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Vulnerability, Trust and the Accompaniment of Educational Development in Nicaragua

Matthew James Tarditi

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Vulnerability, Trust and the Accompaniment of Educational Development in Nicaragua

Abstract
Asymmetrical power relations, imposition and hierarchy characterize much of the field of development. Design and decisions are often dominated by the few as programs determine what is best for the local communities they seek to assist (Cooke & Kothari, 2001). The multiply wounded nation of Nicaragua is no exception to the norm, and the country has a long history of outside intervention by non-governmental and governmental organizations seeking to distribute materials or empower communities. Originally founded through a partnership between the University of Pennsylvania's Graduate School of Education and a Nicaragua Corporate Social Responsibility Division, the Digital Seeds Program strives to push against the common impositional and assistencialist approaches to development through a collaborative, relational and holistic approach. Relational trust and authentic dialogue are centerpieces of what the Program calls accompaniment, or the direct, personalized support of educational actors inside and outside the classroom, and it is within these interpersonal encounters that Digital Seeds’ facilitators join teachers in their daily lives.

Informed by over six years of participant-observation and insider-outsider evaluation of the Program from its inception in 2009, this participatory action research project seeks to understand how participants make meaning of Digital Seeds as they understand the nature and role of trust and dialogue in the iterative construction of the Program. It is my contention that a core group of emotionally intelligent and professionally gifted staff embody this deeply relational and dialogic accompaniment model, and their example serves to show the possibilities of reciprocal vulnerability and mutual trust in cultivating respectful partnerships.

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VULNERABILITY, TRUST AND THE ACCOMPANIMENT OF
EDUCATIONAL DEVELOPMENT IN NICARAGUA

Matthew James Tarditi

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in

Education

Presented to the Faculties of the University of Pennsylvania

in

Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

2016

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VULNERABILITY, TRUST AND THE ACCOMPANIMENT OF EDUCATIONAL DEVELOPMENT IN NICARAGUA

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DEDICATION

This dissertation is dedicated to my friends and colleagues in Nicaragua, whose generosity of spirit, commitment and dedication have inspired me and moved me to do more with and for them and who have made this dissertation possible; to my parents for their unwavering support throughout my life; to my partner, friend and wife, Meredith, whose patience, love and support have given me strength to keep going and to see this through to the end; and to my daughter, Sarah Lynn, whose arrival came at a time when I needed perspective and a healthy distraction to help me during the final push.
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Matthew James Tarditi

John L. Jackson Jr.

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"Follow me, Profe Mateo."

"Be careful, there is a hole up ahead!"

As we negotiated the steep incline, Osmar reminded me to stay close and I warned him of potential danger ahead. With varying degrees of facility and skill, our human caravan sliced through the dense web of coffee plants, each standing at about six feet tall and four feet wide. From above, one becomes clearly aware of the systematic arrangement of plants, paths and irrigation ditches, coming together in an organized grid. Conversely, it is easy to lose (and injure) oneself among the thick vegetation, narrow chutes and challenging terrain. Perspective and (physical) positionality play incredibly important roles in how one experiences, understands and traverses through this environment, or any context for that matter.

Instead of walking the same dirt road overhead as was per usual, this day we decided to traverse the narrow, tree-covered maze below. Lead by our speedy, diminutive 2nd-grade guide, the two teachers and I navigated this demanding topography together, struggling to keep pace with our fearless leader. He glided with ease, skipping, jumping and sliding through the thick expanse of green as we plodded

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along with uncertainty and extreme caution. Our human accordion stretched and
converged, trying to keep a tight group, but invariably spreading out and becoming
stretched from time to time.

"Are you doing O.K.?" I asked, turning towards the teachers as I listened for the
sound of feet shuffling, leaves rustling or people talking.

A cacophony of voices echoed across the verdant hillside. Verbal cues and visual
contact enabled a consistent mutual awareness of people's locations, states of mind and
emotional conditions. Simple call and answer kept us coordinated and assured regular
updates on our collective progress.

"Everything is fine, just making my way down," responded Eveling, and we
continued our trek.

I listened to the specific words being spoken, "everything is fine", but I also
heard the intonation, the tone and the nuances of her voice. She seemed a bit
frustrated and rushed, breathing heavily as she responded. In response, I slowed down
to wait and see her face-to-face, visually checking-in and showing my support,
encouragement and concern. My reaction was a way of letting her know that I truly
heard her and received the deeper meaning.

Beyond and beneath the words themselves are the thoughts, feelings and
deeper meanings of what someone is communicating. By listening deeply, "I hear the
words, the thoughts, the feeling tones, the personal memory, even the meaning that is
below the conscious intent of the speaker." (Rogers, 1980, p. 8). Embedded in and
underlying what Eveling was vocalizing were the subtle personal and emotional messages. "I am struggling to keep up", "You are going too fast", "Can you please slow down?" All is unspoken information within what she actually verbalized. By facing one another and embracing the in between, she could feel my compassion and support. Her feelings were affirmed, she felt heard, and I was able to verify my understanding of her feelings, thus achieving mutuality and shared comprehension.

Our amble continued through the coffee forest, my focus oscillating between the nimble adolescent barreling ahead and the two teachers gingerly maneuvering behind. Eyes locked on Osmar, I followed the established path he had chosen. There was no doubt in my mind that he knew where he was going. My assumption is that this is most likely the route he has taken countless days on his way to and from school. His competence, familiarity and expert knowledge allayed our latent fears and perceptions of risk as we ventured further off the beaten path and deeper into the wilderness. I, and the group, trusted him, accepted vulnerability and the accompanying risk (of injury in this case), and followed his lead without question.

We steadily approached our destination, each walking at varying speeds, an embrace of difference nested within a shared, collective advance of interdependent individuals. Eveling and Yorling lagged a bit behind, walking carefully in their high heels and sandals as I charged ahead in my sturdy hiking boots, glancing back periodically to check on their status. Surprisingly enough this was not the first time, nor the last, that I witnessed my female companions masterfully traversing uneven, treacherous
topography in footwear more appropriate for a night on the town or a day at the beach. Initially I was shocked and dumbfounded by their seemingly ludicrous choices. How could this have made sense to them? Why did they elect to wear sandals and high heels for a mountainside hike? Based on my conception of "normal" or "appropriate" their actions were incorrect, careless and even silly. Checking myself and hesitating to pass judgment or silently convict my colleagues of poor decision-making, I decided to share my confusion and curiosity with them directly.

Owing to an existing relationship of trust (de confianza) and mutual respect, I candidly disclosed my perspective, expecting them to respectfully hear my point of view. We engaged in an open dialogue, a healthy exchange of speaking and listening, and eventually we were able to understand one another's thoughts, opinions, beliefs and personal situations. My disbelief and curiosity were made clear and they informed me that their choice was made out of necessity.

"This is what we have. If we had boots, we would definitely wear them", answered Eveling.

"Oh", I said, feeling embarrassed and moderately ashamed for asking such a presumptuous and judgmental question. How could I be so insensitive and ignorant?

I continued walking as images of young children in flip-flops began to flash in my head. It became immediately obvious to me that my female students and their families were more aligned with Eveling and Yorling than the stranger (i.e., me) among them. Why was I so quick to pass judgment and assume that I was the model of normalcy or
the ideal? It is easy and all too common to exclusively live within one's own personal reality and perception. Consequently, the world is framed through a singular, individualized conceptualization and perception, further exacerbated when that perspective is consistent with dominant/normative constructions. This moment exemplifies one of the myriad opportunities I had to engage with and enhance my critical self-awareness and reflexivity, and expand a burgeoning understanding among friends, colleagues and acquaintances. An ongoing process with an essentially relational quality, I owe these possibilities to the many trusting relationships and the open, authentic dialogue I enjoyed with many individuals and communities.

The shared journey to Osmar's home is a microcosm of the vital role played by trust and dialogue within a collaborative, community-based international educational development intervention in Nicaragua (*Digital Seeds*). Having a common goal (or destination) facilitates the initial meeting and the coming together of individuals based on a unifying focus, and contributes to the creation of trust; however, the end product is only part of a process and an emerging, relational whole. At the core of these shared journeys is the relationship among voyagers; how they communicate and how they make decisions regarding which paths (collectively or individually) to take along the road and what is/are their final destination(s). When considering a heterogeneous group of travelers, each with their individual baggage (histories, experiences, cultures, epistemologies, subjectivities, etc.), these differences, boundaries and fissures necessitate open, authentic dialogue and trusting relationships. Trust and dialogue
comprise the conditions, characteristics, sensibilities, relational qualities and means by which individuals and communities bridge potential gaps, value difference, instill reciprocity, encounter the in-between, foster a shared understanding of mutual respect and establish new frontiers (Bryk & Schneider, 2002; Buber, 1947; Freire, 1970; Friedman, 2002).

Trust and dialogue, together and separately, are essential to the *Digital Seeds* program, and the people and communities at its core. Moreover, they enable and promote the Program's collaborative, contextualized, customizable and perpetually innovative approach to the formation and implementation of the Program in each individual community and school. Interactive engagement with school communities and local stakeholders deeply informs and ultimately enables the "customized replication" of the Program (S. Ravitch, personal correspondence, July 20, 2010). Additionally, through modeling, scaffolding and individualized support, organizers (facilitators, coordinators and directors) engender core values and an ethos of trust, dialogue, respect and collaboration within a holistic, innovative approach to education. Along with fostering foundational principles, each instantiation of *Digital Seeds* engages with and incorporates local, community knowledge, perspectives and realities as a purposeful strategy to contextualize the Program's specific characteristics (i.e. foci, activities, objectives, roles and responsibilities). These emergent school-community-program partnerships assume collective responsibility and co-construct new possibilities for learning and growth among educational stakeholders. Faced with a polyphony of voices
and a multiplicity of perspectives, program facilitators directly enter into dialogue with partners; respectful, authentic means of establishing and maintaining open and honest communication among a vast expanse of individuals and organizations. Converging and diverging, these dialogic engagements are sustained and strengthening by emerging relationships of trust. In sum, dialogue and trust become intertwined, interconnected and mutually reinforcing partners in the ensuing collaborative dance of the Digital Seeds program.

Reframing Strength and Deficit

Within unequal power relationships, there is often an assumed understanding among participants that one side has resources, is resource rich or strong, while the other is weak, vulnerable or in need. These relationships, embedded in history, politics and culture, reinforce the condition, real or imagined, that resources are lopsided or concentrated in one side of the equation. In development partnerships, there is always a rich and powerful benefactor, donor, padrino or sponsor who supplies the necessary resources to the deficient, poor and needy individual or community. A deficit orientation ascribes need, scarcity, absence, ignorance, vulnerability, distress and weakness on another while a strengths-based or resource orientation considers the other to have wealth, happiness, knowledge, and abundance. Strength-based or deficit, both are limited in their conception, and focus their attention on value and not the totality of a person or community. Both classifications and approaches not only
oversimplify but they also reduce and objectify the Other (Spivak, 1999). According to these approaches a person or group is either more deficit or more resourced, and not a complex combination of strengths and weaknesses, resources and opportunities for improvement, a more balanced agglomeration. To collapse or destabilize the vertical relationships of hierarchy and inequality, participants must consider themselves and others as diversified, holistic Subjects with resources and deficit. Teachers and facilitators both bring with them knowledge, passion, weakness and pain, and this relationship does not have to be characterized by a one-way dynamic of giver and receiver, instead, both give and both receive, a reciprocal relationship that requires an openness and acceptance of strength and vulnerability, an aperture to listen and to learn from one another, a willingness to ask more and not tell less, a curiosity, a sympathy, and a respect that guide the interactions and help cultivate a healthy, authentic dialogue and partnership among men and women, boys and girls.

The term “deficit thinking” originated in the 1960s as a social constructionist argument critiquing the prevailing assumptions that people of color and the poor cause their own socioeconomic hardships (Valencia, 2010). Deficit becomes apparent when giving is one-sided, and for one to give, he/she is not required to gift material possessions or financial resources in return. Giving, a part of reciprocity or reciprocal exchange, is complemented by reception, and continued through another gift, and so on, and so forth (Mauss, 1967). In the case of Digital Seeds and Seeds for Progress Foundation, material resources such as markers, pencils, notebooks, projectors and
other didactic supplies are heavily requested by schools and facilitators alike. When asked in what ways the Program can respond to identified needs in the school in relation to accompaniment, several facilitators quickly mentioned materials and supplies. "Materials, didactic materials and provide also some resources because I am thinking of implementing a strategy with the teacher [...] but the students have a scarcity resources [...] and to have something presentable you need resources" (Maria Luisa Herrera, personal communication, August 1, 2014).

A relationship of dependency, at least in the form of material goods, might be problematic, but it is a tangible way of providing additional support to the teachers and students, and also motivating the teacher to better prepare class and didactic resources for use in the classroom. Without materials, teachers often engage in the traditional practices of transcribing verbatim information from their sole textbook on the chalkboard and then obliging students to copy the content into their notebooks, a process that not only takes time but it also often limits learning to pure memorization. Instead, an open dialogue between teacher and facilitator regarding what materials are desired and how they can be used, provides a propitious interaction in which strategies, objectives and preparatory necessities are discussed and decided upon in collaboration. Additionally, with more didactic materials, teachers can maximize their time and be more efficient pedagogues. At the close of an interview with an assistant principal at Modesto Armijo, she reminds me of the school's imagined or real dependency on sponsors and donors, namely CISA and specifically directed at me (and all that I
represent). At the conclusion of our conversation at the Modesto Armijo School, the assistant principal clarifies the school's dependency on *Digital Seeds* and outside donors (represented by me). "We hope to always have the support that you (referring to me) are giving the program, if there isn't coordination there is nothing [...] because of CISA and you all we have this *Digital Seeds* program and we have it here because if one of the donors deviates, what would happen? It will have a bad ending, a bad ending for *Digital Seeds*" (Evelia del Rosario Guardián Herrera, personal communication, July 23, 2014).

Although an expectation of continued financial sponsorship creates dependency by the local school, "it is the expectation of an ongoing relationship that sustains trust in the actions of others" (Kramer and Tyler, 1996, p. 3).

As a white man from the United States (and a US-based university), many teachers and administrators at the schools are under the assumption that I am the benefactor or donor who funds the program and its presence in the school. In one exchange with teachers at the Modesto Armijo school, one teacher, Reyna Matey attributes the success of the program at her school to CISA's confidence in the school and to me as donor, "Thanks to the trust that you (plural) have bestowed in us and to you (singular) as donor...we are able to take a major step forward, that already our children (students) are not in the same routine as before" (personal communication, July 24, 2014).

It is challenging for wealthy, powerful individuals and organizations to give up this concentration of power and resource by accepting vulnerability and deficit, as well
as control and authority. By vulnerability, I mean "the quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally" (Oxford University Press, 2016). It is a biologically, politically, historically and socio-economically (Vera, Valenzuela & Sotomayor, 2015) induced condition that "leaves certain people in particular places more vulnerable than others" (Bryan, 2015). Moreover, vulnerability is contextual, and its causes and sources are multiple: structural (Bryan, 2015), geographic, relations of power (Butler, 2009) and a condition of poverty (Gupta, 2012) among others. Individuals and organizations that provide finances and know-how expect more control and influence over beneficiaries because they are contributing the more necessary capital, resources and materials and because they know better.

Entitlement and a right to power and influence must be met with a willingness to relinquish control, an openness to learning, an inclination to listening and an acceptance of mutual vulnerability and worth. True partnership requires a sharing of resources and learning, mutual giving and receiving and not a one-sided distribution of stuff.

Organizations positions themselves as saviors, helpers, and supporters of those who do not have, the have-nots, and although they also declare these beneficiaries as having local resources, these so-called resources are less desirable or of a diminished quality/worth compared to the economic, intellectual or political capital of the one that haves.

Many communities and people identity as poor, needy, vulnerable, deficient and dependent on generous benefactors, the government or others for basic resources and
materials to survive, let alone excel and innovate. Since the government has very limited resources dedicated toward educations, many schools requires support from outsiders, local, regional, national or international. In the case of Modesto Armijo, a school in the far north of Nicaragua, there is a long history of support from CISA and the Baltodano family. As part of the school sponsorship program, the school underwent various infrastructure projects to remodel the bathrooms and renovate a few classrooms. Additionally, new classrooms were constructed to satisfy the student population demand. More than a decade after the initial support of CISA, the Digital Seeds program arrived and brought with it computers, more personal attention and other resources instead of mere construction projects. However, the vestiges of this assistencialist legacy remain, and the teachers and administrators still clamor for more material support, more computers and more assistance from CISA and donors in general.

Reyna Matey recounts the beginnings of CISA relationship with these schools in 2003 when Don Pedro Joaquin and later Dania Baltodano visited the school and initiated several infrastructure projects. She describes the state of the school when CISA visited, "It was in a very precarious situation...the students were learning in a jail-like classroom, the other was deteriorated" (R. Matey, personal communication, July 24, 2014). During her discussion of the relationship between CISA Exportadora and the Modesto Armijo School, she address me in particular within the larger North-South dynamic, especially with respect to the developed vs. the developed world and the common practice of
Northern, mostly white development or NGO workers traveling to the Global South to improve the lives of locals and assist in developing the underdeveloped (Escobar, 1995). Paternalism and dependency are imbued with underlying inferiority towards the "developed" North, and particularly the United States. Matey shares:

"It has been something emotional to be working with you, as much with CISA Exportadora as with you that has now left your country to come here and collaborate with this country, that we have been under-developed, because the homes that we have here are not the same as your country, but thanks to this solidarity, this spirit of collaboration, cooperation, especially with education, because this is part of education (personal communication, July 24, 2014).

Matey reminds Baltazar, Marielos and me that the school still lacks materials and resources, a product of being in an isolated municipality far from the city. The need for and want of material resources has always been part of the dynamic between CISA Exportadora and the schools and communities they intend to serve. As provider of infrastructural projects, school supplies, and material goods, CISA set the precedent from the onset that they were the sponsor of the school, the father/mother figure that would provide for its child. Originally, the arrangement was in response to state neglect and the resulting acute need by schools to repair buildings and provide adequate physical conditions for schooling. Over time, this one-sided relationship has cultivated a deeply dependent stance by the schools. Whenever there is a need (whether perceived or real), the school looks to their sponsor (padrino) to provide, and who can blame them if that is the relationship that has existed for over two decades. For example, Nayibe Montenegro comments on how the Foundation, and other organizations, often market
poverty to raise funds, and this strategy contributes to the perpetuity of this dependency or assistencialist model and the community's perception of responsibility and self-worth. "Geez, how poor I am and I need them to come and help me...and then I sell this because in that way I can obtain funds that someone gives me" (N. Montenegro, personal communication, August 21, 2014).

Elba Garcia shares a story of teachers in 5th and 6th grade that have asked her repeatedly for content-specific textbooks or discipline-related materials. It is a telling example of the potential to neglect certain teachers due to the focus on 1st-3rd grades, but she cautions the group that they need to focus on the entire teacher body and not a section of it. Additionally, she is pained by the personal commitment to her teachers when they make requests like these. On one level the request is indicative of a dependency on *Digital Seeds* for material resources, but on the other hand, the example given by Elba illustrates the increased level of honesty, transparency and frankness between facilitators and teachers. Martha Alicia Moreno comments on this open communication between teacher and facilitator and the demonstrated initiative by the teacher. "I believe that this is part of the richness that this process has had, because the ideal is this, that the teacher comes and looks for you, and not one inserting him/herself into the classroom" (Martha Alicia Moreno, personal communication, August 1, 2014).

However, Maria Luisa cautions the group against supplying calligraphy books or certain textbooks that prescribe step-by-step lessons and exercises, and possibly limit the creativity of teachers. Instead, "that the teacher creates these strategies is going to
allow, at first that he looks to available things and not value what is already written in a book, because to the child it is meaningful and attention-grabbing to see something drawn from the community, for example a house but not an extravagant house, like a castle" (Maria Luisa Herrera, personal communication, August 1, 2014). Creating the materials and involving students in the creation of their own examples or instances from their own lives and realities engages the class in a locally and culturally relevant learning process, one that brings in the surrounding community and the experiences of the students into the classroom as opposed to using a textbook that cites examples of Spanish castles or far-away princes and princesses. A funds of knowledge approach becomes reality when local knowledges and experiences become classroom realities, knowledge and opportunities for learning (Gonzalez, Moll & Amanti, 2005).

Hierarchies are not going away, and there will always be the few who command the many, but there are many strategies to combat these power differentials and to establish a dialogic relationship steeped in trust and mutual respect. “Not renunciation of power but responsibility in the exercise of power prevents it from becoming evil” (Friedman, 2002, p.51).

In these instances of imbalance, the work necessary to build trust and establish dialogue varies based on the starting point of each participant; however, all must engage in introspection and critical reflection to achieve a fuller understanding of each person's or organization's positionality in the relationship. For Digital Seeds there are no universal absolutes given the contextualized, customizable approach; however, the Program is
steeped in certain core values (i.e. respect, honesty, tolerance and patience among others). Reality is embedded and situated, and for the Program it is not a matter of good or bad, but rather a focus on what works in each particular situation. Therefore, it is important for facilitators to "not create dualities between processes nor classify them as good or bad, but rather to understand that in each context there is a distinct response for everything" (Martha Alicia Moreno, personal communication, May 24, 2012).

For those who provide or sponsor, a critical self-reflection helps to uncover and unmask their own vulnerabilities and weaknesses while simultaneously seeing those of the other participants. Weakness and vulnerability are within us all, and they are opportunities for growth, progress and learning (Brown, 2012). What they are not are elements to be hidden or qualities to be ashamed of and thus sources of deficit. Conversely, our resources and strengths can also be our undoing, as they might cloud us from active listening, openness to learn, and the ability to receive help from another. Reciprocity and exchange are key. It is about listening to others and ourselves to give "us a way to perceive more directly the ways we participate in the world around us" (Isaacs, 1999, p. 83). Help is not a one-way street. In fact, help is reciprocal, it is shared, and only in community and solidarity can individuals, families, schools, communities and organizations help one another and themselves. In order to balance the reciprocal relationship, we need to expand our understanding of resources and not limit ourselves to the financial and material. Relational, affective, personal, experiential and
knowledge-based resources are as important as the funding and physical elements of any educational collaboration. We must view local teachers and benefactors alike, both as holistic beings comprised of vulnerabilities and strengths, resources and deficiencies, and through that lens and approach, we can achieve great things together. Learning and growth become shared and no longer concentrated in one end of spectrum or at the bottom of the hierarchy. Dialogic relationships engender trust, and trusting dialogue allows for the presentation (or gifting) and acceptance of vulnerability and doubt. Instead of feeling shame or inadequacy for one's weaknesses or vulnerabilities, these common deficits become propitious sources of sympathy, respect, growth and learning. In fact, scholars have noted that human vulnerability can be a potential foundation for solidarity (Fineman & Grear, 2014; Mackenzie, Rogers & Dodds, 2013; Schofer, 2010; Turner, 2006). Geddes (2015) argues that seeing another's vulnerability can be a source of solidarity between us but it can also reinforce one's power and superiority and therefore be an opportunity to manipulate, impose or coerce. When one's vulnerabilities are exposed and recognized, it "may lead to compassion or to cruelty, to solidarity or to oppression" (Geddes, 2015, p. 401). While I call for the gift of vulnerability as a means to engender mutual trust, dialogue and relational connection, as well as shared responsibility, respect and equality, there are dangers and potentially nefarious consequences to accepting and showing vulnerability (Geddes, 2015). Being aware of the possible risks of vulnerability is at the heart of informed trust through the existence of perfect information, and therefore the ability to make a rational
calculation; however, we often have to trust another without a great deal of information, and thus gamble or act on faith (Blomqvist, 1999). It is this existence of risk that "creates an opportunity for trust, which leads to risk taking" (Tschannen-Moran & Hoy, 2000, p. 556). The gift of vulnerability is not without risk, just as the decision to trust another person, organization or system comes with inherent uncertainty and potential harm, yet the giving and the acceptance of vulnerability (reciprocal vulnerability) have the tremendous potential for solidarity, collaboration, creativity and learning (Geddes, 2015). A willingness to accept vulnerability isn't only a necessary condition of trust, but it is also a type of trust. Vulnerability trust, originally coined by Lencioni (2012), "is the affected-based experience of team members where positive interactions, stable patterns, openness and good intentions foster a high degree of confidence and care in the relations" (Iversen, 2015, p. 232)

Vulnerability is joined by candor and openness to form the essential characteristics of "authentic and reflective interactions," central exchanges for dialogue and collaborative inquiry (Senge, Lichtenstein, Kaeufer, Bradbury & Carroll, 2007, p.47). In sum, although there is inherent risk involved in sharing vulnerabilities with one another, the possibilities generated by openness, honesty, humility and solidarity represent transformative relational characteristics for the field of development, and its often unbalanced, asymmetrical and hierarchical organizational structures and relationships.

"One presents herself before a person or community [...] not as someone with this role and with all these experiences and education, but rather one arrives as a person that is
looking to learn from these other people" (Silvio Díaz, personal communication, August 3, 2014). To enter into authentic dialogue, there must be a shared humility, fallibility and mortality (Freire, 1970), and this newfound interactional connection unlocks a collective potential and brings participants closer together in true partnerships. Nayibe Montenegro provides an example of humility's role in her dialogue with teachers.

I always tell them, 'No, I don't know everything' (and) the philosophy is, 'If we don't know it, it is OK to not know' because to the extent that someone doesn't know he/she learns, but if you already know everything, what are you going to learn? So, it is OK to not know, I tell them [...] and I too in some moment am going to say, 'I don't know' but we can explore what to do, we can search for an answer together, and this is dialogue (personal communication, August 21, 2014).

Montenegro describes dialogue as an "act of creation" (Freire, 1970, p. 89), an encounter in which participants "name the world." Paulo Freire (1970) offers some guiding questions for Digital Seeds, and other collaborative programs that seek to cultivate dialogue among participants. Specifically, he addresses the major issues of respect and openness, and elucidates the import of acceptance of personal mortality and limitations to entering into dialogue:

Dialogue, as the encounter of those addressed to the common task of learning and acting, is broken if the parties (or one of them) lack humility. How can I dialogue if I always project ignorance onto others and never perceive my own? How can I dialogue if I regard myself as a case apart from others — mere “its” in whom I cannot recognize other “I”s? How can I dialogue if I consider myself a member of an in-group of pure men, the owners of truth and knowledge, for whom all non-members are “these people” or “the great unwashed”? How can I dialogue if I start from the premise that naming the world is the task of an elite and that the presence of the people in history is a sign of deterioration, thus to be avoided? How can I dialogue if I am closed to — and even offended by —
the contribution of others? How can I dialogue if I am afraid of being displaced, the mere possibility causing me torment and weakness? (Freire, 1970, p. 90).

Research Motivation

Over the last six years I have been involved in the creation, evolution and expansion of an applied educational development research program in rural Nicaragua called Digital Seeds (Semillas Digitales in Spanish). In July of 2009, after finishing a master’s degree in the Education, Culture and Society program at PennGSE, I moved from Philadelphia to Northern Nicaragua to spend one year living on a coffee farm and helping to collaboratively develop what later became known as Digital Seeds, working with teachers from the Buenos Aires school (on the Buenos Aires Farm) and in collaboration with local partners from the Corporate Social Responsibility (CSR) division of a Nicaraguan agriculture and coffee export corporation (CISA Exportadora). The initial pilot gradually transformed into the flagship program for a non-profit, the Seeds for Progress Foundation (formerly the CSR division of CISA Exportadora), and has since been replicated in over fourteen schools in the coffee-producing regions of Nicaragua.

In 2009, individuals from the University of Pennsylvania’s Graduate School of Education (PennGSE) and the CISA Group (now Mercon Coffee Group or simply Mercon), an international conglomeration in green coffee production and export comprised of various companies across the world (CISA Exportadora and CISA Agro operate in Nicaragua) founded the Digital Seeds program. Representing these two founding institutions, Dr. Sharon M. Ravitch and I (PennGSE) alongside Duilio Baltodano, Ernesto Baltodano, Rosa Rivas, Nayibe Montenegro, Martha Alicia Moreno and others (Seeds for
Progress Foundation and teachers and staff from Buenos Aires), co-created the Digital Seeds program. Based on a model of stakeholder-driven dialogue, “each of the participants really [had] in mind the other or others in their present and particular being and [turned] to [one another] with the intention of establishing a living mutual relation between [oneself] and [the others]” (Buber, 1947, p. 19). In other words, from the beginning, we forged a relational dynamic built on trust, dialogue and mutual respect, with a goal of building an authentic partnership. Candor, honesty, criticality, co-inquiry and empathy, central attributes and characteristics among participants, promote open communication, discussion and meaning making. A resource-oriented, non-deficit oriented (Valencia, 2010), capacity-building approach is operationalized through strategies steeped in an ethic of mutual respect, relational trust, and shared decision-making (Ravitch & Tarditi, n.d.). The Digital Seeds team of facilitators, coordinators and advisors (i.e., the individuals who facilitate program development) work alongside communities and schools to co-construct an adaptable, respectful and contextualized iteration of the Program in each particular context. The Digital Seeds program departs from a more traditional understanding of education in Nicaragua (e.g., rote memorization, teacher-centered, lecture style, call and response) and instead envisions education as a critical, holistic, human endeavor full of emotions, affect, morals, ethics and relationships in addition to the common emphasis on the acquisition of knowledge, skills (i.e., critical-thinking, problem-solving) and information. Based on this vision of education, the Methodological Guide for Digital Seeds (Tarditi, Moreno, Montenegro, &
Ravitch, 2011) outlines a selection of interconnected and interrelated approaches, theories, practices, and conceptualizations of education: critical pedagogy (Freire, 1970/1973/1990; Kincheloe, 2004), emergent design (Cavallo, 2000), constructivism (Dewey, 1938; Jonassen, 1995a/1995b; Jonassen, Howland, Moore, & Marra, 2003; Nie & Lau, 2009), social cognitive theory (Bandura, 1986), social constructivism (Vygotsky, 1978), holistic education (Gallegos Nava, 2001) and funds of knowledge (Gonzalez, Moll, & Amanti, 2005), and participatory action research (Fals-Borda, 1985; Fals-Borda & Rahman, 1991) among others. As a whole, the methodological guide provides the theoretical and practical pillars on which the Program evolves and iterates in each community and school context.

Although the name *Digital Seeds* evokes a focus on technology, the Program goes far beyond mere technology integration. Starting in July 2009, PennGSE engaged in a 12-month ethnography of the community, school and overall context. Informed by this applied ethnographic approach, the first year of engagement was designed to take an inquiry, resource-oriented stance to co-construct a collaborative educational intervention. Through development and supervision by Dr. Sharon M. Ravitch from PennGSE, the Principal Investigator and my advisor, we espoused and sought to enact a reflexive, critical inquiry stance (Cochran-Smith & Lytle, 2009; Freire, 1970) and ethnographic approach (Clifford & Marcus, 1986; Marcus, 1995). We employed participatory and observational approaches to understand the context, culture, people, practices, history and multiple perspectives, and locate/situated these within the
overarching theme of education in Nicaragua. It was our belief that an inquiry approach to the nascent program would enable the creation of a contextualized, relevant, respectful and novel response to local conditions and global trends instead of Northern experts imposing a predetermined program all-too-common in development work (Chilisa, 2012; King, 1985). Consequently, stakeholders work to push against hierarchical structures and expert-learner binaries through and in dialogue, and these trusting relationships become the central means of reciprocal transformations among partners (Chilisa, 2012; Nakkula & Ravitch, 1998; Ravitch & Tillman, 2010).

From its earliest moments, our charge was to co-develop a responsive, contextualized, community-based educational invention in the Buenos Aires School that would serve as the basis for and the springboard to a customizable and replicable Digital Seeds model across the country and worldwide (Ravitch & Tarditi, in press). Over the course of the first year of implementation, during which time I lived on the Buenos Aires coffee farm, we developed a focus on: (1) personal, ongoing teacher accompaniment; (2) teacher professional development; (3) technology integration; and (4) community-school partnership building among other areas (Ravitch & Tarditi, 2011).

Living and working on the farm was a deeply personal, professional and intellectual engagement. As a participating (and principal) actor in the creation of a "development" project, I was thrust into the many layers and faces of development. Mediated by my professional responsibilities and my position as an applied researcher, a true participant-observer, I was exposed to and became part of the intricacies and
complexities of co-constructing an educational program for and with the local educational communities. Informed by PennGSE's engagement with the CSR Division of CISA Exportadora (and Nicaragua more broadly), we developed a Theory of Action for Digital Seeds (Appendix A) to articulate the intertwined theoretical foundations for the Digital Seeds' model. It represents the intricacies of the approach to the relationships, processes and activities of Digital Seeds, a living document that has been repeatedly iterated over time to adjust to and reflect the evolution and expansion of the Program's focus. This guide emphasizes the community-centered, collaborative ethos and focus on partnership, and it is this relation-centric methodology that sets the stage for the current framework of trust, dialogue and third space. The foundational modus operandi of Digital Seeds was (and continues to be) an ongoing conversation among participants, an open dialogue steeped in mutual trust and respect. In collaboration, we strove to build a respectful, honest, and authentic partnership that became the backbone of the Digital Seeds pilot program in Buenos Aires. As we widen the continuum of our burgeoning partnerships, the centrality of trust and dialogue becomes more evident. The espoused and observed experiences of stakeholders (through interviews and direct observations); a careful review of empirical evidence from the Program (gathered for monitoring and evaluation purposes) and from other collaborative efforts in education and development; my wisdom of practice (Shulman, 2004) from years of participation in the Program; and a rigorous examination of the theories on trust, dialogue and third space have lead to my contention that trust and dialogue are co-evolving phenomena
essential to the creation and cultivation of collaborative third spaces (Bhabha, 1990), ecological edges and edge communities (Gorodetsky & Barak, 2008). Bhabha (1990) believes that culture is not relative to an original or a dominant norm, but instead unique. Culture is in a constant "process of hybridity," a third space, or an area of liminality, that facilitates the emergence of a new and uniquely different dynamic, "a new area of negotiation and meaning and representation" (Bhabha, 1990, p. 209). In the third space, difference is embraced and unique possibilities and structures are fostered by participants. Consequently, trust forms the relational glue and dialogue offers the central communication pathways, and they enable the emergence and opening up of the dynamic hybrid spaces to push against the more traditional, top-down, asymmetrical power relationships all too common in normative development approaches. In fact, with (relational) trust and in (authentic) dialogue, participants can collectively challenge the intrinsic problems of equity in international development partnerships (Chilisa, 2012).

**Importance of Trust in Educational Development Projects**

Trust is widely considered to be a “key ingredient in the success of community change and development efforts (Dale & Newman, 2010; Gittell & Vidal, 1998; Potapchuk, Crocker, & Schechter, 1997 in Lee et al., 2012, p. 611). The identification of trust as a principal value of the Digital Seeds program, and the focus on my research, stems from experiencing its prevalence firsthand and from hearing Nicaraguans repeatedly use the word “confianza” to describe intimate and trusting relationships.
Along with my personal and professional motivations to explore the nature and role of trust in *Digital Seeds*, leading researchers of trust call for more qualitative and quantitative studies to understand "the facets and dynamics of trust in the linkages between organizational levels in schools" as well as "within organizational levels" more broadly (Tschannen-Moran and Hoy, 2000, p. 585). In addition to increased interest in trust in schools (Bryk & Schneider, 2002), there is a long-standing call for further examination of trust among relationships of inequality, all too common dynamics across the globe in general, and particularly in development projects between powerful, resource-rich donors and the under-resourced, vulnerable communities they intend to serve. Annette Baier (1986) argues, "it is high time we look at the morality and immorality of relations between the powerful and the less powerful, especially at those in which there is trust between them" (p. 253). For the less powerful, it requires courage to show distrust in the powerful, and it takes "heroism" to violate their trust (Baier, 1986). For the powerful, a recognition of mutual dependency and a willingness to accept vulnerability not only serve as the foundation for increased self-awareness but they also inspire greater trust and collaboration. To arrive at an understanding of the moral risks of trust, we must recognize each individual's "special sort of vulnerability" (Baier, 1986, p. 239) and the "mutual dependencies" (Molm, Takahashi & Peterson, 2000) that accompany these social exchanges. Bryk and Schneider (2002) point out that even in hierarchical structures like urban schools, the most powerful actor, the principal, is still dependent on both parents and teachers for job security. Without one individual
who exercises absolute power, these mutual dependencies that exist in schooling and in development projects necessitate an atmosphere and culture of relational trust that help to mitigate risk associated with vulnerability and engender collaboration and sharing. Therefore, it is imperative that development projects examine the morality of trusting relationships, by uncovering and sharing the knowledge of the reasons for "confident reliance" between parties to continue the relationship. In other words, Baier's morality test focuses on the ways in which and the extent to which mutual reliance is accompanied by the "mutual knowledge of the conditions for that reliance" (1986, pp. 259-260). It is not enough to trust, but rather understand why we trust one another to fully grasp the nature and morality of trust.

Trust and Confianza

Literature and research on trust abounds; however, little is written about confianza. Additionally, the term confianza has various English equivalents, one of which is trust. Often accompanied by the preposition "of" or "in", confianza occupies a particularly integral role in Nicaraguan culture, especially for those who work in education, and even more specifically for my colleagues associated with the Digital Seeds program. Not only is confianza often spoken by facilitators and coordinators alike, but it is also written into the guiding documents of the Program. According to the Methodological Guide of Digital Seeds, "now that we know the methodological process for the implementation of the Digital Seeds Program, we share some tips that can help in the creation of pleasant (or amenable) spaces in an environment of respect and
confianza, as basic conditions that facilitate the construction of learning" (Tarditi, et al., 2012, p. 51). In other words, respect and confianza represent guiding principals and values of the Program, and therefore demand further examination and understanding. In Spanish, confianza is a moving target, and when translated to English its meaning depends on the context in which it is used and the accompanying words that surround it. According to the Real Academia Española (Royal Spanish Academy), the official royal institution for oversight of the Spanish language, confianza has seven different meanings. The definitions of confianza include:

- "Esperanza firme que se tiene de alguien o algo" (strong faith in someone or something; similar to the English definition of trust);
- "Seguridad que alguien tiene en si mismo" (security that someone has in oneself; self-confidence);
- "Animo, aliento, vigor para obrar" (desire, encouragement and vigor to work);
- "Familiaridad o libertad excesiva" (familiarity or excessive liberty); and
- "Pacto o convenio hecho oculta y reservadamente entre dos o más personas, particularmente si son tratantes o del comercio" (Secretly and reservedly established pact or agreement between two or more people, particularly if they are traders or business associates) (Real Academia Española, 2016)

Due to the range of meanings associated with confianza, the use of trust as a central concept has severe limitations, simply as a result of being lost or expanded upon
in translation. Although I focus on the word trust, which also has varied meanings in English, its definition is limited compared to the wide range of meanings for its Spanish counterpart. Therefore, in order to understand the nature of trust in the Digital Seeds program, it is imperative to explore the many iterations and understandings of the Spanish "equivalent." For example, research participants are asked to define the term, offer its essential characteristics and values, and provide examples of trust (or confianza) in their lives and in relation to the Program. As a researcher, the categorization of the term required an ever-expanding coding system to accommodate the emerging conceptualization of confianza (Appendix B).

Based on long-term observation, participation and presence, I argue that the members of the Digital Seeds team implicitly espouse, enact and embody trust and dialogue as indispensable means (and phenomena) in the creation and cultivation of emerging collaborations with communities and schools in the field of education. Growing out of my long-term engagement with Digital Seeds, the study focuses on how stakeholders understand the Program and make meaning of it, and these understandings arise from their lived experiences. The life of the Program from inception to present provides an overall framing and a chronological thread to the study, and through mostly qualitative methods I will explore the individual experiences and stories, especially related to trust and dialogue. The phenomena of trust and dialogue serve as the central units of focus and areas of concentrated analysis within a phenomenological research study steeped in visual ethnographic methods. I will utilize
semi-structured and open-ended interviews with stakeholders; observations and audio-
visual recordings of stakeholder activity and the people, places and spaces of the Program; a review of program artifacts (i.e., selected existing data collected over the six years of the Program, program guides, monthly/annual reports, website, program profile); an examination of correspondences and interactions with stakeholders; and the application of a trust questionnaire to compare and contrast understandings of trust across participants. My approach to engaging with, documenting, analyzing and representing people's experiences and understandings of the Digital Seeds program will be guided by the following research questions:

1. How do stakeholders (e.g., executives, administrators, teachers, facilitators) in the Digital Seeds program conceptualize the Program and their involvement in it?

2. How do stakeholders in the Digital Seeds program understand the nature of trust and its role in the context of the Program?

3. How do stakeholders in the Digital Seeds program understand the nature of dialogue and its role in the context of the Program?

4. What is the role of trust and dialogue in the creation of third spaces in the Digital Seeds Program?

To understand the roots of the aforementioned questions even further, there must be an in-depth summary of the background of the Program and the context of the research more broadly.
CHAPTER TWO: BACKGROUND AND CONTEXT OF DIGITAL SEEDS

“It is not our role to speak to the people about our own view of the world, nor to attempt to impose that view on them, but rather to dialogue with the people about their view and ours.” (Freire, 1970, p. 96).

Central to understanding and explaining *Digital Seeds*, and the role and nature of trust and dialogue within the Program, is an exploration of the histories and contexts in which theory, practice and experience unfold. In this section I introduce the field of development as a staging place for a brief account of CISA and Mercon Coffee Group's history and the emergence of the *Digital Seeds* program as a counter to prevailing normative development practices. Starting with the Program's founding in 2009, I provide a detailed description of the Program's initial creation, guiding theoretical framework and principles, methodologies and primary activities. Since February 2009, the nexus of the *Digital Seeds* program has been the interpersonal and institutional partnership between the University of Pennsylvania’s Graduate School of Education (PennGSE) and the Seeds for Progress Foundation (SfPF) and Mercon Coffee Group. The partnership between PennGSE and SfPF offers a shining example of the collaborative possibilities in development, and its locus of activity, the *Digital Seeds* Program a illustrative alternative to the mostly hierarchical, impositional approaches to international development and aid.
A Sapling is Planted in the Field of Development.

Mosse (2013) describes the international development arena as "a particular form of institutional practice and as the terms of global economic and cultural integration" (p. 227). Within these practices and terms of integration, there is an abundance of programs, approaches, theories, strategies, perspectives, and epistemologies. There is no singular conceptualization of "development" nor a universal approach to conducting “development” work (Edelman & Haugerud, 2005; Escobar, 1995; Mosse, 2013; Sen, 1999; Sumner & Tribe, 2008). Even without a common definition, the development paradigm can be divided into three distinct phases: pre-World War II, post- World War II, and post-Washington Consensus (Edelman & Haugerud, 2005). Originating in the industrial age, the modern idea of development and many of the current goals of development have their roots in the colonial emphasis on increased industrialization over agricultural production (Gupta, 1998). This long-standing emphasis on industrialization has resulted in the increased standardization of the processes, practices, goals, and products of development among the dominant development agencies. Cleaver (2001) describes the predominant development discourse as "practical and technical, concerned with project-dictated imperatives of efficiency, with visible, manageable manifestations of collective action" (p. 37). Importantly, these discourses are "produced by those in power and often result (even if unintentionally) in reproducing power relations between areas of the world and between people" (Edelman & Haugerud, 2005, p. 8).
A noted critical development theorist, Arturo Escobar (1995), writes that scholars of development studies are acutely aware of the knowledge contributed by local beneficiaries (i.e., local knowledge), but "they have yet to incorporate these newer insights significantly into their theory making and the design of the intervention" (p. xii). In response to these instances of what some think of as the social reproduction (Bourdieu, 1977) of hegemony or the lack of local voices in the creation of theoretical or practical intervention approaches (Freire, 1970), many programs and institutions have attempted to create more participatory frameworks. However, even the explicit, bottom-up participatory approaches that seek to challenge hierarchical and asymmetrical relations of power often re-inscribe inequities, dependency and outside imposition indicative of unequal power relations (Chilisa, 2012; Cooke & Kothari, 2001; Hickey & Mohan, 2004; Mosse, 2013). Moreover, many agencies themselves exhibit the very power inequalities that they claim to push against, and the "relationships within development institutions are as hierarchical, unequal and culturally embedded as any of the societies usually studied by anthropologists." (Gardner & Lewis, 2005, p. 352). Based on the aforementioned examples, and on a broad corpus of research, it is evident that organizational hierarchies and relational dynamics are closely tied to the overarching discourses that dominate traditional development work (Chilisa, 2012; Cooke & Kothari, 2001). Although collaborative, participatory approaches abound, many fail at translating their espoused theories of shared participation to theories-in-use (Argyris & Schön, 1974) because of historical, systemic and structural forces as well as economic,
political and institutional priorities and demands (Kenway & Fahey, 2001). For example, in many planning and decision-making processes that are driven by shared interest in producing plans upon which concrete action can be based, the plan "invariably suppresses difference in favour of consensus, and prioritizes action over detailed design" (Mosse, 2001, p. 22). Difference and diversity are collapsed, homogenized or flattened, thus resulting in a monotone, singular voice, yet organizations claim to represent or even speak for the multitude and their varied perspectives, especially those of the communities that programs are designed to serve (Cooke & Kothari, 2001; Kenway & Fahey, 2001; Sen, 1999).

There is substantial evidence that the field of development is dominated by a traditional, asymmetrical system of power relations and a hierarchical model of relationships in which decision-making is dominated by a few and community participation is simple presence versus authentic influence or the result of significant pressure by the same organizations seeking to partner with locals (Cooke & Kothari, 2001). *Digital Seeds* seeks to push against this normative approach to development work and elucidate the benefits, challenges and possibilities of constructing and implementing a more horizontal, collaborative, relationship-based approach to partnership steeped in interpersonal trust. Another aspect of this push is a strategic, programmatic distancing from welfare and charity programs that create more dependency in local communities and often work within a paternalist model. What Freire (1970) calls "false charity" is a dangerous, dehumanizing tool of subjugation and
domination, a far cry from the Digital Seeds' model of collaboration in the liberation and humanization of stakeholders and partners.

True generosity consists precisely in fighting to destroy the causes which nourish false charity. False charity constrains the fearful and subdued, the ‘rejects of life,’ to extend their trembling hands. True generosity lies in striving so that these hands—whether of individuals or entire peoples—need be extended less and less in supplication, so that more and more they become human hands which work and, working, transform the world. (Freire, 1970: 45).

Enabled by openness and authenticity, or a turning to one another in honest, transparent communication and dialogue, the Program cultivates the seeds of relational trust (Bryk & Schneider, 2003) among participants. In an interconnected, mutually reinforcing dance between dialogue and trust, the educational facilitators, teachers, coordinators, administrators and directors among other stakeholders within the Program began to embody the guiding collaborative principles at the heart of the Digital Seeds program (Ravitch & Tarditi, n.d.). This same open dialogue, stressed by program creators, serves as a faithful and valuable conduit through which stakeholders initiate simple, friendly and regular exchanges (speaking and listening). At the onset of the Program town hall meetings were arranged to facilitate sharing, discussion, negotiation and debate among parents, teachers and Digital Seeds staff. A short presentation about the Program (i.e. goals, activities and vision) was followed by large, group discussions to pose and answer questions and address concerns. Following the large-group format, smaller groups were arranged to facilitate a more intimate, relaxed dynamic among individuals. These more intimate gathering helped to establish rapport, to further
expand communication pathways and enabled the discussion of more specific issues in a true back-in-forth (listening and speaking) fashion. During these moments individuals often shared more specific and personal opinions in an intimate setting as the group continued to break down the barriers and mutual achieve a more open, honest dialogue. These town hall style meetings and similar open forums for exchange are regular fixtures in the Program. Conversations and instances of togetherness--sitting or standing side-by-side and truly facing one another in the Buberian sense--provide necessary platforms and opportunities for bilateral exchanges and establish the foundational building blocks for reciprocal transformation (Nakkula & Ravitch, 1998). Open access and participation in debate, negotiation and decision-making processes are concrete examples of how the Program has translated the tenets of a theory of action (and a personal dream) into a contextualized educational intervention characterized by a diversity and difference of expertise, knowledge, culture, and perspective; all brought together through a unifying spirit of love and respect, concepts grounded in Freirean thought and action (Freire, 1970). Collaboratively and with an effort to achieve candor and honesty, we direct activities and lead the processes of development, growth, expansion and transformation in tandem with our local stakeholders (teachers, parents, administrators) and regional partners (Ministry of Education officials).

**Two Groups: CISA and Mercon Coffee.**

The story of CISA begins over 150 years ago when Enrique Baltodano, an Italian immigrant, pioneered the cultivation of coffee in Nicaragua's Pacific region outside of
Granada. Following in his grandfather’s footsteps, Duilio Baltodano Pallais founded Comercial Internacional S.A. (CISA Exportadora), a coffee-export company, in 1952.

Over the following decades, the CISA Group expanded to include CISA Agro and INTERSA. CISA Agro focuses on fertilizers, pesticides, herbicides, seeds, farm equipment, agricultural machinery and farm management software (ARA) and INTERSA is a farm management company. During the 1960s and 1970s, CISA became the leading Nicaraguan exporter of green coffee. CISA’s operations in Nicaragua declined during the 1980s when the country’s coffee industry was nationalized (Cordero, Ravitch, Tarditi & Perez, 2011, p. 4). Shortly after the triumph of the Sandinista Revolution in 1979, the country coffee industry was nationalized, signaling a sharp decline in operations for CISA Exportadora. Although a downturn for CISA, the period of nationalization also brought with it the founding of the Mercon Coffee Group by Jose Antonio Baltodano in 1982. Created in his New York City apartment in 1982, Mercon's first member was CISA Exportadora (J.A. Baltodano, personal communication, December 9, 2014). The 1990s brought with it market liberalization, and CISA Exportadora quickly reestablished itself as Nicaragua's leading seller of green coffee (Mercon Coffee Group, 2014). Currently, the Mercon Coffee Group is an international network of export and import firms and other businesses that includes Mercon Nicaragua, Mercon Honduras, Mercafe Vietnam, Mercon Brazil, Mercon Guatemala, Mercon USA, Mercon Europe, Mercon Vietnam, Robusta Plantations, Mercambios and Coffee Flour. Other affiliated businesses are Café Soluble, Hogares Urbana and CISA Agro. In addition to the Mercon Coffee Group, "the
Baltodano Family Group has a diversified portfolio of affiliated firms involved in coffee and cattle production, coffee roasting, agrochemicals, agricultural machinery, wholesale of third party consumer brands, currency exchange services, real estate development, and movie theaters" (Cordero et al., 2011, p. 5). Brothers Jose Antonio and Duilio Baltodano occupy the roles of Chairman of Mercon and President of CISA Agro respectively.

**Corporate Social Responsibility at CISA Exportadora**

In the 1990s, CISA Exportadora began intervening in the areas of education, health and environment in Nicaragua. Over the years that followed, CISA and Mercon's focus on education continuously expanded while their efforts related to health and environment were mostly in a supportive role or limited to small projects and initiatives. Throughout it all, direct assistance to schools and schooling broadly remained a principal responsibility of the organization. According to Jose Antonio Baltodano, Chairman and Founder of the Mercon Coffee Group and President of the Board of Directors for Seeds for Progress Foundation, "we began to adopt schools in coffee communities because during that time poverty was much worse than what we have today in Nicaragua. There weren't desks, the blackboards were broken (and) schools weren't equipped for adequate education" (Jose Antonio Baltodano, personal communication, December 9, 2014). Consequently, CISA Exportadora adopted schools with the sole focus of improving infrastructure, thus bettering the physical conditions of schooling. Officially beginning in 1999, the Adopt a School Program (or Apadrinamiento
de Escuelas) was the first educational initiative by CISA Exportadora. In response to the dire, basic need for adequate educational facilities, the Program "has an assistencialist focus, in the sense that it had a strong component of giving donations to schools, donations of educational materials, furniture and food among other things" (Rosa Rivas, personal communication, October 8, 2014). Over the first five years of its implementation, the Adopt a School Program was locally coordinated by CISA's regional managers and sought to maintain direct contact with the communities they served.

The year 2004 was transformative for CISA Exportadora's involvement in social responsibility. First, it marked the beginning of their official alliance with the American Nicaraguan Foundation (ANF), specifically in the implementation of the Adopt a School Program, and secondly it was the year they founded the Corporate Social Responsibility Division (CSR or RSE in Spanish). The CSR division began through the official affiliation with the Nicaraguan-based uniRSE (la Unión Nicaragüense para la Responsabilidad Social Empresarial or The Nicaraguan Union for Corporate Social Responsibility), an NGO focused on promoting the global tendency of Corporate Social Responsibility (uniRSE, 2016).

From 2004 to 2010, the number of schools rose from 5 to 16 across the coffee producing departments of Madriz, Nueva Segovia, Matagalpa and Jinotega. The program educated children and teachers about basic hygiene habits and ways to

\footnote{Paulo Freire (1973) defines assistencialism as "a term used in Latin America to describe policies of financial or social assistance which attack symptoms, but not causes, of social ills" (p. 15).}
preserve the environment, donated books and school supplies, helped with improvements to school infrastructure, provided nutritional foods and beverages for children, as well as school follow up and counseling, and offered workshops for teachers and parents (CISA Exportadora, 2014). Also during this period, the CISA group created the framework in 2008 to integrate its Corporate Social Responsibility actions into the overall strategy to the group. Lastly, one year later in 2009, CISA's CSR initiated the Digital Seeds project, marking a significant expansion in their support of education, and also signaling the start of a gradual turn towards more holistic and collaborative education-based intervention.

The Emergence of Digital Seeds

Education is a deeply human endeavor, and requires a differentiated, diverse and adaptable approach to facilitating the creation of learning environments and experiences for teachers and students. Unfortunately, for most of the world, the vision of schools directly reflects the dominant capitalist version of the world and a factory-based model of education (Robinson & Aronica, 2015). We seek to quantify success, and these quantified, comparable measures dominate much of the standards-centric discourse around education and represent an overall movement towards "standardized forms of numeric data for performative accountability purposes" (Hardy, 2015, p. 467). Moreover, high-stakes standardized testing "continues to build upon the legacy of dominant power relations in the state in its ability to sort, select and rank students" (Kearns, 2016, p. 121). Not surprisingly, the educational-industrial complex has
designed schools to be human factories that mass produce uniform human beings that
conform to specific, predetermined levels and requirements (based on the premise that
development and progress are contingent on an individual's age or score on a
standardized examination, again numbers) (Robinson, 2010). Although this paper will
not travel down the rabbit hole that is the meaning and purpose of education, it is
worth noting that the *Digital Seeds* program departs from a traditional understanding of
education in Nicaragua (e.g. rote memorization, teacher-centered, lecture style, call and
response) and instead envisions education as a critical, holistic, human endeavor full of
emotions, affect, morals, ethics and relationships in addition to the common emphasis
on the acquisition of knowledge, skills (i.e. critical-thinking, problem-solving, etc.) and
information. Based on this vision of education and the Methodological Guide for *Digital
Seeds* (Tarditi, Moreno, Montenegro, & Ravitch, 2011) outlines a selection of
interconnected and interrelated approaches, theories, practices, and conceptualizations
design (Cavallo, 2000), constructivism (Dewey, 1938; Jonassen, 1995a, 1995b; Jonassen,
Howland, Moore, & Marra, 2003; Nie & Shun, 2009), social cognitive theory (Bandura,
1986), social constructivism (Vygotsky, 1978), holistic education (Gallegos Nava, 2001)
and a funds of knowledge approach (Gonzalez, Moll, & Amanti, 2005) among others.

Framed by these underlying understandings of education as a relational, socio-
emotional project (Freire, 1970; Dewey, 1938; Gallegos Nava, 2001; Vygotsky, 1978), the
elements of dialogue and trust become tremendously resonant in facilitating, creating
and developing a collaborative, community-based intervention in rural primary schools. Dialogue and (relational) trust are interconnected and mutually reinforcing conditions, practices, components and sensibilities that enable and facilitate a collaborative and perpetually innovative approach to the implementation of a community-based educational development intervention in Nicaragua.

Since the beginning of the University of Pennsylvania’s Graduate School of Education’s involvement in the Nicaraguan Educational Initiative, which later became known as Digital Seeds, the guiding principles and methodological approach to the Program have been expressly relational, dialogic and collaborative. A non-deficit, resource-oriented, capacity-building approach is operationalized through strategies steeped in an ethic of mutual respect, relational trust, and shared decision-making. Consequently, the Digital Seeds team of facilitators, coordinators and advisors (the individuals working to facilitate the initiation and cultivation of the Program) have worked purposefully, consistently and alongside communities and schools to co-construct an adaptable, respectful and contextualized in Nicaragua. The central stakeholders are teachers, students, educational administrators (e.g., school directors, MINED staff), CISA staff (facilitators, managers, coordinators, directors), community members, and farm staff at the various schools in which the Program is implemented. The internal members of the Digital Seeds team include: (1) educational facilitators; (2) coordinators; (3) the director; (4) CISA executives; and (4) the University of Pennsylvania Research team. Educational facilitators work in schools to implement the Program;
coordinators focus on the guiding methodology and operations; the director oversees strategic planning, operations and finances, serves as the link between the office in Matagalpa and the executives in Managua, and administers the partnership with the University of Pennsylvania; and the CISA executives guide the overall vision of *Digital Seeds*, leverage resources within the Mercon Coffee Group (parent company of CISA Exportadora), and deal directly with PennGSE. Lastly, the University of Pennsylvania Research team conceptualized the initial idea for *Digital Seeds*, co-constructed the Program alongside CISA staff and managed and implemented the original pilot program. Currently, PennGSE works closely with educational facilitators and coordinators, and provides comprehensive consultation to the Program (e.g., Monitoring and Evaluation, Technology Integration, Program Expansion and Sustainability Strategies among other areas).

Following months of coordination and negotiation, PennGSE and the Corporate Social Responsibility Division of CISA Exportadora finalized a formal agreement to work together on what was then called the Nicaraguan Coffee Farm Technology Initiative (Ravitch, 2009). Although the name evoked a focus on technology, the Program represented much more. Embedded within a year-long ethnography of the community and school, the first year of engagement was designed to take an inquiry, resource-oriented stance in order to co-construct a collaborative educational intervention focused on: (1) personal, ongoing teacher accompaniment; (2) teacher professional development; (3) technology integration; and (4) community-school partnership
building among other elements. I was responsible for leading the on-site implementation of the Program’s pilot at the Buenos Aires Primary School and coffee farm over the course of the first year (July 2009-July 2010). Supervised by Dr. Sharon M. Ravitch from PennGSE, the Principal Investigator of the project and my academic advisor, we espoused and enacted a reflexive, critical inquiry stance steeped in ethnographic methods (Clifford & Marcus, 1986; Cochran-Smith & Lytle, 2009; Marcus, 1995). Our engagement, and the Program we were co-creating with a range of local stakeholders, employed participatory and observational approaches to understand the context, culture, people, practices, history and multiple perspectives, and locate/situated these within the overarching theme of education in Nicaragua. From the onset, our charge was to co-develop a responsive, contextualized, community-based educational invention in the Buenos Aires School that would serve as the basis for and the springboard to a customizable and replicable Digital Seeds model across the country and worldwide (Ravitch, Tarditi, Montenegro, Baltodano & Estrada, in press).

Concomitantly with the partnership between PennGSE and the Mercon Coffee Group, the extended locus of collaboration included the Baltodano family (founders and executives of CISA), administrators and educational facilitators from CISA Exportadora’s Corporate Social Responsibility (CSR) Division, teachers and students from the Buenos Aires School, staff at the Buenos Aires farm, and family and community members from the immediate surroundings among other individuals and organizations. It was our belief that an inquiry approach to the nascent program and context would enable the
creation of something contextualized, relevant, respectful and novel instead of the all-too-common externally imposed model from the Northern experts (Cochran-Smith & Lytle, 2009; King, 1985). A shared vision of possibility and opportunity for the future of education in Nicaragua bound us together as we cultivated an emergent dialogue and established a mutual understanding among individuals.

From inception, our varied backgrounds, cultures, histories and realities were embraced as opportunities for individual and mutual learning. Rather than dedicating our time and energy to forcing a compromise, convincing one another of a singular perspective, fusing together previously separate parts, or striving for a unified diversity, we accepted and engaged directly with difference in the spirit of alterity or otherness (Bhabha, 1990). Consequently, the goal of hybridity guided our processes and lead to the formation of the Digital Seeds program and model, something novel and unique to all those involved. Together in relation, in practice and in theory, we purposefully opened up a “third space”, and gave rise “to something different, something new and unrecognizable, a new area of negotiation of meaning and representation” (Bhabha, 1990, p. 211). In this new space of interaction and creation, our different characteristics, experiences and principles flowed freely. Specifically, our emerging culture and community was characterized by collaboration, dialogic engagement, authenticity, care, respect and love. Connected by relationships of partnership among educational stakeholders, we began to work together for innovative and holistic education, humanity, health and community.
Facilitated by a common sense of purpose and focus, the partners engaged in open communication steeped in dialogue (Freire, 1970; Buber, 1937; Gadamer, 1980; Bohm, 1996; Isaacs, 1999). Through dialogic engagement, individuals fostered rapport and mutual respect among the collective, crystalizing in trust relationships.

Concomitantly and consequently, trust supported the emergence and evolution of the Program’s primary values, goals, interactional dynamic and activities. This is not at all to say that all was smooth, and conflict and misunderstanding were absent from the group dynamic. Consistent with most, if not all relationships, both personal and professional, there were and continue to be ups and downs, positives and negatives, and instances of contention, confusion and disconnect. However, faced with tremendous uncertainty, the stresses of expansion/replication and the growing pressure to succeed, it is my belief that the initial existence and intentional cultivation of an open dialogue among participants engendered an environment of trust and provided the bedrock on which the Program stood. Supported by the pillars of trust and dialogue, collaborators shared, legitimized and valued differences of opinions, beliefs and perspectives. Most importantly, we framed our differences as opportunities and possibilities for learning, and we opened up “third spaces” (Bhabha, 1990) or “ecological edges” (Gorodetsky & Barak, 2008) Within this emerging community commitment and belief in the Program continued to grow, and the partnership started to truly typify how trust, dialogue and shared values inform and support the theoretical, operational, relational and
interactional ethos of this diverse collaboration. According to one of the Program's guiding documents:

“Digital Seeds uses the integration of technology as an impetus to more broadly innovate and enrich curriculum, develop teacher knowledge and pedagogical practices, enhance educational culture and student engagement, and facilitate models of professional development using an emergent design approach. The primary goals are to improve student learning, engagement, and retention by engaging educators, students, and community members in the development of sustainable educational innovation that includes the co-construction of a cutting-edge, culturally sensitive and relevant, and contextualized approach to educational improvement that values local funds of knowledge. A central goal of Digital Seeds is to develop teachers as leaders and researchers using a sustainable, capacity-building approach. This innovative model provides the catalyst to collaboratively engage in the cultivation of teachers, students, and community members as critically engaged learners, empowered leaders, and technologically savvy professionals within a community of learners” (Ravitch & Tarditi, 2011, p. 1).

Digital Seeds serves as a catalyst for collective participation and innovation among teachers, teacher supervisors, students and community members. Central to its approach and philosophy are the principles of holistic (and humanistic) education (Freire, 1970; Gallegos Nava, 2001; Rogers, 1969; Rogers, Lyon, & Tausch, 2014) and the idea that the primary goals of schooling is the integral education of the human being (i.e., character, responsibility, critical thinking, solidarity, community consciousness). Consequently, the Program emphasizes the fostering of affective relationships, positive classroom environments and the development of individuals in order to optimize the capacity to learn, create and innovate within these supportive spaces. According to Gallegos Nava (2001), a holistic view of education considers six essential elements of the integral being: physical, emotional, intellectual, social, aesthetic, and spiritual. This idea
of the integral being, or the whole person, is a unifying concept among many of the central thinkers and practitioners that serve as foundational theorists for the *Digital Seeds* program as well as the principal frames for my doctoral research (Buber, 1937; Freire, 1970; Rogers, 1969; Rogers, Lyon & Tausch, 2014).

**Digital Seeds: Theory of Action and Methodology**

The *Digital Seeds* model uses the integration of technology as a catalyst to innovate and enrich pedagogical practices, curriculum and learning; to enhance school organization and communication; to increase student engagement and community participation; and to improve the overall quality of education guided by an emergent design approach (Cavallo, 2000). The Program seeks to enrich and expand students’ skills in reading, writing and mathematics as well as their digital literacy, critical thinking skills and character development by engaging educators, students and community members in the co-construction of a personalized, contextualized and respectful approach to sustainable educational innovation and technology integration that purposefully incorporates local funds of knowledge within an emerging blended-learning environment (Gonzalez, Moll & Amanti, 2005; Kerres & De Witt, 2003). This innovative model facilitates the stakeholder-driven development of teachers, students, administrators and community members as critically engaged and technologically savvy learners, leaders and professionals within a growing and interactive community of educational stakeholders.

*Digital Seeds* works from a theoretical framework informed by post-colonial
critiques of development (Cooke & Kothari, 2001a, 2001b; Fanon, 1963; Said, 1978;), constructivist theory (Dewey, 1938), critical ethnography (Soyini, 2012; Thomas, 1993) and participatory action research (Fals-Borda & Rahman, 1991) and is guided by the following principles and theories that were established in 2010 and last revised in 2012:

1. Community-Centered Approach Grounded in Ethnographic Research;
2. Action-Based, Rigorous Mixed Methods Research and Evaluation;
3. *Funds of Knowledge* as Foundation for Collective Innovation and Partnership;
4. Co-Constructed Capacity Building: Development of Expertise through an Emergent Design Approach;
5. Collaborative Approach to Sustainable Organizational Development;
6. Professional Development Approach to Teachers as Experts, Leaders and Researchers;
7. Curricular Enrichment through an Aligned and Integrated Approach;
8. Sequential Knowledge and Skills Development within and across Stakeholders;
9. Technology Integration as Catalyst for Comprehensive Educational Innovation;
10. Cultivation of Local, National and International Partnerships (Ravitch & Tarditi, *n.d.*).
Phases of the Methodological Process

The Program’s implementation is structured into three phases that are designed to span an initial period of three years: (1) Recognizing the Terrain (*Reconociendo el Terreno*); (2) Let's Get to Work (*Manos a la Obra*); and (3) Fertilizing the Crop (*Fertilizando el Cultivo*) (Tarditi, et al., 2012). Although presented as sequential, the phases are a unified, intertwined whole, a changing flow and sequence open for adaptation and reordering. Consequently, the themes and phases are often revisited according to the particular characteristics, contexts, and/or situations in which they are developed (Tarditi et al., 2012).

**Phase I: Recognizing the Terrain**

The central axes of phase one are negotiation and self-organization among actors. Beginning with an initial proposal and presentation of the Program, *Digital Seeds* staff facilitate an open dialogue with local school actors to obtain input from the community. "During this dialogue among distinct participants, each involved party defines his/her level of responsibility in a shared and self-organized way" (Tarditi, et al., 2012, p. 29). The proposal is a starting point from which participants drive and mold the specifics of the particular iteration of the Program in their specific school and community, and thus create a specific program profile for their particular school. Any and all adjustments are made according to the availability of resources, identification of needs, and the commitment of individuals and communities to assume responsibilities in the execution of a mutually accepted plan of action (i.e., operational plan).
A vital element of shared responsibility and ownership is the establishment of "supportive networks" as a means to organize a harmonious, critical mass of local actors who steward the Program and constantly adapt the model to the ever-changing context of the school. In sum, the principal activities of this phase are: (1) Initial Proposal; (2) Formulation of Program Profile; and (3) Operational Plans.

To continuously improve the process through a perpetual feedback loop, it is essential to create and agree on a Monitoring and Evaluation plan. The process that begins with an initial needs and resource assessment, called Auto-Diagnóstico o Línea de Base (Tarditi, et al., 2012, p. 31). Collection of baseline data clarifies the starting point from which the Program begins, and continues to serve as a comparison with successive moments of implementation. Goals and challenges guide future implementation and decision making, and they inform if and how the Program fulfills goals and executes strategies to address challenges. Specifically, Semillas Digitales strives to understand, improve upon, and document the following aspects of Nicaraguan primary schools: infrastructure needs; school organization; community dynamics, needs and resources; previous and current academic experience and performance; experience and facility with ICT; professionalization of teachers; prominent pedagogical practices and strategies; and the reading, writing, and mathematical abilities of students among others.
Phase II: Let's Get to Work

Two complimentary, parallel components of the Program make up Phase II of Digital Seeds: (1) Processes of Human Development and (2) Infrastructural Improvements. The Human Development component is a set of interactive, systematic and open "learning spaces" offered to the teaching team, “to enrich and reflect on the ways in which we think, feel, and act in our pedagogical day-to-day, and to motivate the search for new knowledge” (Moreno, personal correspondence, December 28, 2015). Safe, supportive spaces stimulate openness to critically self-reflect and embrace change, and actively support the development of teachers' "critical consciousness" (Freire, 1973). The process is facilitated by a purposeful and guided exchange of knowledge and experiences regarding three thematic modules: Motivation and Human Development, Digital Literacy, and Pedagogical Intervention and Innovation.

The module on Motivation and Human Development offers supportive, critical spaces to foment a school culture undergirded by a disposition to personal growth. To this end, we organize reflexive sessions directed at self-recognition to understand oneself and one's ways of being, thinking, and feeling. The group encounters are inspired by the PNL model (Programación Neurolingüística o Neuro-Linguistic Programming), a strategy framework that includes communication, personal development, and psychotherapy (Bandler & Grinder, 1976). Everything we do in life is determined by the ways in which we communicate with ourselves, consciously or subconsciously, and the Motivation and Human Development module facilitates
reflexive practice to enrich interpersonal communication and an understanding of self. It is a process through/in which all participants are experts, everyone knows something vital, and we all learn, analyze, and share with respect to content and experiences.

The Digital Literacy module shares and reflects on the utility of ICT tools and the functionality of technological resources available to schools. Participants' previous experiences and knowledge provide the foundation for the work and serve as the starting point for the guiding logic of this module. Through and with technology, participants seek to enrich and co-create possibilities in their schools that focus on some of the following areas:

- Improve and enrich existing educational processes;
- Enrich curricular content and pedagogy;
- Increase access to information and communication technologies;
- Develop digital literacy skills;
- Expand social inclusion for students, teachers, and community members;
- Support development of critical thinking, critical consciousness, and problem solving;
- Improve community participation in and commitment to education;
- Cultivate alternative spaces for dialogue, debate, collaboration, research, and the incorporation and construction of knowledge.
The development of digital literacy runs parallel to identifying links to practical pedagogical applications and how the integration of technology enriches and transforms the processes and relationships of learning and teaching. Building on the growing digital literacy of participants, the third and final module, Pedagogical Intervention and Innovation, supports teachers with methodological tools and techniques and the tangible materials and resources to design learning spaces and project-based learning experiences.

All of the shared learning experiences (commonly known as professional development or training) are complimented by group exchange sessions and accompaniment visits (described below). Facilitators spend ample time in the classrooms, accompanying the teacher and his/her day-to-day life, while also working closely with students as an in-class resource and help to the primary teacher.

It is worth noting that at no point are teachers obliged to participate in the professional development sessions or accompaniment. Instead, the Program espouses a purposeful and voluntary nature of participation, especially given the research and empirical examples from development projects describing participation as "the new tyranny" (Cooke & Kothari, 2001).

**Accompaniment (Acompañamiento)**

Accompaniment and facilitation go hand-in-hand in the *Digital Seeds* program. The principal actors in accompaniment are facilitators, teachers, students, and administrators. Assuming inquiry as a vital stance on/in practice (Cochran-Smith &
Lytle, 2009), facilitators accompany teachers and students, and focus their curiosity and analysis on understanding the people, places, spaces, and communities of each particular school down to the individual classroom and student. Through personalized visits, data collection, informal conversations, working and planning sessions, and classroom participant-observation, the facilitator supports the teacher in his/her human and professional development. Accompaniment emerges out of an agreement and plan between teachers and facilitators, and it is periodically evaluated to monitor processes, advances, and results in order to inform decision-making and to better reach the agreed-upon objectives (Tarditi, et al., 2012).

The priorities of accompaniment are co-defined during evaluative and observational encounters between teachers and facilitators, before and after class, and also emerge through improvised coordination during class-time. To contribute to the learning environment, facilitators actively support teachers in instruction, classroom management, and direct one-on-one student interaction. Sharing in the process promotes the development of the teacher's skills as a facilitator of learning not the more traditional role as sole arbiter of knowledge and authority. For Facilitator María Luisa Herrera, "Accompaniment is sharing with the teacher didactic and methodological experiences that are going to enable us to improve student learning" (personal communication, March 20, 2015). Herrera's colleague Silvio Díaz emphasizes the observational and feedback dynamic central to providing teachers with practical support. "One is observing and listening to how the class unfolds because [...] the
purpose is to see the entire development of the class and then provide a space with the teacher to be able to review everything that happened" (personal communication, August 3, 2014). Being present and observing enable the facilitator to better understand the activities, relationships and overall reality of the class. Elba García notes, "to be able to understand the realities that occur in the classroom, you have to be in it" (personal communication, August 2, 2014). Active engagement through the Digital Seeds approach to accompaniment favors holistic human development of the teacher. Specifically, the strategy supports self-awareness, critical self-reflection, positive affective relationships, service to community and others, and an openness to change among other possible effects. Digital Seeds Coordinator of Methodology and Monitoring and Evaluation Martha Alicia Moreno sums up the mutuality of facilitation and accompaniment at the heart of the program.

Ideally, facilitation is a form of mutualism, an interaction beneficial to all participants, a shared nourishment, growth, and/or learning. One example from nature is the relationship between pollinators and flowering plants. The pollinator is nourished from the nectar or pollen while plants benefit from the spread of pollen between flowers. In the case of Digital Seeds, teachers and students intertwine and exchange roles as pollinator and plant, at one moment nourishing the other and at another receiving nourishment. Accompaniment and facilitation foster these mutualistic relationships exemplified by the flowering plants and pollinating bees and realized by facilitators, teachers and students in classrooms across Nicaragua” (personal communication, December 28, 2015).

**Phase III: Fertilizing the Crop**

Following and continuing multiple instances of cross-pollination and development, Phase III is time for focused reflection and systematic evaluations to clarify the major
themes, successes, and challenges of the preceding period of the Program's implementation. Group discussions, facilitated inquiries, and data-driven conversations among stakeholders focus on: comparing results to the established objectives and goals, analyzing specific outcomes and variables, reflecting on relationships across outcomes and variables, and identifying overall trends and themes. Participants identify opportunities for improvement and concrete plans for the future structured through evidence-based decision-making and practitioner, collaborative inquiry. Upon completion of initial analysis, stakeholders review lessons learned and collectively plan and prepare for next steps. Program staff facilitates the collaborative processes, paying close attention to scaffolding local capacity building in relevant methodologies and techniques to promote a continuation of this approach moving forward. The culmination of the three-year cycle coincides with a gradual distancing by Digital Seeds staff, a strategy intended to promote further capacity building, local control and increased responsibility.
The University of Pennsylvania’s Role in Digital Seeds

“Any form of cooperative activity, including the division of labor, requires cooperators to trust one another to do their bit, or at the very least to trust the overseer with his whip to do his bit, where coercion is relied on.”

(Baier, 1986, p. 232)

As one of the co-founders of Digital Seeds, the University of Pennsylvania’s Graduate School of Education (PennGSE) has been involved with the Program since before its official inception in 2009. However, the story doesn’t begin there. The University of Pennsylvania’s relationship with Nicaragua and specifically the Baltodano family is over a century old. In 1893, Moises Baltodano, the grandfather of Duilio and Jose Antonio Baltodano, graduated from Penn Medicine. He is the first of what would become four generations of Baltodanos who walked the streets of West Philadelphia and who are now Penn Alumni. This rich, multigenerational history and relationship with Penn represents a strong bond and deep connection between an Ivy-league institution in the United States and an educational program in the coffee-producing regions of Northern Nicaragua.

While the Baltodano family is the principal link in the chain between PennGSE and Digital Seeds, the catalyst for the six-year partnership was not even a member of the family when the initial connection was made. Adriana Chamorro first heard about Dr. Ravitch’s international participatory work in post-tsunami Banda Aceh and with therapists in Ecuador from a friend. Desirous to bring Ravitch to Nicaragua to provide
workshops on how qualitative research can improve practice to employees at the country's only Psychiatric Clinic, Chamorro persistently contacted the Penn professor until the two finally met and Ravitch agreed to travel to Nicaragua. In February of 2009, Ravitch and Tarditi traveled to the Central American country for the first time, meeting with Chamorro and her now extended family the Baltodanos, and visiting two schools and the aforementioned psychiatric clinic. It was on that first trip that PennGSE and the Baltodano family agreed to formalize a partnership, and thus begin the six-year journey of collaboration and educational improvement in Nicaragua.

From February 2009 to July 2010, Professor Sharon M. Ravitch, Ph.D. and I, both from PennGSE, worked alongside coordinators and educational facilitators from the Corporate Social Responsibility (CSR) Division of CISA Exportadora, in concert with other educational stakeholders (e.g., teachers, students, administrators, community members and farm staff), to design and pilot a new educational program at the Buenos Aires primary school, later named Semillas Digitales, which means Digital Seeds in English. During this initial year, the Penn research team facilitated and implemented an ethnographic study as a deeply contextualized, data-based way to explore and begin to understand the Buenos Aires community and to collaboratively define the focus, goals, practices, activities and overall characteristics of the emerging Digital Seeds, a program with the foundational aim of widespread educational innovation through the integration of Information and Communication Technology (ICT). Consequently, PennGSE’s original involvement centered on the general design, implementation, monitoring, evaluation
and overall coordination of the pilot program (July 2009 – July 2010), all of which were co-constructed in partnership with members of the CSR division in order to build local capacity and understanding of the Program as it evolved and expanded to other schools in Nicaragua.

Since 2010, PennGSE has been directly involved in the leadership and implementation of the following aspects of Digital Seeds.

1. Development of the Teacher Professional Model alongside Buenos Aires teachers and Digital Seeds’ facilitators;

2. Ongoing, focused program evaluation of Digital Seeds at the Buenos Aires School utilizing qualitative and quantitative data collection and analysis to assess program effectiveness;

3. Ongoing evaluation, refinement and expansion of the Teacher Professional Development Model and modules;

4. Development and implementation of the Monitoring and Evaluation (M&E) System and accompanying guide for the Digital Seeds Program;


6. On-site support and monitoring of overall implementation and replication of Digital Seeds;

7. Research into additional educational technologies;
8. Development and implementation of a strategic plan for the diversification of ICTs in Buenos Aires for the eventual replication in additional Digital Seeds schools;

9. Overall facilitation of strategic planning, coordination, implementation, promotion, monitoring and evaluation of the Program;

10. Development of the organizational structure and processes of the CSR Division;

11. Assistance in the development of the Seeds for Progress Foundation;

12. Building and maintaining strategic partnerships inside and outside the University of Pennsylvania (nationally and internationally).

At present, my role as doctoral researcher from PennGSE focuses on support and evaluation of the Program’s Monitoring and Evaluation System and research and recommendations on the sustainability of Digital Seeds moving forward. Serving as the macro architect and facilitator of a knowledge transfer approach to developing the structure and specifics of the Monitoring and Evaluation System for Digital Seeds (resulting in an M&E Guide), PennGSE provides support and specific supervision in the development of the architecture and implementation of the M&E system for the Program as it expands. Working in concert with the Nicaraguan team (for capacity-building and knowledge transfer), PennGSE provides educational and evaluative expertise to structure the components of the M&E (e.g., objectives, instruments, timelines, analysis, dissemination). A culminating product of this stage of PennGSE’s engagement will be the publication of a Digital Seeds Monitoring and Evaluation Guide.
The University’s unique involvement as an active, long-term partner with significant in-country, cross-community engagement has provided me and the team with deep and contextualized understandings of the range of stakeholder experiences with respect to the influences and impacts of *Digital Seeds*. The University of Pennsylvania Graduate School of Education strongly believes in the far-reaching, positive impact of the *Digital Seeds* Program and we are fully committed to a long-term partnership as the Program continues to evolve and grow in the constantly changing educational landscape.
CHAPTER THREE: RATIONALE AND SIGNIFICANCE OF STUDY

A critique of the field of Development

There is substantial evidence to support that the development world is dominated by asymmetrical power relations and hierarchical organizational and relational structures in which decisions are dominated by a few privileged individuals (and their organizations), and thus not fully shared with the communities the Programs seek to assist (Cooke & Kothari, 2001; Sen, 1999). To counter the flattening process and the silencing of difference in the field of development, the implications of which are potentially life-altering, Young (1990) calls for a "togetherness in difference" which "requires not the melting away of differences, but institutions that promote reproduction of and respect for group differences without oppression" (p. 47, cited in Harvey, 1993, p. 105). A "togetherness in difference" evokes Homi Bhabha's (1990/1994) argument for cultural difference instead of cultural diversity and his central concept of the third space. For Bhabha (1990), diversity implies a universalist or relativist understanding of culture based on "a particular universal concept" and thus limits "the ways in which cultural practices construct their own systems of meaning and social organization" (p. 209). In sum, although cultural diversity is entertained and even encouraged, cultural difference is contained because cultures must be located within an existing grid or framework and be comparable to the host society or dominant culture (Bhabha, 1990). However, using the notion of difference, rooted in post-structuralist and post-colonial thinking (Fanon, 1963), Bhabha (1990) locates himself in "that position
of liminality in that productive space of the construction of culture as difference, in the spirit of alterity or otherness" (p. 209). Cultures are distinctly unique in their own right and their difference should be embraced instead of contained within a framework of diversity. It is important to note here, and throughout the piece, that the term "other" is used to refer to someone besides the primary individual in question, and not a subject/object relationship, a departure from the norm or related to the process of Othering (Said, 1989). However, I am aware of its problematic past and its polemical usage and conceptualization. Specifically, I reference post-colonial critiques of anthropological representations of the "Other" (Chakrabarty, 2000; Spivak, 1999) and the fetishization of the “primitive Other” associated with the Orient/postcolony (Said, 1989; Shankar, 2013). Returning to Bhabha's (1990) understanding of culture, he believes that is not relative to an original or a dominant norm, but rather it is unique in its own right, and is in a constant "process of hybridity" (Bhabha, 1990, p. 209). Hybridity is the "third space" that enables the emergence of something new, unique and different, it creates "a new area of negotiation and meaning and representation" (Bhabha, 1990, p. 209). Instead of containing difference through relativism, universalism or consensus, difference is embraced in these new, emergent third spaces, thus fostering novel, unique possibilities and structures (Bhabha, 1990; Gorodetsky & Barak, 2008). Instead of collapsing or containing difference in the name of consensus (e.g., normative development), a multiplicity of voices are heard and valued, and development partners collapse the hierarchical, unequal and top-down structures to sit
beside individuals and community as members of emerging *edge communities* (Gorodetsky & Barak, 2008).

The *Digital Seeds* program seeks to push against a traditional, normative approach to the development field and to elucidate the benefits, challenges and possibilities of constructing and implementing a more horizontal, collaborative, relational approach to partnership. Because I strongly believe the success of the Program is due in large part to its emphasis on building relational trust and authentic dialogue and to growing personal, respectful connections and engagements among partners, my hope is to examine if and how the Program has (and/or has not) embodied and implemented a relational, respectful approach through the accounts of a varied collection of participants. This study will explore the nature and role of trust and dialogue in the iterative creation of collaborations in communities and schools across the coffee-producing regions of Northern Nicaragua. Specifically, I explore the co-evolving and mutually reinforcing qualities of trust and dialogue, and seek to understand their contribution to the emergence of *third space* (Bhabha, 1990). Based on over six years of participant-observation I hope to show how *Digital Seeds'* stakeholders are united by relational trust and use dialogue as a central means of reciprocal transformation (Nakkula & Ravitch, 1998) and the co-construction of collaboration (i.e., third space).

In the face of the prevailing paternalistic, impositional approaches to international development, rife with concomitant asymmetrical power relations,
hierarchical organizational structures, and expert-learner binaries, the *Digital Seeds* program inspires a (re)imagining of the field, one in which the relationships, processes and products are envisioned and enacted within a holistic philosophy of relational trust (Bryk & Schneider, 2002/2003) and authentic dialogue (Buber, 1947; Freire, 1970), co-evolving phenomena that coalesce in the aperture of shared hybridity, *third spaces* that are neither top-down nor bottom-up, but rather side-to-side or horizontal in nature, a shared development. In this side-to-side approach, people and communities interact within horizontal relationships of respect, equity and mutuality. Instead of imposing models, formulas or recipes from without, NGO’s operate alongside and hand-and-hand with their perspective partners (both local and international) from the onset and throughout the life of their collaboration. Imposition from above and exclusively grassroots (or bottom-up) approaches are reimagined, and this shared development represents a position of mutual understanding and acceptance in which participants are able to co-determine the goals, activities, relationships and shared responsibilities within a newly formed collaboration (a *third space*). Framed by the mutual acceptance of one another in difference (Buber, 1947), the existence of multiple epistemologies, ideologies and ontologies have the potential to expand and deepen individual conceptions and understandings and serve as opportunities for collective learning, critical reflection and shared understanding. Individuality, difference and wholeness of being are valued through authentic dialogue (I-Thou relationship) (Buber, 1947) and reinforced by relational trust (Bryk & Schneider, 2003). Undergirded by social respect,
relational trust emerges from "respectful exchanges [...] marked by genuinely listening to what each person has to say and by taking these views into account in subsequent actions" (Bryk & Schneider, 2003, p. 41). There is a concerted and individual effort to understand one another, learn together, and co-create something new and unique. Differences of opinion are valued and respected, thus facilitating open dialogue and collective decision-making across these differences.

A middle path to development (as opposed to “top-down” or “bottom-up” approaches) stands in contrast to other traditional approaches, by offering a hybrid strategy to (co)-creating the goals, procedures, responsibilities, and relationships that make up the development partnership and related project. Top-down (macro and micro) and bottom-up development policies coexist, but there is a lack of "synergies and osmosis" (Crescenzi and Rodríguez-Pose, 2011, p. 774). Therefore, "there is a need to cross-fertilise macro-, micro-, and mesolevel approaches to development by combining them in an 'integrated framework'" (Crescenzi & Rodríguez-Pose, 2011, p. 774). Crescenzi and Rodríguez-Pose (2011) argue that this integrated framework is designed to be a diagnostic/policy tool, a common conceptual understanding for the "coordination and synergetic convergence" of “top-down” and “bottom-up” development policies (p. 775). While it is useful at the policy level, there is a need for a more coherent form and applicable practice of coordination and convergence. Studying local participatory process and women's empowerment from a Local Human Development (LHD) perspective, Villalba, Jubeto and Guridi (2013) studied the Basque practice of
"decentralized cooperation", an approach that accounts for statewide and global
dimensions while privileging the local. According to Villalba and colleagues (2013), to
break the dualities of donor/beneficiary, expert/learner and the have and have-nots
there must be "explicit change in the relations between participants", an alteration that
creates more horizontal rather than hierarchical relationships (Villalba, Jubeto & Guridi,
2013, p. 230).

Critiques of development (Cooke & Kothari, 2001) and arguments for a post
development era by Wolfang Sachs (1992) and Arturo Escobar (1995), among others,
provide fertile ground on which a reimagining of the rhetoric and practice of
development can occur. Further, proposals for how this reimagining looks and feels in
practice offer concretes ways and means of doing this new form of development. The
integrated framework of Crescenzi and Rodríguez-Pose (2011) represent a holistic
conceptualization of the actors, structures and forces of development to inform policy
from the top and arising from below, and not one or the other. Therefore, I argue for a
third way to do this type of work, one that emphasizes relational trust, authentic
dialogue and the continual creation of third spaces in international development
collaborations in ways that push for authenticity, including divergence, conflict,
openness and vulnerability. Development is a process that begins with people and
"efforts to promote a process of development should address the fundamental problem
of changing human relationships" (Maguire, 1979, p. 7). A focus on the primacy of
relationships as the centerpiece for development leads to a respectful, honest and
collaborative approach to creating new possibilities in collective inquiry; the understanding and valorization of difference; the leveraging of power, resources and connections; and the shared creation of projects and partnerships.

The foundational work of post development theorists (Escobar, 1995; Sachs, 1992) and the critiques of participatory approaches to development (Cleaver, 2001; Cooke & Kothari, 2001) inform and enrich a wisdom of practice resulting from years in the field with Digital Seeds. Development theory and practice have lead me to engaging with the literatures of relational trust, dialogue and third space as a response to what I have read and what I have experienced. Based on these theoretical and experiential engagements, I argue that there needs to be a more thoughtful, phenomenological, personal, programmatic and practical examination of the co-evolving phenomena of trust and dialogue as they relate to fostering third spaces, the essential arena for a "re-imagination" of power structures (Bhabha, 1990) and the shared creation of development projects. To reduce instances of exclusion, subordination and imposition, even in participatory approaches, there needs to be more equality, mutuality, respect, trust and dialogue among participants, working together, side-by-side, in development (Chilisa, 2012; Kenway & Fahey, 2001). Structured as a vertical case study (Vavrus & Bartlett, 2006), I will engage with key stakeholders (e.g., directors, coordinators, facilitators, teachers, administrators) within the Digital Seeds program to understand their perspectives, experiences, feelings and beliefs with respect to trust, dialogue and collaboration (third spaces). This research is needed in order to further the proposals of
post-development theorists by addressing the challenges of development relationships with a focused exploration of the nature (and powerful roles) of trust and dialogue as means to enable new, hybrid spaces for "togetherness in difference". I offer an examination of the Digital Seeds program through the lenses of trust and dialogue and in the context of development (rhetoric, theory and practice) to speak back into theory, research and practice communities in international education; community-based development; non-governmental organizations (NGOs) and international aid agencies among other fields, organizations and communities of practice.

The Nicaraguan Contexts

Viento de libertad fue tu piloto
y brújula de pueblo te dio el norte,
cuántas manos tendidas esperándote,
cuántas mujeres, cuántos niños y hombres

al fin alzando juntos el futuro,
al fin transfigurados en sí mismos,
mientras la larga noche de la infamía
se pierde en el desprecio del olvido.

La viste desde el aire, ésta es Managua
de pie entre ruinas, bella en sus baldíos,
pobre como las armas combatientes,
rica como la sangre de sus hijos.

Ya ves, viajero, esta su puerta abierta,
todo el país es una inmensa casa.
No, no te equivocaste de aeropuerto:
entra nomás, estás en Nicaragua. (Noticia para Viajeros, Cortázar, 1980, p. 3)
The coffee-producing regions of the North.

Context is particularly important because of the ethnographic nature ofmy engagement (Clifford, 1986). Therefore, a thorough examination and description of Nicaragua's varied contexts (i.e., political, historical, social, institutional) is critical to understanding the Digital Seeds Program. At present, the Digital Seeds Program operates in northern Nicaragua, especially the coffee regions of the departments (states) of Matagalpa, Jinotega, Madriz, and Nueva Segovia. Coffee farming demands great numbers of employees, not only for the creation and maintenance of plantations (and farms), but also for harvest and collection, transportation, processing, and commercialization. Consequently, coffee-related activities create 332,000 jobs annually, around 15% of the Nation's total and 54% of agricultural jobs. In 2013, the Ministry of Agricultural and Forestry (MAGFOR) estimated that there were approximately 43,000 coffee producers, 93% of which are small producers (from 1 to 5 manzanas⁢³) (FUNIDES, 2013, p. 1). The majority of these producers operate in the departments of Jinotega, Matagalpa, and Las Segovias, located in the north, central region of the country. According to the Nicaraguan Foundation for Economic and Social Development (Fundación Nicaragüense para el Desarrollo Económico y Social - FUNIDES) (2013), "coffee-related activities are a key source of socio-economic dynamism in the places where it is cultivated" (p. 1).

³ One manzana is equal to 1.7 acres.
The school population of the northern coffee region is comprised primarily of the children of agricultural workers and small farmers, most of who live in conditions of extreme to moderate poverty. According to data from the population census of the National Institute of Statistics and Census (2005), the average number of children per family is six, and in some cases in households of single mothers who earn too little to support the family, forcing children to drop out of school in search of work to supplement the family’s income is the norm. Additionally, for children who do not work outside of their homes, many assume other duties within the house, often caring for younger siblings alone or at best with the tertiary help of grandparents. Consequently, many parents do not send their children to preschool and even wait until sons or daughters are seven to eight years old until they send them to first grade, thus skipping early education and preschool entirely. The average monthly household income is well below the average value of basic family food basket (canasta básica). According to surveyed parents, most families earn an average daily wage of 80 Córdobas or US$102.35 a month, approximately 22% of the total value of the basic basket based on the Ministry of Labor's calculations from January 2013 (Rodríguez, 2015).

Nicaragua: A multiply wounded country

According to psychologist Martha Cabrera, "Nicaragua is a multiply wounded, multiply traumatized, multiply mourning country" (2002, p. 1). Its people and its landscapes carry the lasting marks from foreign military occupation, harsh dictatorial rule, revolution, civil war and two major natural disasters (Cabrera, 2002). Manmade or
naturally occurring, Nicaragua has experienced tremendous hardship and suffering over
the last one hundred years (Lancaster, 1992). At the individual, community and national
scale, these pains and difficulties have left many wounded and vulnerable (Cabrera,
2002). Hurricane Mitch hit Central America in October of 1998, destroying most of
Honduras' infrastructure and causing devastation to Nicaragua, Guatemala, Belize and El
Salvador. In Nicaragua, the storm caused flash floods and mud slides that destroyed
etire villages, caused thousands to lose their lives and resulted in over $1 billion in
damage to (NCDC, 2009). According to the National Climatic Data Center or NCDC
(2009), "whole villages and their inhabitants were swept away in the torrents of flood
waters and deep mud that came rushing down the mountainsides." In the aftermath of
Hurricane Mitch, Martha Cabrera worked with local citizens on their emotional
recovery. While speaking with people about the immediate losses of the hurricane,
Cabrera and her team found that most people had a "greater need to talk about losses
that they had never voiced before" (Cabrera, 2002, p. 1). People began to share stories
of rape, incest, sexual abuse, insomnia, and other types of domestic violence along with
their accounts of the war, and most of the wounds were related to the country's
political history (Cabrera, 2002). In his ethnography on power, resistance and hardship
in Nicaragua, Roger Lancaster argues, "the intersections of class exploitation and
neocolonial domination are historically the most obvious causes of distress," citing
specifically "underdevelopment, dependency, and dictatorship; exploitation and
poverty" (1992, p. 279). Over the course of the last century alone Nicaragua has
endured repeated conflicts, tragedies, disasters and ruptures, some at hands of men and others caused by nature.

The 20th century began with twenty years of repeated military occupations by the U.S. Marines, ending in 1933 when troops withdrew from the country after six years of unsuccessful attempts to defeat a guerrilla insurgency of peasants and workers lead by Augusto César Sandino (Lancaster, 1992). Left in the Yankee wake was the U.S. trained and equipped national police force, the Guardia Nacional (National Guard), lead by Anastasio "Tacho" Somoza Garcia. Shortly after U.S. troops left the country, peace talks began with then President Juan Bautista Sacasa; however, peace was short-lived. Somoza ordered the assassination of national patriot Sandino and quickly seized authoritative control of the country. Tacho's ascension to power ushered in forty-three years of dictatorial regime by three successive members of the Somoza family, a period characterized by brutality, widespread censorship, martial law, savage repression, legendary corruption, and widening inequalities (Lancaster, 1992). According to Pedro Joaquín Chamorro (former editor and publisher of La Prensa who was assassinated by Somoza's National Guard on January 10, 1978), "It is a classic dictatorship, characterized by corruption, violence, disorder, and government-sponsored crime" and "the Somozas survive because they have the support from [...] the United States government" (Kinzer, 1991, p. 19-20). In 1939, President Franklin Roosevelt allegedly stated that, "Somoza may be a son of a bitch, but he is our son of a bitch" (Schmitz, 1999). Although widely recognized as a ruthless dictatorship, the United States was a staunch ally of the Somoza
regime until the bitter end for geopolitical reasons, using the country as a staging
ground for invasions and operations across Latin America. Over the course of their reign
of terror, the dictatorship was responsible for tens of thousands of deaths,
immeasurable destruction, and unprecedented inequality, and in doing so amassed a
fortune of over $300 million and acquired land equal in size to the state of
Massachusetts (Booth & Walker, 1989).

Not all of Nicaragua's wounds are manmade. On December 23rd, 1972, a
magnitude 6.2 earthquake decimated the capital city of Managua, followed shortly
thereafter by two aftershocks of 5.0 and 5.2 respectively. Reducing much of the city to
rubble, the natural disaster caused tremendous devastation and loss of life. Thousands
died in a matter of seconds, over three hundred thousand became homeless, and "ruin
of this scale defied description and begged only for comparison, perhaps to Dresden
after the Allied bombing" (Kinzer, 1991, p. 15). However, more troubling than nature's
devastation was the human response by the Somoza regime and its allies. Shortly after
the earthquake President Anastasio "Tachito" Somoza DeBayle (son of Tacho) became
the self-appointed chairman of the newly founded National Emergency Committee, the
group responsible for managing relief and reconstruction (Kinzer, 1991). As money and
food poured into Nicaragua in the form of international aid, Somoza and his associates
took most of it for themselves, and notoriously sold medicine, food and other goods
intended for humanitarian aid on the open and black market for profit. According to
one Nicaraguan, "that aid never got to the poor people, who were left homeless and
hungry and hurt," abandoned and forgotten by a regime that "hated the poor people and wanted to keep [them] as weak and dependent as possible" (Lancaster, 1992, p. 118-9). Their greed and larceny in the face of this national tragedy marked the beginning of the end of the lengthy dictatorship's grip on the nation. Universal outrage at Somoza's handling of the relief effort swelled and opposition grew. Humberto Ortega, one of the leaders of the Sandinista Revolution and brother of current President Daniel Ortega, commented in a 1980 interview, "Following the 1972 earthquake, the situation of Somoza's regime became more acute and bureaucratic and military corruption more widespread" and although his corruption primarily impacted the poor and lower classes "it also began to effect the petty and intermediate bourgeoisie, thus increasing the scope of opposition to the regime" (Borge, Fonseca, Ortega, Ortega & Wheelock, 1982, pg. 75). One facet of that growing opposition was the Frente Sandinista de la Liberación Nacional (FSLN or Sandinista National Liberation Front), a movement that in the 1970s steadily gained relevancy and supporters across the country and abroad. Inspired by the Cuban Revolution and the principals of Sandino, Mao and Guevara, the socialist, nationalist and Christian Frente Sandinista began as a Marxist-Leninist guerrilla insurgency in 1961. It represented an authentically Nicaraguan movement to topple the Somoza dictatorship and end U.S. control of the country (Lancaster, 1992).

The Frente Sandinista was named after Augusto César Sandino, a Nicaraguan patriot who waged guerrilla war against U.S. occupation in the first quarter of the 20th
century. According to FSLN co-founder Carlos Fonseca Amador, "The Revolutionary movement has a dual goal [...] to overthrow the criminal and traitorous clique that has usurped the power for so many years" and "to prevent the capitalist opposition--of proven submission to Yankee imperialism--from taking advantage of the situation which the guerrilla struggle has unleashed" (1982, p. 53). By the early 1970s the Sandinistas began launching limited and unsuccessful military assaults, heavily outgunned and overmatched by Somoza's National Guard. As the decade went on, the movement resorted to kidnappings and hostage taking in exchange for ransom and the release of their revolutionary comrades (Kinzer, 1991). On September 9th, 1978, Sandinista leaders called for national insurrection, inciting military action across a dozen cities, even seizing the major city of Estelí. In response, Somoza ordered air-raids on residential neighborhoods and the National Guard resorted to even more brutality, often targeting young men, summarily executing them and then setting their bodies aflame to burn in the streets (Kinzer, 1991). Death and destruction pervaded Nicaragua as Somoza desperately held onto power. However, "the stench of death that hung over Managua, Masaya, León, Chinandega, Matagalpa and Estelí symbolized the regime's decay" (Kinzer, 1991, p. 43). In 1979, amidst growing popular opposition to the existing dictatorship and increasing protests across Nicaragua, the Sandinista Revolution finally succeeded in defeating the National Guard and ending the Somoza dynasty, triumphantly entering Managua on July 19th.
What followed was a short-lived period of peace followed by nearly a decade of civil war between the Sandinistas and the Contras, a proxy of the Cold War, with the United States supporting the Contras against the socialist-leaning, and Soviet-supported Sandinistas. Unable to let Nicaragua, a communist regime, assume control over its own affairs, the U.S. led a counter-revolution to oust the recently victorious FSLN. Consequently, the triumphant revolution was unable to institute wide-sweeping social and economic reforms because of U.S. interference and renewed bloodshed, and according to Lancaster (1992), "that is the tragedy of Nicaragua today, and that tragedy will continue to define Nicaragua's history and struggles until the cycle of colonial power and popular resistance is decided" (p. 21).

The elections of 1990 brought with them a peaceful transfer of power from one government to the next, the first time in over 50 years that successive governments willingly handed over power to the next (Kinzer, 1991). It also marked the beginning of an extended period of relative peace and stability free from the savages of civil war or armed revolution; however, the wounds remained, and many were left untreated and suppressed. Influenced by a collection of factors, and due in large part to successive hardships and traumas, the population has been unable to process their experiences and begin the healing process (Cabrera, 2002). In fact, Cabrera (2002) notes, "after the war of the eighties ended, there was increase in domestic violence in households where the men had participated in the war" (p. 4).
Consequently, to this day many still carry the physical and emotional baggage of hardship and suffering they personally experienced or that was passed down to them by previous generations (Cabrera, 2002).

Today, the political climate of Nicaragua is polarizing and confrontational. Remains of the Left vs. the Right dichotomy still run deep, and a new brand of Sandinista ideology, orteguismo, a populist form of government dominates the social and political landscape. "What began as a split based largely on ideological differences has been exacerbated by personal differences, making reconciliation improbable as long as those who presided over the split continue to dominate the political scene" (Perla & Cruz-Feliciano, 2013, p. 99).

In spite of relative peace, Nicaragua is still a "multiply wounded" country. Lancaster (1992) notes that "Nicaragua's human resources [...] were battered by war, not just in terms of the dead, the wounded, the incapacitated, and the impoverished, but also in terms of those emotionally scarred by the traumas of war, crisis, and dislocation" (p. 7). A direct outgrowth of accumulated trauma and pain is often a dramatic drop in the capacity to communicate and connect with others. Psychological wounds, if left untreated, lead to "apathy, isolation and aggressiveness" (Cabrera, 2002, p. 3). Schools are not free from the consequences of this widespread negligence. Martha Alicia Moreno, herself personally impacted during the Contra War, notes that, "in general terms in the Nicaraguan school the relationships among children has been deteriorating. We see frequent conflicts among the boys, aggressiveness, violence...and
it is a reproduction of all that is being lived in different environments” (personal communication, August 19, 2014). Sister Herminia del Socorro Valdivia Arauz, Principal of the Flor de María Rizo School outside of Jinotega, comments, "often the youth of today lacks a bit of this, right, knowing how to relate with another person, to know how to accept the other person" (personal communication, August 18, 2014). Common to many Nicaraguans, are the emotional scars and painful memories of the past, especially in the areas most affected by military confrontations or natural disasters over the years. Specifically, the rural North of the country was a major theater for both the Sandinista Revolution against the Somoza regime and the Contra War between the Sandinistas and the Counter-Revolutionary Fighters, and its populations carry the baggage and wounds of those unforgotten memories and tragedies. Reflecting on his military service, his life now and the state of his country, Marco Zeledón from INTERSA describes the local and national consequences of a lack of dialogue in Nicaragua's history:

Talking to you now is a person who lived the consequences of bad dialogue, of a lack of communication, in my country there were years of war simply because groups of people did not dialogue. They didn't communicate well and ordered the deaths of thousands of people in this country. They made us regress economically, infrastructures were damaged, lives were lost (and) what remained is the suffering of many families for the loss of children, fathers, grandfathers (personal communication, August 21, 2014).

Jose Antonio Baltodano shares Zeledón's sentiment about the vital importance of dialogue, especially when one reflects on Nicaragua's particular history. Baltodano comments, "I believe dialogue is incredibly important and maybe there would be less wars if there was more dialogue" (personal communication, December 9, 2014).
According to Martha Alicia Moreno (February 17, 2011), many Nicaraguans have been victims of the ambitions of politicians, a group of people who have never lived the reality of most of the country's population:

If the politicians have not lived he hunger that we have lived, they have not lived the consequences of war, but instead they have caused them. If they have not experienced cold that the majority of us have experienced, nor have they experienced the illnesses that the majority suffer, and they can't think of improving living conditions to avoid these situations because they have not felt them in their own skin (personal communication).

A lack of dialogue and intersubjectivity and an absence of empathy and compassion for the majority of Nicaraguans have created tremendous suffering for much of the country's people, and these disconnects and distances among race and class pervade today (Rogers, 2004).

Cabrera (2002) and her team found "the state of (the) population's health in the area of psychosomatic illness was truly deplorable" (p. 3). Exacerbating the problem, or at least doing very little to help address the wounded population, development and grassroots organizations have focused on "empowerment" and have provided workshop after workshop that ignore these seemingly sensitive, politicized themes. Cabrera (2002) calls for "accompanying people in processing their wounds" (p. 2), a process that will help individuals and communities to acknowledge, express and reflect, and begin to heal.

Didier Fassin (2012) argues, "suffering is a recent invention" (p. 40). Of course there was always suffering, but it isn't until the last 25 years that "it has entered into the
public sphere and become a political issue" (Fassin, 2012, p. 41). For much of history suffering was primarily a private matter, almost non-existent in the social world and there were no legitimate spaces to share one's suffering; however, in contemporary times there exists a collective concern to recognize suffering (Fassin, 2012). Amidst an increased exposure to suffering, Fassin (2012) believes there are two main camps, one that condemns this "era of victims" and another that lauds its recognition. I locate myself and this project within the second group, and I seek to recognize and embrace what once remained "a hidden, illegitimate, unheard pain" (Fassin, 2012, p. 42) and reframe these wounds as sources of wisdom and strength (Cabrera, 2012). Within what Levinas calls the interhuman order, "the other's vulnerability in her suffering calls for and constitutes my responsibility to come to her aid -- a responsibility which is also a vulnerability" (Geddes, 2015, p. 406). Mutual or reciprocal vulnerability lead to further intersubjectivity, a central quality of a life in dialogue (Buber, 1947). Additionally, an attention to another's suffering factors into humanity's efforts to co-exist respectfully and humanely, construct a just society and reduce or prevent oppression (Geddes, 2015; Levinas, 1998). A mutual recognition of pain and suffering is also central to the healing process. Cabrera (2002) argues that "healing is a collective challenge based on the recognition that my pain, your pain, the other's pain are similar" (p. 8).

The characterization of Nicaragua as a "multiply wounded" country (Cabrera, 2002) is an unapologetically authentic and sincere depiction of the Central American nation. It is neither deficit nor resource oriented, but rather a frank recognition of the
generations of emotional and psychological baggage that many Nicaraguans carry with them today. Death, tragedy, pain, suffering and wounds are all part of the Nicaraguan reality and the Nicaraguan people, and to ignore them or to focus solely on the strengths and the resources would be harmful, myopic and over-simplified. The Digital Seeds recognizes the integral human nature, and the need for the Program to consider individuals as complex, whole beings, and Nayibe Montenegro encapsulates this stance, "We are all integral and wherever we go we bring with us a sack of things that we carry with us every day [...] so to work on this part is important [...] from the person [...] from the heart" (personal communication, August 21, 2014). A human being or a country is comprised of good and bad, strengths and weaknesses, deficits and resources, and we need to embrace the whole being if we hope to work alongside him/her and be his/her partner in healing, learning and growing. Furthermore, the wounds are sources of wisdom and strength according to Cabrera (2002):

People take their baggage with them everywhere they go. It is also essential not to see wounds and traumas just in their negative sense. They are a source of experience and wisdom. In fact, working through personal trauma is nothing other than transforming it into wisdom for oneself and for others (p. 9).

Instead of a continuation of popular movements and projects to "develop" and "empower" the poor and underdeveloped people of Nicaragua, Cabrera (2002) hopes to begin a profoundly curative process. First, a recognition and identification of wounds is recommended, and then an inventorying of these multiple wounds that includes guided reflection and personal responsibility for treatment and healing. This acknowledgement
of pain, sadness and vulnerability is a process that leads to the eventual healing and
dissipation of those same emotions and feelings.

All and all, it is within this wounded, wise and resilient context that the research
resides, and the guiding theories, methodologies and methods of my investigation take
into account and are situated within this current reality and historic legacy. In the
section that follows I explicate the conceptual framework as the guiding architecture to
various areas of the research project, including researcher positionality, experience,
goals, research questions and methodology and theoretical frameworks.
CHAPTER FOUR: CONCEPTUAL FRAMEWORK

According to Ravitch and Riggan (2012), a conceptual framework is "an argument about why the topic one wishes to study matters, and why the means proposed to study it are appropriate and rigorous" (p. xiii). The conceptual framework, which includes the theoretical framework, guides and grounds the overall approach to and understanding of my research endeavor. The principal components of the framework are: (1) Positionality and Experience; (2) Research Questions; (3) Goals; and (4) Guiding Methodologies (Bricolage, Phenomenology, Documentary Film and Visual Ethnography) and (5) Theoretical Framework (Critical and Post Development Theory; Trust, Dialogue and Third Space) (See below: Conceptual Framework Visual 2015). As a holistic network of (inter)dependent knowledges, theories, perspectives, experiences and sensibilities, the conceptual framework of this study represents a working model of how I make sense of the interconnected parts of the integrated research whole. In the proceeding section (Theoretical Framework) there is a comprehensive review of the individual bodies of literature and a comparative analysis of the relationships among them. I argue in the following section that relational trust and dialogue are mutually reinforcing theories and practices that provide the propitious circumstances and relational dynamics for the emergence of third spaces. Collectively, the theories provide a framework for examining the ways in which stakeholders are making meaning of the Program and for understanding their lived experiences of trust and dialogue within the context of the Program.
The roots of the current conceptual framework begin with my initial involvement in Nicaragua in February of 2009 before beginning a prolonged engagement in July of the same year. In addition to the contextual and historical detail provided in the previous two sections, my positionality and experiences require more concentrated unpacking. As a white male (“gringo”) from the United States, my identity and how it is constructed and reframed by Nicaraguans are vestiges of a long complicated history between these two nations (Kinzer, 1991). A colonial and post-colonial legacy, including repeated US interventions at the onset of the 20th century and during the Cold War (i.e., Sandinista Popular Revolution, Counter Revolution and the Iran-Contra Affair) have left lasting impressions on Nicaraguans' perceptions of the gringo, even today. Assumptions and preconceived notions abound, both positive and negative, depending on each individual's personal experiences and their current political leanings. Confronted with this historical, political dynamic between nations (and people), there is even greater need for a deeply relational ethos informed by a critical cultural/historical awareness. Living in relation to others, an embodiment of Buber's (1947) philosophy of dialogue is particularly vital to overcoming these potential barriers, boundaries and borders (Akkerman & Bakker, 2011; Erickson, 2004) and to eventually establishing direct connections with individuals and communities. Ironically, during my experience in country, I have been more of a border crosser (Giroux, 1992) within and between the multiple domestic worlds of Nicaragua itself. Tremendous inequalities in Nicaragua have bifurcated the nation, leaving great distance between populations and their
everyday realities. As a result, I continuously cross worlds and assume the role of both insider and outsider, as gringo (outsider), as teacher (insider), as a member of the local community around the farm (insider), and as a participant-observer conducting research (outsider) among many others.

My background as a teacher, and continuing to self identify as one, affords a shared sensibility and register with many of the people and institutions with which I interact and connect on a daily basis. Not only does it give me legitimacy within these circles, but it also facilitates a mutual feeling of belonging and membership. Coupled with my ability to speak Spanish fluently and a tireless curiosity to learn the culture cues and codes, I enjoy many personal and professional relationships with colleagues and friends in all walks of life. Although I am considered by many in Nicaragua to be an educational "expert", especially in the beginning when my opinions and expertise (and those of my mentor) mattered above everyone else, I have worked purposefully, implicitly and explicitly to break down this "expert/learner" binary and cultivate a culture in which we are all experts and we are all learners. Integrated into, and stemming from, my positionality and experiences are the primary goals of the research project. Categorized into personal, professional and intellectual (Maxwell, 2013), the goals summarize the motivations for conducting the research (See Personal, Professional and Intellectual Goals). From the challenges/opportunities in the field of development, the lived experiences within the Program (and as part of multiple
communities and worlds in Nicaragua), and the guiding goals of the research engagement, I have developed the central research questions for the dissertation.

1. How do stakeholders (e.g., executives, administrators, teachers, facilitators) in the Digital Seeds program conceptualize the Program and their involvement in it?

2. How do stakeholders in the Digital Seeds program understand the nature of trust and its role in the context of the Program?

3. How do stakeholders in the Digital Seeds program understand the nature of dialogue and its role in the context of the Program?

4. What is the role of trust and dialogue in the creation of third spaces in the Digital Seeds Program?

From these research questions, I identified what I consider to be the relevant methodologies and methods that enable me to capture and share the lived experiences of participants in the Program, and to tell the stories of Digital Seeds through images and sound. Research is about storytelling, and there are countless narrative approaches and discursive strategies that one can employ to tell his/her type of story, and in my case, to not only tell my story, but to focus on the stories and experiences of direct participants. Before explaining the methodological choices, the theoretical underpinnings of the story and how they lead to these decisions requires discussion.
The theoretical basis and framework for the dissertation research arises from years of practice in the field, a review of relevant research and an examination of resonant literature and theory in the emerging aspects and realities of my practice-based engagement. Development as a field, rhetoric and practice have been introduced prior, but necessitate further examination in order to fully understand the historical background and current context of the environment in which the Digital Seeds program is being implemented. The myriad challenges and associated opportunities of development are explored and provide the impetus (and need) for my proposed emphasis on a more relational, dialogic and trust-focused approach to the practice of development generally and educational projects in development specifically. (Relational) trust and dialogue (Buber, 1947; Friere, 1970) emerge as inter-related and even co-evolving phenomena central to relationships and interactions, and therefore, appropriate means to address the challenges of normative development. Additionally, a culminating response to the current field of development and its critiques (Cooke & Kothari, 2001; Escobar, 1995) is a hybrid, third space. An emphasis on fostering trust and dialogue create the propitious circumstances for the emergence of third spaces, collaborations steeped in equality, respect and mutual recognition and acceptance of difference (Bhabha, 1990).

Critical and post-development theories (Cooke & Kothari, 2001; Escobar, 1995/1999; Ferguson, 1997; Rahmena, 1999; Sachs, 1992; Sen, 1992) seek to
problematize the concept, goals and underlying paradigms that justify development itself and examine the asymmetrical power dynamics among participants, the impositional top-down approaches and prevailing hierarchical structures. According to post-development theory, development must be “rejected not merely on account of its results but because of its intentions, its world-view and mindset” (Pieterse, 2000, p.175), and the goal is to "abandon standard development rhetoric and practice" (Siemiatycki, 2005, p. 58). Siemiatycki (2005) argues that for post-development to be realized indigenous and marginalized knowledges must be engaged with more further and thus promote diversity, equity and justice. One approach aligned with this operationalization of post-development theory is "decentralized cooperation" that promotes a supportive climate for the exploration and implementation of collaborative development strategies characterized by horizontal, egalitarian relations between participants (Villaba, Jubeto & Guridi, 2013). Central to creating and maintaining horizontal, egalitarian relationships (and collaborations) are the existence of trust and dialogue among individuals or organizations. Furthermore, I argue that the mutually reinforcing phenomena of (relational) trust (Baier, 1986; Bryk & Schneider, 2002/2003; Tschannen-Moran & Hoy, 1999) and dialogue (Buber, 1937/1947; Freire, 1970; Gurevitch; Isaacs, 2001) are essential to the emergence of truly collaborative partnerships--represented by the creation of third spaces (Bhabha, 1990) and edge communities (Gorodetsky & Barak, 2008). Through my personal and professional experiences as a participant-observer in the Digital Seeds program since its inception in
2009, I have witnessed and been involved in the creation and implementation of a particular approach to development that is resonant with the aforementioned critical conceptions of what development means and how it is carried out in the field. Therefore, in an attempt to explore my assumption/belief that trust and dialogue are essential to establishing collaborations in the field of development, I engage with key stakeholders to understand their conceptions and lived experiences of trust and dialogue within the context of Digital Seeds.

In their critical analysis of “North-South research collaborations”, Sayed, Morris and Rao (2014) stress that there is vital need for “mutuality and dialogue in securing equality" and argue "against an uncritical acceptance of research and development agendas and priorities determined in the global North" (p. 499). Instead of accepted subordination to the agendas and priorities of the North, they argue, partners must "ensure that international education and development work reflects the needs of the global South and calls on researchers, policymakers and practitioners in the global North to develop more authentic and equal partnerships" (Sayed et al., 2014, p. 499).

This focus on the co-construction of authentic and equal partnerships and collaborations is at the heart of more critical approaches to development initiatives, to participatory methods, and to the field of development as a whole (Chilisa, 2012). In edge communities, differences in opinions, understandings, meanings, worldviews and orientations are legitimized, and the culture of the community encourages egalitarianism among participants and the recognition of different voices as assets and
"points of departure for deliberations" (Gorodetsky & Barak, 2008, p. 1909). Therefore, the metaphor of *ecological edges* helps us to understand the processes of mutual growth and change in collaborative communities, and suggests "for a partnership to flourish, the collaborating partners [...] should establish a new, participative community" (pp. 1908-1909). In sum, it is in these *third spaces, third cultures, and ecological edges* that individuals and organizations will create new, hybridized conceptions of development that embrace difference and spawn more equal and respectful partnerships. It is my belief that an emphasis on the co-construction of dialogue and trust serve as pathways towards establishing collaborative (third) spaces that ultimately promote the relationships, conditions and circumstances necessary for the "invention of new narratives" and "new ways of thinking and doing" within the field of development, and beyond (Escobar, 1995, p. 20).

**An Introduction to Trust**

The moral philosopher Annette Baier (1986) describes the unique atmospheric quality of trust as follows, "We inhabit a climate of trust as we inhabit an atmosphere and notice it as we notice air, only when it becomes scarce or polluted" (p. 234). Trust is all around us. It factors into every relationship, encounter and instance of communication or interaction. Because of trust's ubiquitous quality, we are often unaware, unconscious or under-appreciative of the importance of trust in our daily lives, unless that trust is threatened, broken or absent. The absence of trust brings with it a litany of (re)-actions, behaviors and relationships. Without trust, people are less willing
to accept risk and require more protective measures (Tyler & Kramer, 1996), the cost of doing business is augmented due to an increase in self-protective actions (Limmerick & Cunningham, 1993), individuals are less willing to share information openly to minimize vulnerability and protect self-interest (Bartolme, 1989; Govier, 1992; Mellinger, 1956) and feelings of anxiety, suspicion and insecurity are pervasive (Fuller, 1996; Tschannen-Moran & Hoy, 2000). In an organizational setting, distrust often exists when an individual or group is perceived as not "sharing the same key cultural values" (Sitkin & Roth, 1997 in Tschannen-Moran & Hoy, 2000, p. 560). Consequently, "Distrust impedes the communication which could overcome it... so that suspiciousness builds on itself and our negative beliefs about the other tend in the worst case toward immunity to refutation by evidence" (Govier, 1992, p. 56). In other words, distrust begets more distrust and blocks the essential dialogic interactions that can break the vicious cycle and establish an atmosphere, culture and ethic of trust.

According to Blomqvist (1997), “Trust seems to play an important role in almost any human interaction: effective communication, learning and problem-solving all require trust” (p. 283). Considering the omnipresent and almost-invisible role trust plays in human interactions, it is not surprising that people are often unaware or underappreciate the importance of trust unless it is “scarce or polluted” (Baier, 1986, p. 234). It is as quotidian and commonplace as the many concepts to which trust is connected: love (Gibb, 1978); hope (Deutch, 1958); loyalty (Kaman, 1993); and faith (Deutch, 1958; Giffin, 1967). These concepts inspire a visceral human reaction, and
share with trust an instinctive and unstrategized quality and emotion. In fact, Gibb (1978) describes trust as a feeling close to love.

Even though trust is created, felt, broken and/or repaired on a daily basis, and while there is universal consensus on the importance of trust in human interaction and all types of relationships, there is a lack of agreement on a universally acceptable definition of the construct (Hosmer, 1995). That being said, before defining trust across disciplines, it is helpful to examine theories on why human beings trust in the first place. Human beings are incapable of taking care of everything that is near and dear to us, including ourselves. Consequently, we are left no choice but to entrust the things we care about to others, thus relinquishing control and granting the other discretionary power of the coveted object, and trusting in his/her goodwill. According to Baier (1986), “Trust is the reliance on other’s competence and willingness to look after, rather than harm, things one cares about which are entrusted to their care.” (p. 259). In order to rely on another and entrust him/her with the care of what is dear to someone the individual must allow himself to be vulnerable while also relinquishing control over the thing in question. We trust all kinds of people in a litany of ways and under a plethora of circumstances.

Trust is important in all human interactions (Blomqvist, 1997), and it is especially vital to cooperative and collaborative endeavors in international development projects (Diallo & Thuillier, 2005). Over the course of the following sections I examine trust as a concept, exploring its roots, components, conditions and degrees (types) as a means to
provide a comprehensive overview of this complex term and phenomenon and position trust within the literatures on dialogue and international development. Specific attention will be paid to the processes and stages of trust, which include understanding, building, maintaining, repairing and expansion. Informed by a dialogic sensibility, trust assumes a more collaborative, interpersonal quality, and the parallels between the two constructs emerge more clearly.

Human beings are unable to take care of everything that matters to them, and therefore must look to another for help. According to Baier (1986), “Trust is the reliance on other’s competence and willingness to look after, rather than harm, things one cares about which are entrusted to their care.” (p. 259). In order to rely on another and entrust him/her with the care of what is dear to me, I must allow myself to be vulnerable while also relinquishing control over the thing in question. We trust all types of people in a variety of ways, from an old, reliable friend to a passing stranger we encounter on the streets of an unfamiliar city. While on vacation I trust my neighbor with the keys to my house, granting him access to my private sanctuary. I expect that he will act responsibly and respectfully and “take care” of my home and all that comes with it. Even with ubiquitous smartphone technology, who hasn’t been in uncharted territory and asked a complete stranger for help in the form of directions? We trust someone we have never met nor know nothing about, yet we expect good intentions in the form of honest, and most importantly, correct directions. In this case, relying on another human being in our vulnerable state does not come with huge risk, but it
exemplifies one of the many instances in which we are incapable of complete independence and therefore require the help of another to take care of what is dear to us. Further along the spectrum of importance and vulnerability, we trust doctors, and the system that legitimizes and ideally guarantees their competence, when confronted with pain and suffering or simply to keep us healthy. I trust that she will know how to diagnose my affliction and ultimately alleviate my discomfort rather than harm me further or prescribe unnecessary medications for her financial benefit and my physical detriment. Lastly, I am confident that my wife will not cheat on me while on a work-related trip because I trust her unconditionally and expect her to honor her commitment to our monogamous relationship. All and all, the aforementioned examples demonstrate the instrumental value of trust (McLeod, 2014). In a variety of contexts, relationships, and situations, we trust one another with something dear to us (including our own physical well being) because we are unable to care for everything alone.

“Trust [...] is accepted vulnerability to another’s possible but not expected ill will (or lack of good will) toward one.” (Baier, 1986, p. 235). Whether trust exists between a doctor and patient, between neighbors or between a husband and wife, the cases presented above allude to the facets of trust across multiple disciplines: willingness to risk vulnerability (Coleman, 1990; Williamson, 1993); confidence (Rousseau, Sitkin, Burt, & Camerer, 1998); benevolence (Baier, 1986; Butler & Cantrell, 1984; Deutsch, 1958; Gambetta, 1988; Mishra, 1996); reliability (Butler & Cantrell, 1984); competence (Bryk &
Schneider, 2003); honesty (Baier, 1986; Butler & Cantrell, 1984; Tschannen-Moran & Hoy, 2000); and openness (Butler & Cantrell, 1984; Tschannen-Moran & Hoy, 2000). To further explore the components and overall understandings of trust, the following section will review certain discipline-specific conceptualizations of trust.

**Trust across Disciplines**

While there is broad consensus on the importance of trust in human relationships and individual conduct/behavior, there is a significant lack of agreement on the appropriate definition or acceptable construct (Hosmer, 1995). It is at this point in the review of trust that we attend to the broad range of definitions across disciplines. Thus far we have primarily viewed trust through the lens of moral philosophy (Baier, 1986), a framing that places special significance on attitudes and ethics. Specifically, moral philosophers stress a particular trusting attitude toward another that is implicit (Herzberg, 1988). Although Plato and Aristotle did not explicitly define trust, they did however imply trust in their discussion of human virtues, cooperation and friendship (Hosmer, 1995; Baier, 1986). Specifically, trust comprises and promotes positive/healthy human ethics and interactions, and the breaking or the disappointment of trust is therefore morally wrong. According to Baier (1986), there are countless forms and versions of trust within the discipline of philosophy, including the unconscious, unwanted or unaware among others.

For economists, trust is a useful and reliable indicator with far reaching importance. According to Steve Knack, a senior economist at the World Bank, “If you
take a broad enough definition of trust, then it would explain basically all the difference between the per capita income of the United States and Somalia" (Hartford, 2006).

Specifically, trust enables individuals and organizations to do business together as well as participate in more informal transactions. Personal, informal trust (i.e. between neighbors) and impersonal, institutionalized trust (i.e. providing sensitive financial information online) are two types of trust that are simultaneously distinct as well as correlated. For example, an individual is more likely to trust another if she believes that the courts or police will intervene/assist if necessary, thus exhibiting a reliance on and a confidence/trust in the institution(s). Although economists distinguish between these two instantiations of trust, the overarching construct is associated with the existence of “mutual confidence” (Zucker, 1986; Blomqvist, 1997). This purely rational and calculative view of trust comes with the belief that the costs and benefits of the relationship are explicitly measured and quantified. Furthermore, trust is a response to an expected future behavior, similar to a return on an investment (Coleman, 1990; Williamson, 1993, Blomqvist, 1997). Evoking Baier’s earlier conceptualization, trust is also seen as atmospheric, an emotional setting in which business is conducted (Hallén & Sandström, 1991). Without trust, the atmosphere is marked by stiff competition and skepticism instead of confidence and strong collaboration.

In sociology and social psychology, trust is an interpersonal matter (Blau, 1964). It is also defined as a personal trait (Deutsch, 1958; Rotter, 1967). As stated previously by Rotter (1967), trust emerges from an individual’s expectation that a word, promise or
statement from another can be relied upon. Common across other social psychologists as well, reliance is a key component of trust (Giffin, 1967; Schlenker, Helm, & Tedeschi, 1973). Similar to the definition given by Baier, Rotter (1985) emphasizes reliance on another and the expectancy that she will act in good faith. Trust is “the expectancy that the word, promise, verbal or written statement of another individual or group can be relied upon” (Rotter, 1985, p. 651). Reliance, a narrower and more selective concept, is a central component of trust but not an interchangeable synonym. A final conceptualization of trust by social psychology comes from Morton Deutsch. “An individual may be said to have trust in the occurrence of an event if he expects its occurrence and his expectations lead to behavior which he perceives to have greater negative consequences if the expectation is not confirmed than positive motivational consequences if it is confirmed” (Deutsch, 1958, p. 266). In sum, expectations of future behavior and actions are essential aspects of one’s trust in another, and this trust involves great risk for the truster.

Along with the discipline-specific definitions of trust, there are many cogent examples of interdisciplinary constructs of trust. McEvily, Perrone, and Zaheer (2003) explain that “trust has been conceptualized as an expectation, which is perceptual or attitudinal, as a willingness to be vulnerable, which reflects volition or intentionality, and as a risk-taking act, which is a behavioral manifestation” (p. 93). As mentioned above, participants in a trust relationship expect the other to act or behave a certain way, namely in the best interest of the object or thing for which the relationship hinges
attitudes, for example, are of primary concern especially for philosophers because they emphasize the trusting attitude as “being part of a basic conduct of life” (Blomqvist, 1997, pp. 274-5). A willingness to be vulnerable is a commonly accepted prerequisite for entering into a trust relationship with another. However, this reflection of volition assumes that individuals always enter into trust relationship on their own accord. Baier (1986) warns, “If the network of relationships is systematically unjust or systematically coercive, then it may be that one’s status within that network will make it unwise of one to entrust anything to those persons whose interests, given their status, are systematically opposed to one’s own” (p. 259). Being vulnerable to another necessitates an acceptable level of risk for the one who must rely on the other for help with something and an expectation of good will from the other (Luhmann, 1979; 1988). Therefore, the willingness to accept vulnerability and the consequential risk is often based on one’s expectations (positive or negative) about the behaviors or intentions of the other and the level of acceptable risk commensurate to the benefit or need (Mayer, David, & Schoorman, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). Another important factor in a trust relationship is the exercise of discretionary power (Baier, 1986). For example, when entering into a trust relationship, the trusted must understand the scope for discretion—how much to give—in assessing what are her expectations of the trusted and what constitutes a failure of trust, which is often caused by negligence, ill will or incompetence. The concept of goodwill comes up again here since trusting another arises from an optimistic attitude regarding her goodwill, and the
confidence that the other will do what it takes to maintain trust and comply with expectations (Jones, 1996). Throughout these disciplinary-specific constructs, there are several common facets of trust that cut across disciplines and represent general elements of trust. In order to achieve a deeper understanding of trust, the following section examines the eight main components of trust and compares them to the four facets of relational trust (Tschannen-Moran & Hoy, 2000; Bryk & Schneider, 2003).

**Components of Trust**

Based on empirical evidence, Hoy and Tschannen-Moran (1999) offer several facets of trust relations in schools that together provide a coherent construct of trust. The fact that the construct is based on relations in schools does not limit its validity and reach; however, it does require that that the elements of trust are considered in additional contexts and situations outside of a school environment. With that being said, the components of trust are: (1) Willingness to risk vulnerability; (2) Confidence; (3) Benevolence; (4) Reliability; (5) Competence; (6) Honesty; and (7) Openness (Hoy & Tschannen-Moran, 1999).

A willingness to risk vulnerability is rooted in the need for help in the creation or sustainment of what we care about. Caused by the inability to single-handedly take care of all that matters to us, we must enlist the help of the others, expose ourselves to risk, and accept vulnerability in exchange for support. Trust inherently involves risk, and it is this possibility for both good and bad outcomes in human interaction that Hume evokes. “Tis impossible to separate the chance of good from the risk of ill” (Hume, 1978, p. 497).
A chance for positive or negative consequences is the reason why we have to trust someone as a way to mitigate the potential negative outcome. Moreover, the presence of risk creates the opportunity for a trust relationship, one in which their exists an interdependence between the truster and the trusted (Baier, 1986; Molm, Takahashi, & Peterson, 2000; Tschannen-Moran & Hoy, 2000). With regard to the specific risk, the truster accepts the possibility that the trusted will fail to comply with the expectations of the relationships. Examples of non-compliance are not practicing reasonable discretion, not reciprocating, behaving irresponsibly, acting selfishly at the expense of the truster, injuring the object/thing in the trusted’s care, or exhibiting ill-will.

One’s degree of trust is based on the level of confidence she has when faced with the inherent risks of vulnerability (Rousseau, Sitkin, Burt, & Camerer, 1998). In other words, the degree to which the truster can accept uncertainty with confidence is the level to which she can trust (Kee & Knox, 1970). There are many sources of this confidence, including the competency and integrity of the trusted (both components of relational trust), past experiences of the truster and trusted, the expected/assumed level of risk, and the context and situation among other factors. From an affective and emotional standpoint, confidence comes from the assumption that the other (the trusted) genuinely cares and is concerned for the well-being of the truster and this often leads to a mutual liking between individuals (McAllister, 1995).

The third and possibly the most common component of trust is benevolence (Tschannen-Moran & Hoy, 2000). It is the confidence that the something (i.e. house,
child, reputation, job) that matters to someone or their individual well-being will be safe, protected and unharmed by the trusted (Baier, 1986; Bradach & Eccles, 1989; Butler & Cantrell, 1984; Cummings & Bromily, 1996; Deutsch, 1958; Gambetta, 1988; Mishra, 1996; Zand, 1971).

Next is reliability. It is the level of confidence that expectations/needs will be met, or the dependability of a trust relationship or the trusted participant (Tschannen-Moran & Hoy, 2000). It “combines a sense of predictability with benevolence” (Tschannen-Moran & Hoy, 2000, p. 557). The fifth facet of trust is competence, which is also one of the four elements of relational trust (Bryk & Schneider, 2003). Competence refers to the perception of the ability of the trusted to perform or fulfill her expected role and responsibility in the trust relationship. A level of skill is required in order for the trusted to perform, thus good intentions and good will are not enough. Honesty is the sixth facet of trust, and it is comprised of integrity, authenticity and character. A pivotal facet of trust, honesty is essential to the quality and degree of credibility, reliability and confidence within the relationship. It also serves as a facilitator of open, transparent communication, an element of trust that improves the creation, maintenance and fulfillment of expectations and the overall relation of dialogue between actors. A closely related facet of trust is the seventh and final on the list, that of openness. Openness refers to the “extent to which relevant information is shared and not withheld” (Tschannen-Moran & Hoy, 2000). A common product of openness is the establishment of reciprocal trust, an instance of trust in which information sharing is
fluid and safe between actors. There is a shared sense of confidence in the other and that the relationship will be free of exploitation, either of people or information.

Considering the aforementioned seven facets of trust, it is evident that there are many overlaps among the seemingly separate pieces of the puzzle. In fact, the definitions of the facets themselves have multiple interpretations and conceptualizations, thus resulting in even more layers, degrees, and granular characteristics of this complex interconnectedness of components within and around one term.

It is my hope that the thorough review of the approaches, frames, sections, divisions and parts of trust provide a clear picture of the variety and depth of this immensely influential factor in the human experience, and specifically related to interpersonal relationship and dialogue. With that hope in mind, I embark on an even more concise journey through the road of relational trust.

**Relational Trust**

Formulated and refined in schools, “relational trust is the connective tissue that binds individuals together to advance the education and welfare of students” (Bryk & Schneider, 2003, p. 45). Bryk and Schneider (2002) describe their three-level framework of relational trust as follows:

At is most basic (intrapersonal) level, relational trust is rooted in a complex cognitive activity of discerning the intentions of others. These discernments occur with a set of role relations (interpersonal level) that are formed both by the institutional structure of schooling and by the particularities of an individual school community, with its own culture, history, and local understandings. Finally, these trust relations culminate in important consequences at the organizational level (p. 22).
The intrapersonal, interpersonal, and organizational levels of relational trust represent the varied actors and settings in which trusting relationships are forged. Its primary components (or characteristics) are respect, personal regard, competence and personal integrity. Respect refers to a personal, professional and moral way of being, interacting and treating others that values people and their opinions for their individuality. Genuine listening and engagement with members of the school community are grounded in a social respect (Bryk & Schneider, 2003). Personal regard is the willingness of individuals to go above and beyond the minimum, formal and/or legal requirements of one’s job as a means to recognize and support other members of the community. It enables the cultivation of a climate of personal regard and collective selflessness and camaraderie among its participants. As important as personal regard and respect are for interpersonal relationships, individuals are still expected to do their job effectively and comply with the roles and responsibilities of one’s position as part of a cog in the larger collective machine. Skills are a primary element of one’s competence, the third component of relational trust. There is both a technical competence, characterized by skills in performing specific tasks of the job, and a moral competence, which contains an individual’s (or a friend’s) understanding of loyalty, generosity, support, kindness and patience among other related attributes (Bryk & Schneider, 2003). Lastly on the relational trust list is personal integrity. In the face of conflicts, misunderstanding, work-related stress, it is imperative to have a moral-ethical compass to guide one’s work and engagement with others. Particularly in schools,
“conflicts frequently arise among competing individual interests within a school community” and “a commitment to the education and welfare of children must remain the primary concern” (Bryk & Schneider, 2003, p. 42). Building upon Baier's (1986) description of the atmospheric quality of trust, Bryk & Schneider (2003) contend that a major factor achieving a high level of relational trust is the "cultivation of a climate in which personal regard is the norm across the (school) community" (p. 42). This climate or atmosphere of trust and personal regard are established, maintained, and cultivated in and through the dialogical relationships that accept difference while mutually recognizing the uniqueness of each individual. More specifically, personal regard evokes Buber's (1937/1947) central tenet of dialogue, the acceptance of difference: "one accepts and confirms him in his being this particular man made in this particular way" (Friedman, 2002, p. 94).

The three degrees of trust most relevant to the co-evolving nature of dialogue and trust and to the emergence of third spaces are knowledge-based, interpersonal and relational trust. As stated above, these three types of trust are contingent upon open, honest communication among individuals, yet relational trust offers an expanded definition that includes the elements of respect, personal regard, competence and personal integrity (Bryk & Schneider, 2003). These four components offered by Bryk and Schneider are of particular interest given the emphasis on the acceptance of and regard for difference and the importance of community. Respect for one another in his/her difference or otherness; personal regard and care for the greater community;
moral competence to be loyal, generous, supportive, kind and patient; and a moral-ethical compass to guide individuals and the overall organization through conflict, challenges and negotiation (Bryk & Schneider, 2003). These qualities are particularly resonant given the prevailing understandings of dialogue provided by Martin Buber (1937/1947), Paulo Freire (1970/1973/1998) and additional authors (Gurevitch, 1990/2001; Isaacs, 1999/2001/2012) presented in the preceding section.

**Toward a dialogical existence**

The word "dialogue" derives from two roots: "dia" which means "through" and "logos" which means "the word", or more particularly "the meaning of the word." The image it gives is of a river of meaning flowing around and through the participants (Bohm, Factor & Garrett, 1991, p. 3).

Dialogue is not a static concept or a finished product, but is rather a process, a relationship, a way of being with oneself and with others. It flows in us, from us, between us and among us. Without dialogue, we live in isolation, disconnected from the world and alone in our singular understanding of it (Bohm et al., 1991; Buber, 1937/1947; Freire, 1970; Gurevitch, 1990; Isaacs, 1999/2001). Dialogue is both a phenomenon and a theory of practice (Isaacs, 2001), a process of learning and knowing and an act of creation (Freire, 1970), "a social form of awakening the presence of Self via-a-vis an Other" (Gurevitch, 1990, p. 182), and it often emerges from our human instinct for communion and connection (Buber, 1947). According to Burbules and Rice (1991), "dialogue aims at the reconciliation of differences or the formation of new common meanings in pursuit of intersubjective understanding" (p. 408). However,
reconciliation does not imply consensus nor does it assume the elimination of difference. Instead, dialogue inspires and facilitates the existence of respect, tolerance and understanding across difference. Through dialogue, we learn as much about ourselves as we do about others, and participants in genuine dialogue are able to establish "a living mutual relation" between whole beings (Buber, 1947, p. 19). The act and presence of dialogue involve listening, speaking, understanding, communicating, reflecting, learning, knowing and creating among a litany of other active processes.

As an actionable skill (Isaacs, 1999/2001) or a way of being and knowing (Buber, 1947; Freire, 1970), dialogue encompasses an expansive landscape of inter-human relations and existential meaning making. The following section highlights Martin Buber and his philosophy of dialogue and dialogical existence. Overall, the review is structured to elucidate the power and possibilities of a life in dialogue and of dialogical engagement, and open the connections to collaborative and third spaces--and relationships. Dialogue is much more than the communicative means through which relationships are established. It is a way of being (Isaacs, 2001), a process of learning and knowing (Freire, 1970), and "the act of entering into relation with the world" (Friedman, 2002). Martin Buber (1947) states that dialogue is:

the binding business of life on the hard earth, in which one is inexorably aware of the otherness of the other but does not at all contest it without realizing it; one takes up its nature into one's own thinking, thinks in relation to it, addresses it in thought (p. 27).
Underlying Buber's contention that dialogue is "the binding business of life" and it is natural and instinctive to human beings, is his allusion to the fundamental concepts of wholeness, recognition and mutuality. Before one can enter into dialogue with another, he/she must be become and accept that he/she is a complete, whole being, different and unique from all others. And, it is from this individual, internal recognition that one is able to recognize the uniqueness and difference in the other (Buber, 1937/1947; Friedman, 2002). One begins the work of understanding the other and developing a relational connection and a sense of mutuality (explained below). As a whole, the philosophy of Martin Buber serves to highlight the spiritual and human framing of this often overly operationalized term. Dialogue is more than a conversation between two people, it is a way of life, a way of learning and knowing, and a way being with oneself and in relation to the world. In the building and enactment of community-based development efforts, dialogue serves as the central conduit and catalyst for individual understanding, knowing and learning and through which stakeholders communicate, collaborate, share, connect, understand one another, grow together and negotiate future possibilities.

**Martin Buber: A life in dialogue**

I have referred to the child, lying with half-closed eyes waiting for his mother to speak to him. But many children do not need to wait, for they know that they are unceasingly addressed in a dialogue which never breaks off. In the race of the lonely night which threatens to invade, they lie preserved and guarded, invulnerable, clad in the silver mail of trust (Buber, 1947, p. 98).
For renowned philosopher Martin Buber (1937/1947/1965), being engaged in genuine dialogue with another requires unconditional trust and a willingness to be vulnerable. Evoking the definition provided by Tschannen-Moran and Hoy (2000), this unconditional nature refers to the "state of trust where each comes to identify with the other" (p. 563). Identifying with one another is a central component of Buberian dialogue, which, as mentioned above, also requires vulnerability, a universal element of trust. In this section on dialogue, the overlapping characteristics of trust and dialogue along with their mutually reinforcing processes, relationships and impacts clearly demonstrate the natural linkage between these pivotal concepts and the vital qualities of any respectful, authentic collaboration, and the emergence of third spaces (Bhabha, 1990). But, before we delve deeply into a comparative analysis of trust, dialogue and third spaces, let us return to the "child, lying with half-closed eyes waiting for his mother to speak to him."

Upon entering the world, newborns are completely dependent on others for their care and ultimate survival, thus their vulnerability and trust in others is not made by choice but instead arises out of necessity. Even so, this initial relationship with other individuals models a connection, a dialogue that never ceases, one that remains intact even without physical, face-to-face interactions. The idea of dialogue without physical presence may seem abstract or too metaphysical; however, it is this mystical particularity of Buberian dialogue that elevates the dialogical relationship to something
beyond mere verbal exchange or point/counterpoint. According to Buber (1947), there are three types of dialogue. First is *monologue disguised as dialogue* in which two men speak to one another "in strangely tortuous and circuitous ways" (Buber, 1947, p. 19). *Monologue disguised as dialogue*, is what Covey (2011) alludes to in his popular quote about the lack of true, active listening in favor of listening with the intent to reply. A vital approach to and an essential component of dialogue, and trust, is active listening for understanding. In the immortal words of psychotherapist and the creator of client-centered therapy Carl Rogers (1961), "Real communication occurs [...] when we listen with understanding" (p. 331).

The second type of dialogue, *technical dialogue* is communication "prompted solely by the need of objective understanding" (p. 19), or a basic comprehension of what the other person is expressing and nothing more. The third and optimal form of dialogue is *genuine dialogue*, or what Buber (1937) calls the *I-Thou* relation, one characterized by mutuality, presentness, intensity, directness and togetherness. Each member of an *I-Thou* relation remains himself and embraces the uniqueness and difference of the other, and they truly engage in genuine dialogue. Participants remain themselves while embracing the other as unique and different (Friedman, 2002). Similar to Young's (1990) argument of "together in difference", Buber stresses the importance of remaining whole, separate beings in the embrace of difference. The *I-Thou* relation occurs in the ‘between’ space, “the reciprocal relationship of whole and active beings” (Friedman, 2002, p. 69). Actively in relation with another, individuals preserve their
unique wholeness and grasp being as a unity with others. This unity with others requires a trusting relationship, “a relation of trust to the whole man, a relation which takes precedence over any proof concerning his particular qualities” (Friedman, 2002, p. 56).

For trust and dialogue to exist and thrive between individuals, organizations and communities, each participant must first accept his/her own uniqueness and wholeness of being and be fully present, open and authentic. He/she embodies a simple and direct presentness, a communicative openness with a strong commitment to direct interpersonal relations, and a transparent and genuine authenticity (Buber, 1937; Friedman, 2002). Although there are innumerable external and internal factors that either inhibit or encourage transparency and authenticity, Buber focuses on the individual's internal and transparent acceptance of his/her uniqueness and authenticity as a prerequisite for mutual acceptance and confirmation of otherness (1937/1948). It is this unity of contraries (self and other) that begets the mystery at the center of the dialogue (Buber, 1948; Friedman, 2002). With individuality preserved and unity embraced, the dialogic interaction creates an atmosphere of mutual respect, trust and cooperation, a space in between the two participants that is shared exclusively by the pair (Buber, 1964; Wals & Schwarzin, 2012). Evoking the atmospheric quality of trust proposed by Baier (1986), the dialogical engagement between two individuals, two whole beings forges a unique spatial connection (i.e., an atmosphere or culture) that bonds the two in mutual recognition. It is within this culture of dialogue and trust that
third spaces can emerge and begin the essential work of forging new meanings, new authority, new power relations, and new possibilities for collaboration.

Trust and dialogue represent attitudes, thoughts, qualities, characteristics and feelings essential to any human interaction, cooperative activity or partnership (Baier, 1986; Blomqvist, 1997; Bryk, Camburn, & Louis, 1999; Burbules & Rice, 1991). They cut across theoretical landscapes and encompass vast fields of literature, simultaneously elusive and viscerally familiar to us all. In any collaboration, partnership, agreement or arrangement, either explicit or implicit, a certain level and type of trust and dialogue are present in the creative, relational, operational and productive processes. Senge and colleagues (2007) go further by stating that “Success in any collaboration between organizations rests on the quality of relationships that shape cooperation, trust, mutuality and joint learning” (p. 47). These successful collaborations, whether in the development space or within the walls of a school, rely on and flourish because of dialogue, the quintessential framework and way of being in the creation and expansion of cooperation, mutuality and joint learning.

Trust, Dialogue and Third Space

Both relational constructs, dialogue and trust are inextricably linked, not only because of their particular existence in the world, but also because for whole beings to be in genuine dialogue with one another, there must be a relationship of trust, and vice versa (Buber, 1965a). Beginning at birth and continuing throughout our lives, trust is central to human interaction. “Trust seems to play an important role in almost any
human interaction: effective communication, learning and problem-solving all require trust” (Blomqvist, 1997, p. 283). According to the moral philosopher, Hume scholar and feminist Annette Baier (1986), trust is “a necessary element in any surviving creature whose first nourishment […] comes from another” (p. 242). From the moment we are brought into this world our initial survival depends exclusively on the trusting relationship with another or others. In Baier’s example, we depend on help in the form of nourishment and care from our mother because we are vulnerable. Although we have no true choice in the matter, we innately trust another because we require her help in the care of some thing, in this case, our own wellbeing. It is this three-place predicate, “A trusts B with valued thing C”, that becomes the foundational model for the majority of our trust relationships to follow (Baier, 1986). More generally, the cooperative and constructive behavior needed for long-term relationships to thrive are often spawned by and/or aided significantly by trust (Blomqvist, 1997; Morgan & Hunt, 1994; Young & Wilkinson, 1989). Some even claim that trust is a necessary aspect of cooperation (Ring & Van de Ven, 1992/1994). Trust is viewed as an essential “lubricant” between in(ter)dependent group members working together to achieve shared goals (Diallo & Thuillier, 2004; Ring & Van de Ven, 1992/1994). “Trust is necessary for cooperation, which is in turn the social lubricant that allows autonomous but interdependent group members to achieve common goals harmoniously” (Diallo & Thuillier, 2005, p. 241).
Our work in the Digital Seeds program is grounded in the intersecting literatures on trust and dialogue and their relationships to the creation of third spaces. It is my belief trust in dialogue is what truly enables the work along the ecological edges that ultimately creates the essential third spaces where new, unique cultures and dynamics emerge. In Moje and colleagues' (2004) article on third spaces in content area literacy, the authors stress the relevance of dialogue to these new spaces of hybridity. They state "Bhabha's argument is that third space is produced in and through language as people come together, and particularly as people resist cultural authority" (Moje, Ciechanowski, Kramer, Ellis, Carrillo, & Collazo, 2004, p. 43). In collective resistance to dominant approaches to development work (discussed earlier), participants engage in action-oriented dialogue, thus creating new possibilities and unique spaces that challenge the previous arrangements and structures of interaction, authority, control and power (Escobar, 1995; Eyben, 2009; Ravitch, Tarditi, Montenegro & Baltodano, in press). A resistance to authority and related hierarchical structures are central to establishing the authentic and unique collaborations (and partnerships) among emerging partners in the various iterations of the Digital Seeds program. Therefore, resistance to dominant structures and practices and the creation of new, negotiated cultures (i.e., third space) occur in and through dialogue. Isaacs (2001) classifies this dialogue as a "sustained inquiry into the processes, assumptions and certainties of everyday experience" (p. 713). An "act of creation" (Freire, 1970, p. 89), dialogue enables stakeholders to forge new (edge) communities (Gorodetsky & Barak, 2008) in
these emergent cultural (third) spaces (Bhabha, 1990). In other words, the combined, mutually reinforcing presence of trust and dialogue facilitate the vital interactions and negotiations along ecological edges and within edge communities, and ultimately results in the emergence of third spaces. The edges and edge communities are the "critical zones of interactions between landscapes and habitats" (Gorodetsky & Barak, 2008, p. 1908) and "provide a facilitative environment, practical knowledge and conceptual frameworks for reflection, knowledge negotiation and understandings of the processes that are undergoing" (Gorodetsky & Barak, 2008, p. 1917). This implies a resource-oriented approach to difference and different voices that offers a legitimizing and respectful culture for the re-evaluation and critical reflection on the present and the co-construction of new possibilities. Based on their research of a partnership between a school and a college's teacher education program, Gorodetsky and Barak (2008) demonstrate the value of edge communities and ecological edges in the creation of a "culture of equality and respect" and the "shared construction of new knowledge" (p. 1917). To facilitate the initial creation of and the necessary interactions along these ecological edges and within third spaces, participants must trust one another and engage in dialogical relationships. However, these mutual relationships of trust and dialogue first emanate from the internal, deeply individual selves of participants (Buber, 1937; Friedman, 2002).

The emergence of trust and dialogue begin with the individual being true and authentic to oneself before extending this same authenticity and wholeness to others,
and embracing the other in his/her wholeness of being (and in difference) (Buber, 1937). The interconnectedness and mutuality, key components of trust and dialogue, stem from our individual authenticity and blossom as we recognize the other and the other recognizes us. According to Tubbs (1972) and Buber (1947), to exist fully and authentically requires a life in relation to each other, a mutual confirmation of uniqueness and difference. Framed by this conception of life as the relation between and among authentic individuals, mutually confirmed in their uniqueness, the role of trust and dialogue in the creation/emergence of the third space becomes clearer.

Forming the quintessential ethos, spirit and foundational principles, trust and authentic dialogue enable the emergence of third cultures, *third spaces* (Bhabha, 1990) and the *ecological edges* (Gorodetsky & Barak, 2008) that serve as critical zones of interaction, growth and change. The resultant participatory communities combine elements of the cultures and practices of the collaborating individuals and organizations into a new culture that is unique to the particular partnership. It is important to note that what originate in these hybrid spaces are not based on prescriptive methods (i.e., "recipes for success") or pre-determined outcomes. Instead, individuals and communities intermingle and coalesce vis-à-vis an engagement in mutual discovery, learning, growth and development, venturing through uncharted territory as a newly forming community, confronting uncertainty together in dialogue. For example, as the *Digital Seeds* program multiplies, these new instantiations--characterized as *edge communities* (Gorodetsky & Barak, 2008)-- do not intend to indoctrinate newcomers to
the center (i.e., the existing, dominant culture) or simply integrate communities into the existing program. Rather, they represent distinct opportunities for expansion, evolution and growth of the Program at its heart, "a newly constructed environment that serves not as a buffer zone for introduction to the existing core communities, but rather one that serves as a context that eventually leads the core communities in new directions.” (Gorodetsky & Barak, 2008, p. 1909). In these newly created and constantly emerging third spaces, participants enjoy "togetherness in difference" (Young, 1990) and a "mutuality of relation" that embrace the other as different and unique (Friedman, 2002). An atmosphere of trust (Baier, 1986) and an ethic of dialogue (Gurevitch, 1990) support the free flow of ideas, understandings and opinions, as individuals and the community, acting interdependently, push themselves and one another in new directions.

**Moving towards more authentic partnerships in development**

To counteract the prevailing normative approaches to development and thus create more sustainable, respectful partnerships, individuals, organizations and programs must enable openness and authenticity, a turning to one another in honest, transparent communication and dialogue, to cultivate relational trust (Bryk & Schneider, 2003) and facilitate a dialogical relation (Buber, 1937/1947; Freire, 1970). Conversations and instances of togetherness--sitting or standing side-by-side and truly facing one another in the Buberian sense--provide necessary platforms and opportunities for bilateral exchanges and establish the foundational building blocks for reciprocal
transformation (Nakkula & Ravitch, 1998; Ravitch & Tillman, 2010; Sen, 1999).

Moreover, framing these interactions, partnerships and collaborations as dialogical engagements founded upon love (appreciation of and recognition for others), humility (essential to authentic dialogue) and faith (component of and close synonym to trust) fosters the horizontal relationships and mutual trust necessary for establishing truly authentic partnerships (Chilisa, 2012; Freire, 1970; Miller, 2005). Consequently, Miller (2005) argues that the promotion of this horizontal nature "maximize(s) the growth and benefits for all parties involved" (p. 24).

Based on their research on the influence of interpersonal relationships, trust and communication on the success of international development projects in sub-Saharan Africa, Diallo and Thuillier (2005) concluded, "Trust and communication are inseparable, and in international development, they are critical factors of project success" (p. 249). In fact establishing a climate of trust and communication among the members of the project team is highly influential to the effectiveness and success of the cooperative activity. Consequently, Diallo and Thuillier (2005) suggest that multilateral donor agencies should monitor and assess regularly the environment of trust that exists among project participants. Finally, “it is widely acknowledged that for inter-organizational projects to succeed trust between the project team members of the local firm and its outside project partners is of great importance” (Maurer, 2010, p. 629)

Within an atmosphere of trust (Baier, 1986), dialogue flows freely and openly, and the communication and coordination vital to any successful collaboration is
strengthened (Diallo & Thuillier, 2005). The differences among partners and stakeholders that are commonly collapsed or dismissed (i.e., normative development) are shared without hesitation and valued for their uniqueness. Instead of striving for consensus or proximity (and conformity) to the norm, difference and hybridity emerge in the negotiation of new possibilities among stakeholders. A goal of this research is that the data produced from this study can support the cultivation of collaborations steeped in trust and dialogue. Through the exploration of stakeholders' stories and experiences, practitioners working in education and development can witness the power and possibilities of living a life of dialogue, of building (relational) trust with one another and co-creating, supportive, negotiated third spaces as integral components and processes in the spread of more respectful, just, and equitable partnerships across difference.

**Positionality**

Researcher positionality (and experience) serves as the center of perspectival, emotional and relational gravity for the conceptual framework. From one's position and experience, theories, practices and methods of understanding arise, and therefore guide the development of questions and determine why and how he/she proposes to engage with these questions. My past experiences and contemporary position as a researcher/educator has given rise to a multicultural wisdom of practice in the fields of education and international development. During the last six years, my evolving participation in *Digital Seeds* has enabled me to accompany stakeholders as a colleague.
and friend, an authentic dialogue that includes listening to their personal stories and reflections, observing them in the multiple contexts of the Program, and developing a relational trust along the way. Over the course of this prolonged engagement the lived experiences of individuals have become primary to my understanding of the Program. How stakeholders make meaning of the Program and their experiences in it are paramount. People and the situations they inhabit are engaged in a constant dialectic relationship, the lived body and the world (Merleau-Ponty, 1945). Visual ethnography affords an initial capturing of moments in time, engagements with people and places, and then provides future opportunities to "relive" those moments beyond my revisionist history or fragmented memories. Filming, photographing and recording my myriad encounters through the lens of visual ethnography are particularly appropriate and effective methods and representational forms to capture lived realities and experiences in the contexts in which they unfold.

My perspective and position as a researcher, and person in the world, goes far beyond my long-term personal, academic and professional engagements with the Digital Seeds program. As a participant-observer I have been and continue to be deeply involved in "experiencing the Program as fully as possible," however, my work often favors or even requires being more of a participant at times and less of an observer. All the while, I strive to maintain "an analytical perspective grounded in the purpose of the fieldwork" (Patton, 1990, p. 274), yet being truly present (in the Buberian sense) as a friend, colleague and co-worker are primary, human concerns that trump the desire and
pressure to gather data. Additionally, it is important to note here that in the field of
development there is a division between those "who retain a characteristically
anthropological antagonism toward 'development' (based chiefly in the academy) and
those who have embraced the development world, only to find themselves marginalized
and sometimes scorned in the anthropological field at large" (Ferguson, 2005, p. 149).
Faced with this apparent separation, I find myself crossing borders and breaking down
barriers between these two seemingly divided worlds, at one moment occupying a
space in the academy as a doctoral researcher from an Ivy League institution, and at
other times working alongside members of the Digital Seeds Program at the Seeds for
Progress Foundation and personally and professionally engaged in a "development"
project. On a daily basis I struggle to balance and reconcile with these potentially
irreconcilable antagonists, the drive towards modernity within the development field
and the specialization and attentiveness to (and sometimes fetishizing of) the local and
traditional (Ferguson, 2005). At present, I have yet to find a comfortable medium point
between these diametrically opposed forces, and therefore a perpetually dance of self-
reflection, criticality, practicality and judgment continue.

Informed by Moustakas (1994) transcendental phenomenology, I strive to
reserve my own prejudgments related to the studied phenomena (i.e., trust and
dialogue) and reduce the constraints and limitations based on my experiences,
knowledge and beliefs "to be completely open, receptive, and naive in listening to and
hearing research participants describe their experience of the phenomenon being
investigated" (p. 22). Born out of my extended, personal experience with the Program and its participants, issues of researcher bias and reactivity are central concerns and must be reflected upon, considered and mitigated if and when possible. That being said, I accept that I am a human being with biases, and by extension, am also a researcher with specific preconceived notions of the realities, experiences, programs and people that I struggle to comprehend and investigate as part of my current doctoral dissertation research.

To engage with my biases, I have designed interviews to begin with general biographical and professional information about the participant followed by a discussion of the *Digital Seeds* program. Usually, during our conversation about the Program participants will mention dialogue or *confianza* (trust) at which point I will probe further to explore the meaning of these terms and their potential relevance in *Digital Seeds*. The impetus to focus on trust (and *confianza*) and dialogue as a concepts and constructs pertinent to the Program arise from over six years of direct experience with the Program, its participants, and the broader context of Nicaragua. Following the FSLN's successful victory over the Somoza regime, the Marxist-Leninist Sandinistas led literacy campaigns across the country, especially among the rural poor in the North. Deeply informed by Paulo Freire, these campaigns have left indelible marks on generations of educators, particularly those who participated as teachers or students. Additionally, Freire's concepts of critical consciousness and dialogue still reverberate in the hearts and minds of those in education, especially those who lived through the revolution and
its immediate aftermath. Although there are ideological similarities along Freirean lines, the differences of class and rationalities can create distance and possibly tension between an upper-class, white male from the United States and lower-class, Nicaraguans. A common resolution to this tension was a consistent self-awareness and criticality coupled with humility, respect, deep commitment and the gift of vulnerability. Together, my actions and words intended to cultivate "mutual respect and a shared commitment, and through authentic collective participation [sought] new knowledge and synergistic experiences" (Fals-Borda, 1991, p. 153).

In interviews and conversations with stakeholders in the Program, the topics of trust and dialogue have emerged organically, and participants have mentioned their importance without my guidance or emphasis. Additionally, I seek to address all angles and variations of these phenomena, and not limit the focus to more favorable and positive experiences and accounts. It is important to ask stakeholders to discuss the challenges, failures and problems as much as the positive successes because both provide assess into understanding their feelings and lived experiences. Trust and dialogue are not always easily established or maintained, so their reflections on these critical moments are needed to grasp the totality of their experiences. Describe a moment of challenge or can you share an experience with an unresolved conflict and how it made/makes you feel are examples of how to uncover the messiness of building trust and engaging in dialogic relationships. Therefore, critical engagement with and
reflection on trust and dialogue purposefully support an honest, open discussion of their meanings and people's lived experiences of them.

Lastly, it is important to recognize the limitation and privilege of my voice as a filter through which people, places, histories and cultures are represented. As much I espouse equality and strive to embody fairness in my everyday interactions and relationships with participants, I realize that there are systemic and structural inequalities and power asymmetries that influence our individual and collective positions. In fact, to claim "equality of positioning" is to deny responsibility and critical inquiry (Haraway, 1988, p. 584). Consequently, I make no claim to "appropriating the vision of the less powerful" nor see from the position Nicaraguans, regardless of socio-economic status, ethnicity or class, in spite of the "premium on establishing the capacity to see from the peripheries and the depths" (p. 543-4). Instead, this study attempts to be in conversation with the participants who made it possible, and I intentionally quote individuals as often and as thoroughly as possible so that the reader can hear first hand what people are thinking, feeling and saying, and not read paraphrased summaries of conversations and discussions. Even so, no matter whose perspective I provide or choose to include, the accounts are highly subjective and situated. In the end, my situated, located position as researcher, participant, colleague and friend, although varied and diverse, only allows for a partial rendering and interpretation of the phenomena and stories depicted in this written work, a "partial truth" (Clifford, 1986).
CHAPTER FIVE: METHODOLOGY

Given the goals, conceptual framework and research questions, this study will employ a mixed-methods approach to the dissertation research. There is a primary focus on qualitative and ethnographic methods (e.g., participant-observation, interviews, focus groups) because of the focus on the meanings and essences of human experiences in the *Digital Seeds* program, and these "data of experience" are critical to comprehending human behavior (Moustakas, 1994, p. 21). Quantitative methods are used to increase the scope of participant inclusion and to expand the methods of data collection and the forms of data representation. Hoy and Tschannen-Moran's (2003) research-based questionnaire measure the levels and types of trust across and among educational stakeholders (Appendix C). The inclusion of teachers from all 12 *Digital Seeds*' schools brings breadth to the selection of participants and enables comprehensive contrasts among individuals and contexts. The guiding methodological orientations for the current study are phenomenological research (Husserl, 1990; Moustakas, 1994) and documentary film and visual ethnography (Barbash & Taylor, 1997; Jackson, 2014; Pink, 2003/2011; Rouch, 2003), described at length in the Conceptual Framework section.

**Methodological Frameworks: Phenomenology and Visual Ethnography**

In the following section is a discussion of the three methodological frameworks from which I base my engagement: phenomenology and visual ethnography.
Phenomenology

Simply put, phenomenology examines the structures of consciousness or experience (Smith, 2013). To study individuals' lived experiences of trust and dialogue, the two phenomena central to my research, a phenomenological methodology is not only apropos but necessary. Within the varied landscape of phenomenology (e.g., Dilthey, 1988/1996; Husserl, 1990), the methodology of Transcendental Phenomenology proposed by Moustakas (1994) is most appropriate given the circumstances of my relationships with the Program, people and phenomena being researched.

Transcendental Phenomenology employs three core processes to "facilitate the derivation of knowledge" (p. 33): Epoche, Transcendental-Phenomenological Reduction, and Imaginative Variation. Epoche represents the casting aside of preconceptions and existing understandings in order to achieve a fresh and naïve "vantage point of a pure or transcendental ego" (Moustakas, 1994, p. 33). This first step in the processes is particularly important to my engagement with the subject matter given my long and intimate history with the Program. After moving away from preconceived notions, Transcendental-Phenomenological-Reduction surpasses the quotidian and moves into the pure ego of each individual, "transforms the world into mere phenomena" (Moustakas, 1994, p. 34) and returns to the roots of "meaning and existence of the experienced world" (Schmitt, 1967, p. 61). Moustakas (1994) argues that the goal of the methodology is to consider the singularity of each experience and to describe the totality of each phenomenon. The meanings phenomena have in participants'
experiences are achieved through each individual's subjective (first person) point of view, and this exercise of explicating one's own consciousness is an important first step before he/she "can understand someone or something that is not (his/her) own, someone or something that is apprehended analogically" (Moustakas, 1994, p. 37). Intersubjectivity is framed through others entering into one's consciousness as they become present and copresent, and thus become "essential to my international experience" (Moustakas, 1994, p. 37). In sum, Transcendental Phenomenology helps develop an account of a multiplicity of awareness in participants: temporal, spatial, one's own experience, self-awareness and other awareness of other persons (i.e., empathy and intersubjectivity) (Smith, 2013).

**Visual Ethnography**

Utilizing visual ethnography (or ethnographic film) as a guiding methodology arises from multiple considerations at the nexus of process, relationship and product. Barbosa (2010) argues, "being in the world is a sensory, emotional and reflective experience" (p. 299). As researchers, we attempt to document, analyze and (re)present this sensorial world using methods, techniques, forms and media that are legitimized (or deemed rigorous and scholarly) by our specific disciplines or fields of study, and the norms within them. However, there are certain practices that break the boundaries and borders between disciplines and offer alternatives to siloed approaches. Visual ethnography is one example of a "practice [that] spans a good range of academic and applied disciplines as well as interdisciplinary fields" (Pink, 2011, p. 443) and thus
"provides a potentially important opportunity for examining the methodological and representational norms of scholarly output" (Jackson, 2014, p. 535). In addition to pushing the possibilities of rigorous, legitimate scholarship within the academy, filmmaking and video-based research have profound affordances (and challenges) as a method for conducting research (Heath, Hindmarsh & Luff, 2011), a representational form (Jackson, 2014); a form of art (Barbash & Taylor, 1997), and a catalyst for more participatory processes (Pink, 2008; Rouch, 2003; Ruby, 1991).

Ethnographic filmmaking and documentary can be categorized into four main styles: expository, impressionistic, observational, and reflexive (Barbash & Taylor, 1997). The markers of expository, or a Griersonian, approach are on-screen commentators or a voice-over track, and it tends to be more didactic in nature as it explicitly "informs" and "instructs" the viewer. Impressionistic filmmaking, characterized by a more lyrical and poetic quality, is less didactic and argumentative, and tends to focus on "people's subjective feelings" (Barbash & Taylor, 1997, p. 22) in a hyper stylized form.

Observational film, comprised of direct cinema and cinema verité, attempt to "film lived experiences itself instead of summaries or reports [...] condensed in interviews" (Barbash & Taylor, 1997, p. 27). Implication not demonstration or explicit explanation leaves spectators to assemble the pieces and thus requires a more active, thoughtful viewer. The fourth style, reflexive, directly attends to the process of representation and the relationships between filmmaker and filmed and filmmaker and audience. While it
is a more "self-conscious" or "self-reflexive" approach, it is often accused of being too intellectual or narcissistic (Barbash & Taylor, 1997).

For the current research proposal, I envision a hybrid of these four styles, incorporating specific elements from each given the affordances of each methodological and narrative approach. Exposition fulfills the explicit theorizing and analysis indicative of scholarship, yet a purely expository filmmaking reduces the primacy of the visual and the diegetic audio (natural, direct sounds and not voice-over). Impressionism permits a more experimental, poetic feel of the film; however, it may not be enough to satisfy the demands of traditional academic knowledge production. Observation, and specifically shared anthropology, is most appropriate given the overarching conceptual framework of my engagement with the participants and the central themes of the research. Showing trust and dialogue in action and through the conversations and engagements with participants expands the access points to understanding the lived experiences of individuals in the Program, thus representing a more authentic phenomenological methodology. Additionally, the affordances of visual anthropology to vividly capture and (re)present the sensorial nature and experiences of life (Pink, 2011) profoundly resonate with phenomenology's commitment to descriptions of experience, not explanations or analyses (Moustakas, 1994). Employing the multi-layered, juxtaposition of images and sounds through montage, the invisible becomes visible (Suhr & Willerslev, 2012). Suhr and Willerslev (2012) point to Merleau-Ponty's theory of perception to describe the relational quality of vision, "visual perception emerges as an
intertwinement of our own subjective viewpoint along with the focal object and the vast sprawling web of viewpoints that surround it and provide its supporting context" (Merleau-Ponty, 1997 cited in Suhr & Willerslev, 2012, p. 286). By using montage in ethnographic film, we are able to create a "view from everywhere" and thus bring us closer to imagining and depicting the multiplicity of people's worlds (Suhr & Willerslev, 2012).

As an ethnographer, reflexivity is a critical component of the research. To reflexively engage with my perceptions, presuppositions, and understandings, and to engender a critical dialogic among the people, places and themes of research there must be an emphasis on the processes of representation and the relationships with participants as they relate to the research project (Ravitch & Carl, 2016).

The life of the research process is deeply informed by a visual ethnographic approach, impacting each stage from design and data collection to analysis, representation and dissemination (Pink, 2008). The effective and respectful use of visual methods and forms requires technical capabilities to "deploy and exploit its functionality" (Heath, et al., 2011, p. 147) and a highly reflexive and ethical focus given the sensitivities related to how filming "might affect people's lives and relationships to each other" and the possibility for a "plurality of interpretations" (Barbash & Taylor, 1997, p. 44) among other elements. Although it is widely believed that images can speak for themselves, Barbash and Taylor (1997) caution filmmakers of the "ambiguity of images" and the range of potential responses and reactions to films by audiences and
participants. Therefore, the ethical responsibility to participants (or 'actors') assumes even more transparency and necessitates an honesty and tactfulness in the explanation of the research project (i.e., goals, methods, results) and the imagined life of the filmic product. "Film brings people and cultures alive on the screen, capturing the sensation of living presence, in a way that neither words nor even still photos can" (Barbash & Taylor, 1997, p. 1).

In the fields of public and applied visual anthropology, Pink (2011) argues that the critical interventions and partnerships outside of the academy are central, and directly challenge the notion of anthropologist as "expert." French anthropologist and filmmaker Jean Rouch engaged in "shared anthropology," emphasizing a more participatory approach to producing anthropological knowledge through/on film (Rouch, 2003). In fact, critical involvement from participants deeply informed the making of many of his films. One strategy he employed was to hold screenings with participants to receive feedback that he later integrated into future versions of the film. He strove to improve the accuracy of his representations through participants' direct involvement in the creation and final formation of the filmic products. Motivated by a desire to justly portray individuals, Rouch (2003) argues that, "This type of participatory research, as idealistic as it may seem, appears to me to be the only morally and scientifically feasible anthropological attitude today" (p. 44).

The participatory and applied possibilities of visual anthropology (and specifically "shared anthropology") resonate with my methodological, theoretical and ethical
approach to conducting research and directly align with the ideals of the Digital Seeds program. The processes and products of visual anthropology enable a form of "cultural brokerage" that Chalfen and Rich's (2007) hope "to increase the flow of, first information and second, understanding" (p. 58). By expanding access (to information and content), the film process and finished form deepen the possibilities for inclusion of participants, and this creates a "two-way learning experience" (Barbash & Taylor, 1997, p. 2). The process of making and sharing the finished products will facilitate awareness, learning and critical dialogue by and among audiences, and thus have far-reaching impacts beyond the local communities in which they are made. Through a dialogic relationship with one another and with the film, participants expand their understandings of oneself, one another and the people, places and themes portrayed in the film. The "two-way learning experience" facilitates awareness and understanding, and supports the formation of trusting relationships, foundational elements in the emergence of third spaces, and a new, more respectful form of collaboration among participants and stakeholders. Film as scholarly method and form, in addition to contributing to knowledge production, should be of value to the participants and communities involved in the research.

The principal draw to ethnographic film as a methodology, method and representational form is best summarized in Jean Rouch's (2003) description of "shared anthropology". Upon going through various stages in this shared approach, Rouch (2003) states:
Finally, then, the observer has left the ivory tower; his camera, tape recorder, and projector have driven him, by a strange road of initiation, to the heart of knowledge itself. And for the first time, the work is judged not by a thesis committee but by the very people the anthropologist went out to observe. This extraordinary technique of 'feedback' (which I would translate as 'audiovisual reciprocity') has certainly not yet revealed all of its possibilities. But already, thanks to it, the anthropologist has ceased to be a sort of entomologist observing others as if they were insects (thus putting them down) and has become a stimulator of mutual awareness (hence dignity) (p. 44).

Film creates its own reality, a filmic reality Vertov considered as its own peculiar truth (Feld, 2003). The tiny units of observation captured by the "kino-eye", a new kind of seeing, are assembled together to decipher reality and uncover meaning. In the Editor's Introduction to a collection of works by French Anthropologist and Filmmaker Jean Rouch, ethnomusicologist Steven Feld (2003) refers to ethnographic cinema as "exciting and liberating (as cinema and as ethnography)" because it exceeds a mere record of descriptions, and allows one to "grasp and show and reveal significances, some of which are only emergent in the actual process of filming and editing" (p. 16). Therefore, ethnographic filmmaking is a powerfully rich storytelling technique. It "intimately project(s) the richness of local sensibilities" (Feld, 2003, p.16) and "uses experience to express experience" (Barbash & Taylor, 1997, p. 1).
An iterative (often messy) rendering of my conceptual framework seeks to clarify the logical connections between each step in my understanding of the current research project. The interconnected nature of these individual elements stems from their roots in a wisdom of practice, an understanding of theory and a continuous research praxis (Lather, 1993).

- Personal and professional participation in the Digital Seeds program provided a practical and immediately direct exposure to a development project and my continued involvement greatly informs my understanding of and experience with the development field.
• Normative development approaches (historically and currently) are often impositional, (top-down) hierarchical, deficit-oriented, detached from local realities, and are based on outsider expertise, often due to a lack (or absence) of dialogue, mutual trust and the co-construction of programs/projects that are ultimately intended to serve (and involve) local participants.

• Dialogue facilitates active listening, mutual understanding, authenticity, individual wholeness of being, the acceptance of difference and deep human connection; and a life in/of dialogue engenders the communicative qualities, sensibilities, feelings and practices essential for establishing trust (Bryk & Schneider, 2003; Buber, 1947)

• (Mutual) trust is a critical element of human interactions, and it is especially important in the creation and maintenance of collaborative endeavors/relationships (Bryk & Schneider, 2003).

• Dialogue and trust are mutually reinforcing phenomena that facilitate the creation (and cultivation) of third spaces, open forum for establishing new cultures and collaborations (in development) (Bhabha, 1990; Bryk & Schneider, 2003; Buber, 1947).

• The Digital Seeds theoretical model (theory of action) emphasizes the customization and contextualization of the Program to each particular community and school through continuous negotiation, shared inquiry,
horizontal relationships and mutual learning through the establishment of supportive, respectful spaces of open communication/sharing.

- The Digital Seeds program is a holistic educational project based in accompaniment and the cultivation of an educational community designed to empower teachers and improve the quality of education. It strives to innovate pedagogy, create significant shared learning, strengthen relationships and promote the holistic development of participants in the Program (i.e., students, teachers, and facilitators).

- Personal participation over more than five years and critical engagement with the theories of trust, dialogue, third space and development have lead me to believe that trust and dialogue among participants represent the core characteristics of the Digital Seeds model and they are critical elements to: (1) the creation of respectful relationships and partnerships among multiple individuals, communities, organizations and institutions and (2) the central objectives of the Program, especially in the field of development and education.

- Espoused theory (theory of action) is used to describe and justify behavior and a theory-in-use is the operationalization of the espoused theory that governs actions (Argyris & Schön, 1974).

- Individual understandings of trust and dialogue by program participants and their relevance in the Digital Seeds program, captured through long-term engagement, phenomenological interviews and conversations, and ethnographic
approaches to observing and participating in their lives will inform an understanding of the nature, role, processes and experiences of trust and dialogue in the Program.

- The use of audio-visual approaches as a data collection method, a process for engagement with stakeholders and a medium of dissemination strengthens the participatory nature of the research through increased interactions with participants in the design of the research, the sharing of results (dissemination), the accessibility of information, and it serves as a catalyst for further conversations, engagement and involvement.

- The production of knowledge in audio-visual forms promotes greater accessibility to the people, places, spaces and stories associated with the Digital Seeds program and the participating stakeholders and communities.

- A phenomenological research project steeped in visual ethnography focusing on the nature of trust and dialogue in the Digital Seeds program will inform a potential future emphasis on these core principles and values in the cultivation of respectful, authentic collaborations in the field of development, as well in the creation of partnerships among heterogeneous actors/organizations.

**Research Design**

My engagement with Nicaragua--principally in the Buenos Aires school and farm--as part of the *Digital Seeds* program began in July 2009 (months before it officially assumed its current name). As the in-situ, lead researcher (ethnographer), classroom
teacher and teacher-educator, I was, and continue to be, a participant-observer in the ethnographic sense (Geertz, 1984), assuming the varied roles of program co-founder, facilitator, community liaison, and border crosser (Giroux, 1992) within and among the multiple communities and stakeholders associated with schools, teachers, families, the Mercon Coffee Group, the CISA Group, the University of Pennsylvania and the foundation itself (Seeds for Progress Foundation-SfPF implementation team). Since 2009, the Semillas programs has expanded to 12 schools through the Northern, coffee-producing regions of Nicaragua (See Digital Seeds Program Map 2014).

As a framework to research design, Maxwell (2013), provides an interactive model and a set of influential contextual factors (See Contextual Factors Influencing Research Design). Throughout previous sections, the different elements of Maxwell's framework have been addressed as a means to consider the interconnected nature of research design, and how individual components affect one another. In the current section, the specific research methods and overall design of the dissertation proposal will be presented in order to explicate its systematic, rigorous and measurable nature.
In the following section, I outline the research design of the current study. The design includes: Research Participants, Data Collection and Analysis Plan, Triangulation, and Research Ethics.

**Research Participants**

A focus on meaning making and experience are essential in ethnographic, participant-observation (Moustakas, 1994, p. 8). To conduct ethnographic inquiry, there are several widely accepted recommendations (and possibly requirements) for the ethnographer. Over an extended period of residence and intimate study, the researcher must directly participate in activities at the heart of the culture or phenomenon being examined (Van Maanen, 1982). Central to participant-observation is working
knowledge of the local language along with "deep reliance on intensive work with a few informants drawn from the setting" (Van Maanen, 1982, p. 104). Informed by prolonged and intimate involvement in the Digital Seeds program, I have identified several key informants to participate in the study and share their wisdom, experiences and perspectives on themselves, others and the Program as a whole.

Guided by a participatory approach to research, the research participants for the current study come from three stakeholder groups: (1) Seeds for Progress Foundation and affiliates (SfPF); (2) Nicaraguan Ministry of Education (Mined); and (3) the University of Pennsylvania Graduate School of Education (PennGSE). The first group, the Seeds for Progress Foundation and affiliates, houses the Digital Seeds program, and it is responsible for the funding, management, implementation, monitoring and evaluation, coordination and development of the Semillas program as well as additionally planned programming within the fields of health and economic development. Members of SfPF group who work on the direct implementation of the Program are Nicaraguans with extensive backgrounds in education (i.e., former administrators and teachers, Mined employees) and development-related fields (i.e., program coordinators and project managers). I have worked closely with all of them over the years, working alongside them in schools, sharing in regular meetings and workshops, co-presenting at conferences and events, and establishing personal bonds with them and their families in more informal settings (i.e., dinners, parties, funerals and my Nicaraguan wedding). Included in this first group is the Baltodano family (Duilio, Ernesto and Jose Antonio),
founders of the CISA and Mercon Groups, the major sponsoring organizations of the current foundation and the companies in which the former Corporate Social Responsibility division that housed the *Digital Seeds* program was located. The connection between PennGSE and Nicaragua partners was initiated by the Baltodanos in the winter of 2008/2009, reaching its first crescendo during our original visit to the country in February of 2009. Over the years our relationship has grown into a personal and professional bond, a critically engaging dynamic that is quintessential of the relational approach to both our research and overall collaboration.

Personnel within the SfPF are key actors and stakeholders located at the nexus of the collaborative network of participants, stakeholders and friends of the *Digital Seeds* program. They are central to examining, understanding, observing and identifying the major elements of the Program (e.g., tenets, ethics, values, principles, strategies and activities) as well as facilitating access to individual perspectives and lived experiences of the Program, including the congruencies and incongruities between the theory of action and the theory-in-use of the Program (Argyris & Schön, 1974). The second group, the Mined, represents the teachers and administrators participating in the Program at the school level. Teachers and administrators are important stakeholders in the adaptation and contextualization of the Program, and the direct connection between the proposed model (theory of action) and the implementation in schools (theory-in-use) (Argyris & Schön, 1974). Stakeholders from PennGSE are the third group. The two individuals from PennGSE co-founded the Program, lead the pilot experience in the Buenos Aires
school, have been active participants in the Program since its inception, helped guide the transition from a CSR division to foundation, and are currently involved in developing a sustainability strategy for the Program moving forward.

My relationships with the Seeds for Progress Foundation (SfPF) members as well as several teachers and administrators from the Mined are a combination of long-standing, personal and professional. For example, with some SfPF personnel (facilitators, coordinators and directors), I have developed deeply personal friendships, getting to know their families and lives outside of the professional environment. Similarly, the executives of the foundation have become a part of my family, attending my wedding and forging connections of a profoundly emotional and personal nature. With all of these varied relational dynamics came both affordances and challenges to the research project (discussed in Researcher Positionality).

Framed and facilitated by rapport, respect and trust, the core implementation team of the Seeds for Progress Foundation (located in Matagalpa, Nicaragua) have participated in various stages of the research design, including ongoing discussions and dialogues on the possible foci, goals, methods and participants. Specifically, educational facilitators (in situ implementers of the Program), coordinators and the Executive Director of the foundation have critically engaged in the development of methods and instruments (e.g., Interview protocol and questionnaire) and have aided the collection of data (e.g., Focus Groups and Questionnaire).
Participants from the Seeds for Progress Foundation (SfPF), the Digital Seeds Program and partnering organizations are comprised of the following sub-groups:

- **Seeds for Progress Foundation.**
  - Facilitators (Educational and Technical) (8);
  - Coordinators (Methodology and Monitoring and Evaluation AND Operations) (2);
  - Director (1).

- **Mercon Coffee Group.**
  - President Mercon Coffee Group / Former Executive Director SfPF-USA (1);
  - President CISA Agro / Former Executive Director SfPF-Nicaragua (1);
  - General Manager CISA Agro / Co-Founder of program (1);
  - Director of Human Resources, Mercon / Advisor to program (1);
  - Managing Director, INTERSA; includes Buenos Aires Farm (1).

- **Ministry of Education (MINED).**
  - Teachers from Digital Seeds-affiliated schools (139 total teachers in 12 schools);
  - Administrators from Digital Seeds-affiliated schools (12 directors plus assistant-directors).

- **PennGSE.**

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4 Some members of the Mercon Coffee Group hold official positions in the Seeds for Progress Foundation.
The rationale for emphasis on the Seeds for Progress Foundation, especially those who implement the Program, arises from the desire to understand the lived experiences and meaning-making of those who once helped create Digital Seeds and now embody and the steward the dynamic Program along its current journey. For a Program that emphasizes relationships and human development, the individual facilitator is at the front lines of these interpersonal borders and barriers, and as a long-time colleague of the team, I had unfettered access and strong rapport with this particular group of participants. Additionally, I wanted to understand the depth and breadth of experiences by the implementation team, and juxtapose these with some sampling of other actors within the Program. In sum, the main purpose for focusing primarily on the Digital Seeds team stemmed from a perceived richness, thoughtfulness, and quality of data before beginning research and an actual diversity of knowledges, feelings, and thoughts based on experiential, practical and theoretical engagement with the Program and strong relationships with teachers, administrators, students and community members. I never imagined that this dissertation would be the end of my participatory action research agenda related to the Digital Seeds program; however, I had to start somewhere, and with the internal team was a logical and appropriate inception and point of departure for further inquiry.
Data Collection

Collection and analysis are not separate phases of research, but rather integrated, overlapping processes (Miles, Huberman, and Saldaña, 2014; Weiss, 1994). As methods are applied and data are gathered, I am constantly making connections and creating hypotheses based on the emerging information being shared, a dynamic interplay among past experiences, current interactions and predictions of future outcomes. Generalizations and consistencies in data, whether they are shared during interviews or given as responses to questionnaires, are hypothesized and as the data collection phase comes to an end, these generalizations and hypotheses are compared and contrasted with "formalized body of knowledge in the form of constructs or theories" (Miles & Huberman, 1994, p. 9). The multiple stages in "Displaying the Data", outlined by Miles et al. (2014) are: (1) Exploring; (2) Describing; (3) Ordering; (4) Explaining; and (5) Predicting (p. 105). These sequential and cyclical processes in the analysis are key stages in the engagement with the data, and serve as essential blueprints to making sense of the stories (implicitly and explicitly) expressed in the information being gathered and the results that emerge. In sum, the multiple processes of collection and analysis are iterative and I have engaged in much preliminary and formative data analysis over the course of my previous six years of participation in the Program. Specifically, I have been deeply involved in the design and implementation of the Monitoring and Evaluation system of the Program, and have thus gained a comprehensive understanding of the process, results and impacts of the Program from
the quantitative data gathered, my own direct observations and based on conversations with members of the implementation team in schools.

The guiding methodologies of phenomenology, documentary and (visual) ethnography undergird the selection of methods to be used in data collection and analysis. Therefore, the methods used are interviews, focus groups, questionnaires, participant-observations (jottings, field notes and memos), audio-visual recordings and document review.

**Interviews**

Through semi-structured interviews I sought to learn about stakeholders' lived experiences in the *Digital Seeds* program as they relate to trust and dialogue. In a facilitated dialogue of introspection and reflection it is essential that I maintained my phenomenological stance, one characterized by openness so that I may be able to "live that experience as a Gestalt, that is, in its wholeness, by trying to prevent any judgment from interfering with their [the research participants'] openness to the description" (Sadala & Adorno, 2002, p. 283). Interviews facilitated a deep learning of people's experiences, perceptions, interpretations, thoughts, feelings and meanings (Weiss, 1994). Moreover, the past, present and future came alive through the words of participants. For my dissertation research, I generated an interview protocol as an outgrowth of my original research questions. As an open conversation with guiding questions, the interaction facilitates unfettered descriptions and reflections by the participants so that they could express their conscious experiences within the Program.
The exact order and phraseology of the actual questions vary depending on the natural flow of the interactions, a purposeful phenomenological openness and flexibility (Sadala & Adorno, 2001). According to Weiss (1994), qualitative interviews "achieve fuller development of information" because they "sacrifice uniformity of questioning" (p. 3). Sacrificing uniformity does not mean a complete lack of uniformity across interviews. In fact, there were primary themes that I addressed across all interviews; however, the way we engaged with these topics and phenomena depended on the natural flow of the conversation with each particular participant. Generally, my intended role as an interviewer is to guide the conversation, pushing into certain areas for more details and descriptions and also pulling away from other topics depending on participants' responses and my interpretation of their feelings and levels of comfort (Ravitch & Carl, 2016). All of my interactions were guided by an ethos of *primum non nocere* (First, do no harm) and a respect for each participants' integrity (Weiss, 1993). When to interview and how to interview are framed by this guiding ethic. I never want to seem pushy or offensive in the determination of the time and place for the interview nor the content of the conversations, and this stance lead to countless accommodations, adjustments and occasionally the decision to not insist on a formal interview or to not audio record a conversation. Throughout the interviews I was constantly reading the mood and emotions of the participant in order to respect their privacy and not force them into uncomfortable conversations. If I sensed that a topic was deeply personal or currently damaging to their emotional well-being, or that a past experience had negatively
impacted them and they did not want to rehash old scars, it was my duty as a respectful human being and an ethical researcher to be aware of these nerve endings and open wounds so that I avoided causing further harm or discomfort. With a constant connection to and awareness of these sensitivities and sensibilities, I used the interview protocol as a guide to the conversation instead of a prescriptive set of instructions or script (Appendix D).

The interviews ranged from 45 minutes to two hours and the topics focused on their experiences with and their understandings of Digital Seeds and their role within the Program. Equally as important were their experiences, memories, thoughts and feelings on trust, dialogue and the relationships between and among participants. All interviews were audio-recorded and filmed with the consent of participants. Ideally, I conducted the interviews in their place of employment to engender a familiar and comfortable atmosphere and to avoid creating any additional strains. When the interviews were conducted depended primarily on their availability and when it was convenient for them as to not interrupt their primary responsibilities and roles associated with their work (since most interviews were conducted during regular work hours).

The analysis of interview content occurred during collection, immediately following completion of interview, and during the focused analysis phase of the research project. Based on Weiss (1994), analysis was issue-focused, and I used thematic codes to organize, group, compare and contrast content from each interview
in order to identify trends among participants (Appendix B for full list of codes).

Extensive note taking during the interviews was an essential step in gathering the ongoing feel of the conversation, and each interview was transcribed verbatim and then analyzed using Dedoose to code for themes and threads within and across interviews. Additional analytic methods included local integration and inclusive integration that sought to bring coherence and meaning and to unite isolated analytic pieces into a single coherent story (Weiss, 1994). Extensive, iterative data displays of the results from the interviews were utilized to organize and compress information to facilitate conclusions (Miles et al., 2014).

During and after several interviews, participants expressed their gratitude for providing them with a space to reflect, remember and fully recognize rich history, challenges, accomplishments and personal/professional growth as a result of their involvement in the Digital Seeds Program. By design, and through a constant adaptation and fluidity with respect to the conversations/interviews, the interviewee and I developed a mutually guided exploration of themes and topics, and I attempted to facilitate deep reflection and increased understanding by both of us. All and all, the semi-structure interview was a direct source of connection and intersubjectivity, and therefore indicative of the very themes and approaches that the Digital Seeds program embodies, namely trust and dialogue through mutual respect and prizing.
Focus Groups

Facilitating conversations among mostly homogenous participants allows for a social, interactional engagement with the questions and themes presented by the focus group organizer. While an interview is a one-on-one dialogue, and thus promotes an in-depth exploration of personal feelings, thoughts and understandings, a focus group brings these feelings, thoughts and understandings into conversation with multiple participants. Points and counterpoints create a dialogue between individuals, one layer of a focus group dynamic. Numerous contributions around a related theme or set of topics generate a polyphony of perspectives. Both dialogue and polyphony are opportunities to deepen our understanding of the themes being discussed because they place individual positions in relation to others. A relational holistic demonstrates the similarities and differences among participants, and these moments of focused discussion, whether it is structured, semi-structured or open, are invaluable data sources for my particular qualitative study.

Focus groups were used to supplement the primary data from interviews, the principal method of data collection for my research. Organized into groups of 3-5 homogeneous participants (teachers or administrators), I moderated the discussion with assistance from the facilitator assigned to the particular school. The rapport with the participants and their long-standing trust fostered a more comfortable environment for sharing and dialogic engagement. Additionally, with the support of the facilitator I was able to focus on responses, moods, expressions and observations of the individual and
the group dynamic as well as the filming of the sessions. For example, two facilitators Baltazar Sánchez and Joel Montalván were of great assistance to me during three focus groups at the Modesto Armijo y Ena Sanchez Schools respectively. Specifically, Montalván and I reviewed the Focus Group Protocol, discussed my intentions for the encounter and shared some basic roles and guidelines to facilitate a more fluid coordination. Also, the demands of filming the focus groups magnified the importance of Montalván's presence and coordination to keep the conversation flowing, to probe for elaboration and to moderate the discussion. Additionally, Maria de los Ángeles Úbeda, the Operations Coordinator for Digital Seeds assisted Montalván and myself. Most importantly, the existing rapport between facilitators and school actors promoted a more comfortable dynamic and reduced the potential tension that might arise from an outsider organizing this group encounter. Furthermore, the presence of the facilitators enabled them to hear from their local partners in a group setting around particular issues of trust, dialogue and relationships as well as their understandings of the Program. Lastly, following the focus groups the facilitators became thought partners in making sense of what happened during shared reflections and discussions. It represented a multi-perspectival interpretation and analysis of the focus group content and interactions among participants. Overall, focus groups provided a vibrant encounter with the teachers and administrators from schools as well as an opportunity to observe and engage with the relationships between facilitators and school actors.
The specific guiding questions and dynamic of the focus group is outlined in the focus group protocol (Appendix E). During and upon completion of focus groups, I am searching for thematic threads, comprised of uniformity and dissonance, both important characteristics of the overall stories being captured and eventually told in the final dissertation product.

**Questionnaire**

The singular questionnaire used in this research project is adapted from Hoy and Tschannen-Moran's (2013) Omnibus T-scale Questionnaire (Appendix C). In addition to the original elements on faculty trust, I added items that addressed themes related to dialogue and collaboration. The questionnaire was administered to all teachers from Digital Seeds schools and the Program staff (i.e., facilitators, coordinators and director). Teachers filled out one questionnaire for their school (Appendix F) and each facilitator filled out two questionnaires, one for each of his/her schools (Appendix G). The procedures for application and the analysis of the results were based on the original protocol (Appendix H) and descriptive statistics to describe, show and summarize results to identify and highlight patterns in the data. Additionally, I focused on central tendencies such as mode, median and mode to look at the central positioning of the results from the questionnaire application.

Because the questionnaire was in paper form, the first layer of analysis began with digitizing and organizing the results into a table summary as a means to display participants' responses to each of the questionnaire items. Upon initial transfer of data
the preliminary table were checked multiple times to verify accuracy. Following the
digitalization and organization of the results, I used a data display to further explore the
results as a way to notice obvious trends, surprising or significant findings, and outliers.
The data display also helped organize the results by item with the individual responses
in the same row to show range and variation. Calculation of mean, median and mode
provided a preliminary understanding of the results for each item. Another step in this
process was grouping of data by school and facilitator to see if there were differences
from school to school across the data. Specifically, I was interested in the comparison
between the results from teachers and schools overall and those identified by the
accompanying facilitator. Was there congruency between teachers’ perceptions of trust
and those of the facilitator? Where did they align and where did they differ?

To further engage with the results comparisons by particular variables were
made: (1) Years in the Program; (2) Pure grades (1st, 2nd, 3rd, etc.) vs. Multi-grade (1st
& 2nd in the same classroom) schools; and (3) Among the grade level across schools.
These variable or characteristic-specific comparisons helped to identify any correlation
between selected variables and results. Additionally, line graphs, histograms and pie
charts were explored to determine how best to show the summary of results and
further illuminate the numerical similarity or discrepancy of the individual item
responses and overall trends. The aforementioned steps were repeated once the
results were analyzed using the Omnibus T-scale Analysis Procedures to produce ranges
and scores regarding: (1) Faculty Trust in the Principal; (2) Faculty Trust in Colleagues; and (3) Faculty Trust in Clients (students and parents) (Appendix H).

Upon processing the results using the protocol, I shared the findings with the representative facilitator (member check) to discuss the results, the Omnibus T-scale scores, and any significant trends or correlating variables. This member check served to compare the results of the questionnaire with his/her intuition and perception given their extended participation in the schools and relationships with the participants in the questionnaire.

**Participant-Observation and Fieldnotes**

According to Ruth Behar (1996) participant observation is an oxymoron. It asks ethnographers to "act as participant, but don't forget to keep your eyes open" (Behar, 1996, p. 5), and is therefore a strange dance between being in the moment and witnessing from the sidelines. Being a member of the Digital Seeds' team since inception has meant direct participation in and observation of the activities and happenings of the Program, and concomitantly with participating and witnessing, I have developed very personal relationships with the people and communities involved in these same activities. General meetings, planning meetings, school visits, professional development sessions, accompaniment sessions, presentations and school fairs among many other encounters are the moments, spaces and places I have been to observe, and participate in, as a valuable means to see, hear and engage with people's "lived experiences" or *Erlebnis* (Dilthey, 1988). First-hand experience and direct observation
enable the researcher to learn things that research participants and staff may not be conscious or aware of, and thus are left out of the sharing that occurs during interviews. Additionally, participants may not be willing to explicitly divulge certain information, and thus participant-observation seeks to address the verbally absent by observing the actions and interactions of participants (Patton, 1990).

Direct experience (participation) with the activities and actions of the Program breathed life into the theories and hypotheses that I brought with me as lenses through which I hope to understand and explain what was happening and why. I focused specifically on the relational dynamics among participants. What types of dialogue were opened and maintained during these encounters? What were the barriers to open, honest dialogue? How easy or difficult was it to establish dialogue? Was trust established or facilitated through these interactions? How was trust created among participants? What were the barriers to trust? All and all, participant-observation enabled direct access to the enactment of or the dissonance with theory in the specific actions of individuals and groups.

Writing in ethnographic research is an essential practice for observation, documentation, analysis, reflection and engagement. The ever-present practice of writing *jottings and fieldnotes* were essential practices throughout participant-observation, and these served to document internal and external developments. As an ongoing reflexive process, jotting and fieldnotes were reviewed to deepen my understanding of what I observed and heard, how I felt and thought, and what were the
emerging hypotheses and assumptions based on these written records. The texts I produced in the field were given added depth and thought as they were read and pondered upon. Analysis happened as jottings and fieldnotes were written and it continued after documentation as I considered the observations and comments made in the field, critically engaged with initial assumptions and hypotheses, examined personal biases, identified patterns and emerging themes, and formed expectations and theories to be tested as I reengage and continue the documentation in the field.

"Being there" included a continuous attention to rapport, reciprocity, ambiguity, personal determination and faith (Wolcott, 2001). Simultaneously, the use of fieldnotes aided in my own process of understanding, critically reflecting, analyzing, interpreting and preparing for future moments and encounters. In fact, fieldnotes are the "primary means for deeper appreciation of how field researchers (or in this case yours truly) come to grasp and interpret the actions and concerns of others" (Emerson, Fretz & Shaw, 1995, p. 13). Of particular concern to me were the interactional details of those I observed and participated with on a regular basis. To document social life in process, especially given the focus on the relational quality of the Digital Seeds program, I wrote fieldnotes immediately after events to detail the processes of interaction and my perceptions, interpretations and emerging hypotheses. Later, in future fieldnotes and memos, I would explore how these hypotheses have been disproven or sustained through repeated or exceptional cases.
A perpetual setting for participant-observation and the subject of many fieldnotes was the meeting, professional or program-specific encounters among participants, both internal and external to the implementation of *Digital Seeds*. These meetings, conversations and presentations demonstrated who the individual participants and the organizations they represented interacted with one another and it provide the opportunity to hear, see and feel how they described the Program, their relationships within in, and the concepts of trust and dialogue. As a whole, the interpersonal and professional points of encounter emerged as the critical moments of human interaction and relationship that framed my understanding of how people lived the Program and made meaning of their relationships with others in the Program.

**Audio-Visual Recordings**

Since my initial involvement in *Digital Seeds* in 2009 I have been perpetually recording, photographing and filming the people and places at the heart of my current research project. The sensibilities and priorities of these recordings have varied depending on the purpose and intended use of the media being captured. For example, at times a research orientation framed what I was seeing and hearing and what I chose to record. Simultaneously, my subjective lens had another filter, an additional cinematic and artistic view that influenced and determined what and when I captured the images and sounds that were indicative of my visual style and technique. Regardless of my focus, intention or primary objective, I was always concerned with the framing of the image and the capturing of quality sound since “filmmaking is after all a question of
'framing' reality in its course" (Minh-ha, 1993, p. 101). Together, there is a guiding poetics of ethnography (Clifford & Marcus, 1986) that informs what "rhetorical devices and literary construction" I employ in the creation of ethnographic forms and content.

Similar to the review of interview content, I used thematic coding to organize and analyze the audio-visual material. The original intention of the dissertation research was to create a feature-length documentary, a set of short films or a web-based multimedia project; however, due to myriad factors, I have decided to forgo the filmic dissertation and revisit the filmmaking process at a later date. That being said, what follows is a plan of action to construct a academic film based on my recordings and accounts from Nicaragua and beyond. Since the intent of the dissertation was to privilege images and sounds equally, each form of media will be coded to group and organize them, and later determine the relationships and uses within the various purposes of the final product. Audio content will form the basis of an eventual script, a narrative arch that provides the path through which the story unfolds. Images, also capable of telling stories, will be placed alongside audio material or standalone as they fit within the overall flow of the film. As I progress in the review of materials, both audio and visual, I will begin to create a storyboard, a three-columned grid comprised of text, audio, and visual, and possibly a thematic column for further depth, that organizes the formation of the final filmic product. This process of storyboarding will elucidate gaps and holes in the material and identify the level to which the narrative is cohesive and supported by the audio-visual content on screen.
Document Review (Artifacts)

An important aspect of the research involved the extensive review of artifacts associated with the Program. Guiding documents (i.e., Methodological Guide), proposals, reports, promotional materials, official correspondences and other related materials were perused and analyzed to "identify similar phrases, relationships between variables, patterns, themes, distinct differences between subgroups, and common sequences" (Miles & Huberman, 1994, p. 9). The declarations of the Program and its staff, and how they were communicated internally and externally were vitally important to the overall understanding of what the Program means. If and how trust and dialogue were present or alluded to in these artifacts provided evidence of the ways in which these co-evolving phenomena were (re)presented.

The Methodological Guide of the Digital Seeds program and the Program Profile were two central documents that I reviewed to identify how the Program was conceptualized; if and how relational trust, dialogue and third space were mentioned or alluded to; and what were the ways in which trust and dialogue were engendered in the language of the document or through the specific practices outlined in the guide. The Program Profile was an abbreviated (and updated) version of the Methodological Guide that focused on the organizational and operational divisions of the Program. It was another artifact that explained and told the story of the Program to allow for further exploration of how the Program described itself and how that compared to individual conception of the same.
Each year PennGSE and SfPF create and sign a written agreement on the areas of our coordination. It outlines the specific tasks, responsibilities and outcomes of our collaboration. Over time the foci have changed given the evolution of the Program and of our partnership. The content of these proposals were important materials because they described the goals of the iterative collaboration and were situated within the overall goals and status of the Program at that moment in history. Included in this proposals and agreements were the major activities of our joint efforts and the areas where support was requested from Penn. Inter-organizational and institutional agreements were important documents to review how the Program was being described, in what areas was SfPF partnering with others and how were these partnerships evolving over time.

Another category of artifacts was the individual facilitator reports and the annual program reports. These documents narrated the monthly, quarterly and yearly progress of the Program, including details on specific activities, processes, relationships and results. A review of these documents helped elucidate the particular realities of each school through the written word of the facilitator and provided overviews of the Program as a whole from year to year. Successes, challenges, major activities and plans for the future were included in these documents, areas that may or may not refer to or represent trust, dialogue and third space. Through the lens of trust, dialogue and third space, I analyzed the content and identify the ways in which these phenomena were
present, absent and/or assumed, and how they differed from facilitator to facilitator and year to year.

Lastly, promotional materials were reviewed to explore the same areas mentioned above. However, as an outward facing document, the image of *Digital Seeds* and the realities of the internal affairs were juxtaposed to see how the Program presented itself vs. the in-house results of its operations, monitoring and evaluating.

Another expansive category of artifacts includes memos, contractual agreements, emails and broader dialogic engagement with participants at Penn and from the Program and Foundation. Memos enable focused, reflexive and analytical opportunities to process the past and compare it to the present moment and understanding. Emails represented the ongoing instantiations of our coordination, collaboration and relationships, evidence of how we communicate with one another, what are our concerns and areas of focus, how our interactional styles have transformed and evolved over time, and what plans we have for the future among other relevant topics of discussion from the purely personal to the formal and professional. Additionally, participants in the Program have partnered with Dr. Sharon Ravitch and me to write collaborative pieces on the impacts of *Digital Seeds* from our shared and respective points of view. These collaborative endeavors have been sources of intense conflict as well as beautiful harmony. In the end, they have brought us all closer together and have deepened and strengthened the bonds that unite us. Lastly, personal correspondences and writing samples provided by Program participants have also been
vital sources of espoused understandings and feelings related to their experiences within *Digital Seeds*. Unsolicited and solicited, these writing samples have provided me with a window into the hearts and minds of those with whom I work and who have been integral members of the *Seeds* team.

**Data Triangulation**

Triangulation is to "cross-validate" using multiple methods (i.e., questionnaires, ethnography, phenomenological interviewing) and by gathering different kinds of data (i.e., interviews, observations, artifacts, audio-visual recordings) (Patton, 1990). The incorporation of multiple methods and varied participants afforded a comparative analysis of the differences and similarities across data. For example, the results from questionnaires on trust were triangulated with my direct observations from schools and the content from interviews with facilitators and other participants in the Program. As an integrated whole, stemming from three different data sources and methods, the congruencies and incongruities across the stories of trust emerged throughout this triangulated approach. For example, the phenomena of trust and dialogue were examined using a questionnaire as method to gather data on teacher, facilitator and administrator responses to element of trust and dialogue in schools. The results of this method were compared and contrasted to the results from interviews with facilitators and members of the SfPF team (directors, coordinators, executives). Further, participant-observation in the contexts where trust and dialogue happen produced
observational notes, jottings and memos that offered additional content and information with which the other results were compared and contrasted.

Bias was, and will always be, an unavoidable element of the research process, so the triangulation of information from a variety of participants and contexts that employ a range of methods strived to reduce bias and addressed the threats to validity (Maxwell, 2013).

Lastly, the incorporation of extensive, perpetual and concentrated periodic member checks--facilitated by a "shared anthropology" approach--provided additional gauges and verifications to increase validity and veracity of emerging hypotheses, characterizations, assumptions, conclusions and eventual findings. Mentioned in previous descriptions of methods, these member checks were employed to discuss findings, generate hypotheses, test hypotheses, analyze results, verify categorizations and identified trends, and arrive at potential conclusions.

**Inquiry Group / Critical Friends**

An important dynamic throughout the research process were the interactions and critical discussions with colleagues and friends. Beginning with initial musings on the topic of the research and through design, the critical conversations with other doctoral students, professors and friends outside of academia were essential to reflecting on the presuppositions, biases, reasoning, rationale and positionality of the research. Engagement with other individuals conducting research in the field of development has been and will continue to be an integral aspect of the refinement and
expansion of the theoretical and conceptual frameworks that inform and guide my research and practice.

Methodological support was a critical area in which I received constructive, honest feedback on the rationale for the methods of data collection and ways in which I would analyze the results. Specifically, the coding process was aided by a doctoral student and two masters students, all three bilingual in English and Spanish, and they assisted in the review of the coding guide and the subsequent application of the codes to sample transcripts. These vital encounters helped me to better explicate the reasons for the codes, what each code meant or was looking for, and how the codes fit together within an overall framework or approach. Additionally, emerging themes and potential codes arose from these shared coding sessions. I owe a tremendous amount of gratitude to these thought partners for their thoughtful, candid participation.

Critical friends helped to fill gaps in my own knowledge and theoretical rigor. Acutely aware of my own limitations, I sought support from colleagues to locate relevant literatures and theoretical frames to assist in the contextualization of the research project and enrich the analysis of results among other activities. In one particular conversation a colleague reminded me of Marcel Mauss' (1967) *The Gift* and its potential relevance to the relational dynamic between me and the participants in the Program. The idea in the dissertation of the "gift of vulnerability" was a direct result of that specific conversation with my friend and colleague.
Lastly, to examine and check my own biases, assumptions, personal proclivities and perceptions as well as increase the depth and breadth of criticality, several colleagues came to my aid, contributing an outsider perspective to help infuse a layer of objectivity to the overall project. Researcher bias was a major concern, and thus interactions with more skeptical and unbiased thought partners helped to uncover where my biases laid, what were my main assumptions, and how could I be more critical. From the proposal phase onward, the processes of analysis and sense-making were directly supported by friends and colleagues alike, including members of the Seeds for Progress Foundation, students at PennGSE, friends and family outside of the academy, and other scholars and researchers. All together, these ongoing conversations and frank discussions enabled deeper reflection and introspection as well as an overall element of criticality.

**Research Ethics**

A deeply personal and professional commitment to ethics guides my interactions and engagements with the world around me in general and with the research participants specifically. In research relationships there must be "a respect for people and for the knowledge and experience they bring to the research process" (Brydon-Miller, Greenwood & Maguire, 2003, p. 15). As I conducted qualitative research, the three basic principles of the Belmont Report remain present and prominent throughout (Department of Health, Education, and Welfare, 2000):
1. Respect for persons, i.e. 'that individuals should be treated as autonomous agents' and 'that persons with diminished autonomy are entitled to protection' (p. 198);

2. Beneficence, i.e. 'do not harm' and 'maximize possible benefits and minimize possible harm' (p. 199); and

3. Justice, i.e. 'research should not unduly involve persons from groups unlikely to be among the beneficiaries of subsequent applications' (p. 201).

Transparency, honesty and respect for individuals and communities are essential characteristics of any researcher when working in the field. First and foremost, we are human beings in relationship with other human beings, and this human-to-human relationship is paramount to any and all demands of conducting research (Behar, 1996). Even though I have long-standing relationships with those that participated in my research, I kept in mind that my work was "an intrusion into the lives of the participants in (my) study" (Maxwell, 2013, p. 92). Being mindful of this "intrusion" and trying to mitigate the interference, the interruption and the influence of the research project was a constant concern. It was a primary ethical obligation to continuously strive to understand the perceptions, feelings and reactions of participants to the various actions and activities of research. Personally, humor and laughter were amazing techniques that alleviated stress, reduced tension and engendered a comfort level between researcher and participant. Establishing an empathetic connection through shared
laughter could also be a powerful type of "anthropology that better facilitates cultural
critique and collaborative action" (Jackson, 2010). It was especially important for my
research to mitigate tension and nerves because of my use of film and photography.
The ethics of representation were particularly acute when depicting individuals and
communities in images and sound. Therefore, I paid close attention to providing a clear
explanation of the research and the use of photography, film and audio recordings as
part of a discussion with participants before obtaining voluntary informed consent
(Appendix I and Appendix J). The heightened sensitivity to "capturing reality" on film is
described in detail previously in the section of the Conceptual Framework dedicated to
Visual Ethnography.

By maintaining the primacy of respect for participants and a critical openness
with myself and with participants I strove to conduct ethical research that embodied the
same phenomena of trust and dialogue at the heart of my inquiry. The validity of the
study, according to Maxwell (2013), refers to "the correctness of credibility of a
description, conclusion, explanation, interpretation, or other sort of account" (p. 122).
There is no such thing as an objective truth, but the accounts presented in the research
must be credible. To increase the level of credibility, the threats to validity need to be
considered in order to understand the possible alternative interpretations and
explanations (Maxwell, 2013). For the study of the Digital Seeds program, my
relationships with stakeholders and how our dynamic potentially influenced their
responses were critically examined and taken into account throughout the research
Due the qualitative focus of the research, many of the validity threats were addressed after research commenced. Two main threats to the validity of the study were researcher bias and reactivity (Maxwell, 2013). As stated previously, strong existing relationships with stakeholders ascribed a certain set of biases, comprised of preconceived notions, expectations and perceptual lens. My charge was to strive to understand how my values and expectations could and may have influenced the study. Opening up the analysis process to thought partners and trusted colleagues helped to mitigate standing biases and lenses, and thus expanded the range and variation of interpretations. Additionally, the triangulation of methods (and data) and a continuous openness to and search for discrepant evidence (or negative cases) contributed to reducing threats to validity and add to the credibility of the results and conclusion presented in the final dissertation.

To review and monitor the research design of the study entitled *Cultivating Collaboration* I have applied for and been approved by the Institutional Review Board (Appendix K).

**Coding and Analysis**

Coding is the process of reading the data and then separating the data into meaningful parts. Segmenting and reassembling occur largely in the coding process. "Coding is the first step in moving beyond concrete statements in the data to making analytic interpretations" (Charmaz, 2006: 43). A code is "most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or
evocative attribute for a portion of language-based or visual data" (Saldaña, 2013, p. 3).

Over the course of my research I have engaged in open coding, axial coding and
selective coding (Charmaz, 2006). For the beginning stages of my research project I
used open coding to guide a thematic approach to breaking down, comparing and
categorizing data (Strauss & Corbin, 2007). Next, axial coding supported the
establishment of connections across categories and the identified emergence of more
relevant or meaningful themes in the data. A more focused coding spawned more
conceptual abstraction and clearer relationships between categories and subcategories
(Boeije, 2010). Lastly, selective coding enabled a process in which categories became
theoretical concepts and eventual aspects of my theoretical model. For example, trust
as a central category was identified early on, but through the various stages of coding
the subcategories and components of trust emerged and became salient in order to
create a theoretical model of trust in Digital Seeds.

Over the course of the research the list of codes and their subsequent definitions
iterated and iterated until finally reaching a critical mass of codes that included those
that were deemed insignificant or irrelevant and others that were central to the stories
and practices being manifested by participants. For a closer look at the ending list of
codes and some definitions, refer to Appendix B.
CHAPTER SIX: ANALYTICAL DISCUSSION OF FINDINGS

The Evolution of Social Responsibility: Trust and Adaptation in Nicaragua

"Relationships of inequality—some of them, such as parent-child, of unavoidable inequality—make up much of our lives, and they, as much as our relations to our equals, determine the state of moral health or corruption in which we are content to live."

- Annette Baier, 1986, p. 253

A Response to Local Conditions

Over the last 25 years, the approach to social responsibility by CISA Exportadora and the Seeds for Progress Foundation has reflected and responded to the changing realities of the local and global contexts in which they operated. In response to direct observations of the deplorable conditions of school infrastructure, CISA adopted the Modesto Armijo School in San Juan del Rio Coco in 1999, signaling the beginning of what would become CISA's comprehensive social projects. Gradually, CISA Exportadora deepened and diversified its interventions and activities, an expansion that lead to increases in staff, alliances, and the eventual institutionalization of social responsibility in 2005. By the time the Digital Seeds Program was developed in 2010, CISA's social projects had swelled to an almost untenable level of diversification and dilution. Their activities included the sponsorship of 16 schools, multiple health-related projects, an entrepreneurship program aimed at gender equality and environmental sustainability, high school and university scholarships, various environment-related campaigns in schools, shoe donations in partnership with Café Soluble, and internal environmental
initiatives aimed at reducing emission and waste. Unifying these foci was CISA's continued commitment to the coffee-producing communities across Northern Nicaragua where CISA has had over 70 years of experience. However, it is more than business relationships that bond CISA and these communities; CISA "is a part of these communities" (Martha Alicia Moreno, personal communication, May 24, 2012).

When CISA Exportadora began its intervention in education in the 1990s, the country was just emerging from over 50 years of human-made disasters. The lengthy and brutal Somoza dictatorship (1933-1979), the Sandinista Revolution (1970s), and a bloody civil war (Contra War) in the 1980s caused tremendous destruction and devastation across the country and left most of Nicaragua and Nicaraguans "multiply wounded" (Cabrera, 2002). The last of these human tragedies, the Contra War, was particularly destructive to the Northern, rural regions of Nicaragua, the areas in which most of the military operations and fighting took place. On April 25, 1990, Violeta Chamorro (aka Doña Violeta) was sworn in as President of the Republic of Nicaragua, marking the first time in more than five decades that power was peacefully surrendered to the opposition (Kinzer, 1991). Her presidency brought with it peace and relative (economic and political) stability, and it also gave Nicaraguans a chance to lay down their arms and begin the healing process. It was at this historic moment that CISA Exportadora and CISA Agro initiated their social programming to address the ruins of war and the extreme state of poverty (J.A. Baltodano, personal communication, December 9, 2014).
The Inception of School Sponsorship

In the 1990s, basic human needs of food, shelter and clothing were especially acute across Nicaragua, and especially in the rural, coffee-producing region of the North (Babb, 2004). Faced with crumbling classrooms, bathrooms in disrepair or non-existent, broken chalkboards and a paucity of textbooks and school supplies, CISA decided to intervene in the rebuilding and reequipping of the Nicaraguan school system through infrastructural projects and in-kind donations (CISA Exportadora, 2014). With a Nicaraguan government unable to address the tremendous level of need following years of war, individuals, organizations and companies responded, and over the years "the private sector has taken a very important role in different regions of the country within the education sector" (Rosa Rivas, personal communication, March 23, 2011).

Simultaneously, Non-Governmental Organization also helped fill the gaps, "taking on activities of basic education provision where the government lacks the capacity to do so or does not consider it a priority" (Ulleberg, 2009, p. 12). In 1999, CISA Exportadora with the help of Starbucks sponsored its first school in San Juan del Rio Coco, a town in the Northern department of Madriz. Serving more than 600 students at the time, the Modesto Armijo School suffered from "extreme infrastructural deficiencies," a situation CISA hoped to improve. Jose Antonio Baltodano describes the initial push by CISA Exportadora, "we began to adopt schools in the coffee communities [...] because at this time poverty was much greater than it is now in Nicaragua [...] there were no latrines, there were no desks, the blackboards were broken, frankly the schools were not apt to
provide an adequate education" (personal communication, December 9, 2014). Current assistant director of Modesto Armijo Reyna Matey, who has been at the school for 25 years, recalls the beginning of CISA's support of her school. Don Pedro Joaquín from CISA Exportadora "arrived to ask us in what way we could expand and improve the conditions of this school because it was in a very precarious situation [...] the students were studying in a jail as a classroom, and the other was deteriorated" (Reyna Matey, personal communication, July 24, 2014). Pedro Joaquín Dávila worked closely with Dania Baltodano (sister to Duilio and Jose Antonio) to reopen CISA Exportadora in 1990 after the election of Doña Violeta and subsequent liberalization of the coffee industry. As one of the first managers of CISA, he opened up offices in the Department of Nueva Segovia (Ocotál) and "he played an integral role in the beginning of social projects and he was a pillar in the development of relationships with coffee communities" (Rosa Rivas, personal communication, April 1, 2016). He was also the first person to approach schools, including the initial proposal to Dania Baltodano to support the Modesto Armijo School in San Juan de Rio Coco (Martha Alicia Moreno, personal communication, March 31, 2016). After reaching an agreement with the school administration and local community members, CISA began their direct sponsorship by improving the bathrooms, and later remodeling the annex buildings of the school (Reyna Matey, personal communication, July 24, 2014). More importantly, Don Pedro Joaquín established a reputation of generosity and care and he sowed the seeds for a lasting relationship with the Modesto Armijo School. The reputational effects of Don Pedro's example inspired
trust in the CISA network, a trust that was contagious among local stakeholders who began to share "perceptions regarding network members' trustworthiness" (Lee, Robertson, Lewis, Sloane, Galloway-Gilliam, & Nomachi, 2012, p. 622). His example would spread to many more communities and schools, and it continues to mature to this day. As relationships between CISA and communities expanded these emerging collaborations remained dependent on “positive personal relations and effective emotional connections between partners” (Gajda, 2004, p. 69).

From 1999 to 2003, the Adopt-a-School program supported infrastructural projects in four more schools across the coffee communities in and around Jinotega. CISA continued rebuilding school facilities and performing general maintenance in the additional schools; however, the Las Marias School project was the first time they sponsored the construction of an entirely new school in an area where one did not exist. The year 2003 also brought with it a loan from the World Bank that would allow CISA Agro to build a new brick and mortar campus for the Buenos Aires School, a drastic improvement from the mud-floored, wooden classroom where classes were previously held (Popkin, 2013). All and all, for five years from 1999-2004, CISA adopted schools with the sole focus of making infrastructural improvements. The relationship between CISA Exportadora and its sponsored schools fell somewhere between cooperation and coordination, the second and third stages of Hogue's (1993) model of levels of community linkage, or what Frey, Lohmeier, Lee and Tollefson (2006) call the collaboration scale. In cooperation, information is provided to each other through
formal communication, there are somewhat defined roles, but all decisions are made independently. For a coordination relationship, information and resources are shared, there are defined roles and frequent communication, and some shared decision-making (Frey et al., 2006; Hogue, 1993).

**From Social Projects to Corporate Social Responsibility.**

2004 marked a major developmental period for CISA, specifically in terms of alliances and program expansion. By the end of the year CISA Exportadora had forged formalized alliances with CISA Agro, INTERSA and the American Nicaragua Foundation (ANF), sponsored 12 schools and benefitted over 3,000 students. Along with the two organizations within the CISA Group, ANF brought expertise, resources and rich experience operating as an NGO operating in Nicaragua. Founded in 1992, the American Nicaragua Foundation's mission is "to mitigate the effects of poverty" by "working across the relief-development spectrum in the areas of housing, healthcare, nutrition, education, water sanitation, agriculture, and humanitarian assistance" (About ANF). Their experience in education and the administration of social projects positioned ANF as a key collaborator in the implementation of CISA Exportadora's Social Projects (Proyectos Sociales), and they contributed donations in the form of school supplies, food, equipment and furniture. In the same year that CISA and ANF began their partnership five more schools were adopted, bringing the total to ten. Also, the alliance with ANF expanded CISA’s support to include the aforementioned in-kind donations. At this point in the Adopt-a-School trajectory plans were made to organize workshops for
teachers and parents and offer pedagogical support and counseling for teachers. To handle the more comprehensive attention given to teachers and parents alike, ANF hired two facilitators, Nayibe Montenegro and Baltazar Sánchez. Montenegro recalls her initial role as making sure "the schools were receiving donations, that we executed certain campaigns that had to do with prevention, with health, with environmental care [...] to collect information from the school, grades, and we did offer professional development for teachers, but in this moment the scope of the work didn't allow for this to occur in the classroom" (personal communication, August 21, 2014). Although Montenegro and Sánchez were educational facilitators, their roles were more akin to managers and accountants, assuring that materials were delivered on time and to the correct location, and providing follow-up to infrastructure projects. They worked closely with ANF's Program Manager of Education to manage and distribute donations, reporting to him as their direct supervisor until Rosa Rivas was hired to coordinate CISA Exportadora's expanding scope of operations. As newly appointed Coordinator of Social Projects, Rivas assumed leadership of the growing team and handled donations while coordination continued with ANF.

During these initial stages of the Adopt-a-School program the approach to the facilitator's work was essentially "assistencialist" (Maria Luisa Herrera, personal communication, March 20, 2015; Rosa Rivas, personal communication, October 8, 2014). Chiefly responsible for distribution, inventory and coordination, they had little time to be consistently present in the classroom in order to provide real pedagogical
support to the teachers. Consequently, relationships with teachers and students were limited by their limited presence. On the off chance they could spend time with the teachers Montenegro remarks that there wasn't a clear, structured approach to pedagogical support; instead "depending on each one of us (the facilitators) and our experience in education to be able to support the teacher in the classroom, but we weren't doing it in a systematic or organized way" (personal communication, August 21, 2014). Without a program-wide strategy or a universal methodology, facilitators responded and reacted ad hoc to solicitations from teachers who would independently ask questions related to pedagogical practices or content information and request materials and/or physical improvements to their schools/classrooms. Of all the expressed needs shared by teachers and administrators, donations, physical resources and materials were by far the most common asks of CISA Exportadora, a logical and expected outcome given the corporation's historic role as school sponsor.

The Creation of a CSR Division at CISA Exportadora

The theory and practice of Corporate Social Responsibility (or CSR) have evolved greatly since Nobel Laureate Economist Milton Friedman claimed that the "one and only social responsibility of business" is "to use its resources and engage in activities designed to increase its profits" (1970, n.p.). Since Friedman's capitalist-centric decree, this focus on profits, although still a major concern of corporations and business in general, has been complemented by two additional components (*people* and *planet*) to form what is know as the "triple bottom line" (Elkington, 1997). Beyond the original
bottom line of profits, the people account refers to how socially responsible the organization is and the planet account is a measure of the organization's environmental responsibility (The Economist, 2009). While measuring profit is straightforward, universally understood and quantifiable, the social and environmental performance of a corporation is much more complex and subjective. To further muddy the waters, the term Corporate Social Responsibility has multiple definitions. According to Sheehy (2015), CSR is most commonly defined by behaviors (i.e. corporate philanthropy or sacrificing profits), operations (i.e. internal management strategy), or a belonging to a particular group of institutions (i.e., ISO 26000, UN related Global Report Initiative or B-Corp), all of which are limited in their scope and comprehensiveness. Instead of these aforementioned constructs, he urges for "defining CSR as international private business regulation" (Sheehy, 2015, p. 643).

In the same year that CISA Exportadora and ANF forged an alliance to implement Social Projects (Proyectos Sociales) in Nicaragua's coffee communities, the former inaugurated a company-wide strategy of Corporate Social Responsibility. Under the leadership of Rosa Rivas and with the consultation of uniRSE, a local NGO, CISA Exportadora developed an official strategy and structure for their CSR division (or RSE) in 2004. The following year CISA Exportadora created the formalized structure for their very own CSR Division, and to accommodate the expanding role of CSR in CISA, Rosa Rivas hired Silvio Díaz as the third facilitator and Martha Alicia as supervising coordinator to assist Rivas in this new phase of social responsibility. It was during this
phase that the Adopt a School Program started "becoming a more integral program," one that offered pedagogical support in addition to the original assistance with infrastructural projects (Rosa Rivas, personal communication, March 23, 2011). Rivas cites the hand washing campaign as a particularly important aspect of CISA's more integral approach, "The idea of these campaigns is to [...] make education more integral, so that the student doesn't only go to school to learn to write, to read, to add, but also that they start learning other things that are basic for development." (personal communication, March 23, 2011). The educational campaigns included hand washing, environment and dengue and malaria among others. In general, teaching students, teachers and families how to care for their own health and to practice more hygienic behaviors are widely recognized as quintessential goals of any health-related program (Werner, Thuman & Maxell, 1973). It is important to note that CISA's decision to integrate health-related educational campaigns marks a slight divergence from their purely assistencialist approach, but it did not signal its end.

Health and environmental programs became more prominent foci of the newly founded CSR Division. For example, CISA initiated a partnership with Operational Smile to support the organization in the recruitment of patients throughout the coffee-growing regions of Nicaragua and then provide logistical support to patients, and the company raised funds and donated medical equipment to the international NGO. CISA also supported an Italian Medical Brigade (Nueva Oficina) that regularly visited Nicaragua to provide free medical care to CISA employees, families and community
members. Further, in coordination with Operation Smile and the Nicaraguan Ministry of Health (MINSA), Nueva Oficina provided medical attention and medicines to over 2,000 patients per year in the fields of dentistry, cardiology, neurology, dermatology and obstetrics among other medical disciplines (CISA Exportadora, 2014). Partnerships and alliances are vital to CISA Exportadora's main goal of improving education, and "many of the things that we have achieved for education have been via alliances, alliances with local organizations, alliances with companies with which we have relationships abroad and in general I believe that this is going to be key" (Rosa Rivas, personal communication, March 23, 2011).

By 2007 there were 15 CISA-sponsored schools, and in many regions in which the program operated, 50% of the student population benefited from the sponsorship (CISA Exportadora, 2014). During this period of the CSR division's development, facilitators still spent significant time on donations and coordination with Operation Smile, ANF and Nueva Oficina; however, they began to be able to deliver more human-centered, capacity building services. Namely, the facilitators performed pedagogical advisory visits and offered teacher professional development trainings on motivation and human development, didactic planning, mathematics, and reading and writing in addition to other themes. Recounting her role as facilitator during the Adopt-a-School program (aka School Sponsorship), Maria Luisa Herrera shares, "when I was in the Sponsorship program I considered our work as facilitators [...] as an assistencialist position, just visiting schools, distributing and inventorying nothing more" (Maria Luisa Herrera,
personal communication, March 20, 2015). Herrera's perspective points to a possible disconnect between the intentions/plans for the Adopt a School program and its implementation, an incongruence between its espoused theory and its theory-in-use (Argyris & Schön, 1974). While there may have been an intended increase in pedagogical assistance at the time of design and planning, facilitators still dedicated significant time, maybe even the majority, to logistical and administrative duties. In fact, today the Seeds for Progress Foundation still faces the same challenges related to facilitators spending significant time on logistics and administrative tasks at the expense of their primary pedagogical, professional development and accompaniment responsibilities.

The Adopt a School Program, the centerpiece of CISA Exportadora's social responsibility since nearly the beginning stayed focused on its central purpose "to contribute to the improvement of the quality of education for boys and girls at the Preschool, Primary and Secondary levels" (CISA Exportadora, 2009). As the flagship program continued to evolve and grow, the roots of a new program were slowly emerging from existing institutional and personal relationships, and its eventual germination accelerated the rising tide in CISA Exportadora's CSR Division towards a more holistic, human-centered and collaborative approach to supporting and partnering with local communities. At a moment when programming was becoming bloated and diluted by excessive diversification and an unclear sense of core focus, a seed was planted that would bring about fundamental and transformative change to the very
Digital Seeds: One man's dream transforms CISA's Social Responsibility.

"It is good to know the history of how a project is born," remarks Duilio Baltodano as he begins to tell his version of the Digital Seeds story. It was his dream of bringing technology to the Buenos Aires farm, and by extension the local farm school, that sparked what would eventually become the Digital Seeds Program and lead to the creation of the Seeds for Progress Foundation several years later. The Buenos Aires farm occupies a special place in Duilio's heart, and he has always taken particular interest in supporting the school located within the farm's grounds. In fact, since there was a school on the farm, he has made it a personal goal to attend every graduation, a commitment he continues to this day. As President of CISA Agro, Baltodano is also dedicated to the business of producing coffee and he is tireless in his desire to find ways to improve operations, increase yield, upgrade conditions on the farm and integrate the latest technology. Consequently, problems or challenges become opportunities for growth and innovation. According to Baltodano,

One of the principal obstacles that a businessman has is the lack of administrative information, with systems that can provide information on the activities of agricultural companies that is reliable, up-to-date, and that can be handled by the personnel that one has in the agricultural sector that is personnel with a very low level of education (D. Baltodano, personal communication, August 14, 2014).

Faced with this management problem, Duilio saw that a solution could be reached through the use of Information and Communications Technology (ICT). CISA Agro began
developing programs, principally ARA (Administración de Recursos Agropecuarios or Administration of Agricultural Resources), that existing personnel could use to improve the processes related to budgeting, programming and monitoring operations (CISA Agro, 2016). For many years, the ICT infrastructure on the farm was severely limited. There was no Internet and no mobile phone service, and even conventional landline phone service was spotty at best. However, with the arrival of satellite connectivity to the Buenos Aires farm, the former limitations caused by a lack of functioning conduits\(^5\) quickly became a thing of the past. Baltodano recognized the potential connection between business innovations and their possible impacts on education as well as the two-way beneficence between economic and social (educational) prosperity/quality.

At some point we saw that through satellite communication we were able to communicate directly with the capital where information from the farm was being sent directly, and [...] to me personally seeing the changes that technology is producing in systems of administrative information, I thought that possibly we could achieve the same thing in education (personal communication, August 14, 2014)

Timing and serendipity transformed Duilio's dream of bringing technology to the Buenos Aires school to that of realistic possibility. In short, the pilot of Digital Seeds arose from the combination of three inter-related factors: (1) The Baltodano family's multigenerational connection with the University of Pennsylvania; (2) the arrival of XO

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\(^5\) According to Warschauer (2003), conduits refer to supply lines that provide a service or resources (i.e., electricity or Internet connectivity)
laptops to Nicaragua via Telmex's donation of 3000 in 2008; and (3) CISA Agro's relationship with the AmCham-Nicaragua (American Chamber of Commerce - Nicaragua). As the third generation of Penn alumni in his family, Duilio has a strong connection to and respect for the University, including personal relationships with the Dean of the College (Dennis DeTurck). During DeTurck's visit to Nicaragua in 2008, Duilio mentioned his dream of integrating technology into Nicaraguan education to which DeTurck shared that Penn was developing an online mathematics program for Mexican immigrants, and that the Buenos Aires school could use the same program to help students learn math (D. Baltodano, personal communication, August 14, 2014). As XO laptops began to arrive in Nicaragua through Telmex and Claro, two telecommunications giants, AmCham was able to acquire some, and they subsequently donated 40 to CISA for their educational programs. If the story had ended here the Buenos Aires School would probably have emerged similar to countless other schools around the global south that have received technology donations as a panacea to solve educational challenges and modernize schooling, many with little attention to teacher professional development and overall support to learning environments. Luckily, there is more to the *Digital Seeds* story because of the remarkable persistence of one young lady who made the final connection to set the ball in motion and sow the original seed for what would become CISA's flagship program and the impetus for the formation of an autonomous foundation. Adriana Chamorro, then girlfriend and current wife of Ernesto Baltodano, Duilio's son, made repeated attempts to contact Dr. Sharon M. Ravitch
because of her experience helping systemic family therapists with a grassroots NGO in Ecuador and focus on international participatory action research. Chamorro's persistence paid off and she met face-to-face with Ravitch to invite her to Nicaragua. Within a matter of months, Ravitch was on a plane with Tarditi for a short trip to deliver workshops on how qualitative research can be used to inform and improve practice for employees at a psychiatric clinic and members of AmCham. Considering Dr. Ravitch and I were from the Graduate School of Education, we were also offered the chance to visit two schools, one in Managua and another on the family's coffee farm Finca Buenos Aires. On the long road to the farm, Ernesto Baltodano and Adriana Chamorro began telling us about the XO computers and the planned demonstration for teachers, students and the local MINED delegate at the Buenos Aires school. Duilio shared his intentions to collaborate remotely with Penn using the online mathematics program, a perceived panacea to magically improve teaching, learning and student outcomes in math. However, Ravitch cautioned Baltodano that solely bringing computers and teaching/assessing math would not create real nor lasting impact and the program would not be sustainable. Instead, she proposed a much more holistic and collaborative approach, an ethnographic-based engagement with the community to co-construct a program and a model for overall educational improvement (Duilio Baltodano, personal communication, August 14, 2014). A participatory action research project centered on community engagement and intensive teacher professional development were the centerpieces of her proposal. By the end of the evening, Ravitch and Baltodano shook
hands on the initial agreement between CISA and PennGSE, described by Baltodano as "an act of faith, an act of trust" (personal communication, August 14, 2014). He trusted Ravitch because he perceived honesty, benevolence and competence, and she was a professor from a prestigious university like Penn, and "that inspires confianza" (personal communication, August 14, 2014). Additionally, Ravitch's and Tarditi's willingness to travel to and even live in Nicaragua for the duration of the one-year pilot also inspired confianza in Baltodano because it reflected deep commitment, and this personal integrity was a tremendous source of relational trust (Bryk & Schneider, 2002). In general, the trust that Baltodano had, and continues to have, in Ravitch and Tarditi are of two types, cognition-based and affect-based (McAllister, 1995). It is cognition-based because he perceives that both parties have knowledge, skills and competency (Colquit, Scott, & LePine, 2007; Mayer, Davis & Schoorman, 1995), and it is affective-based due to his perceptions of honesty, benevolence and mutual respect (Chua, Ingram & Morris, 2008; Mayer et al., 1995). Further solidifying the budding trust among Baltodano, Ravitch and Tarditi were the perceived and actual characteristics of honesty, competence and benevolence, three central elements of trust, and widely represented across literature and research (Butler & Cantrell, 1984; Mishra, 1996; Tschannen-Moran & Hoy, 2000).

The timing of this proposal for a Nicaragua Coffee Farm Technology Initiative (the name before it became Digital Seeds) coincided with a growing attempt by the Adopt a School program to offer more human-centered support amidst the ongoing
donation-focused, assistencialist strategies. These converging approaches would mutually inform and support one another during their co-existence, and as Digital Seeds grew and the Adopt a School Program was subsumed into the former, the experiences and relationship of school sponsorship provided the historical, contextual and relational foundations for Seeds to flourish. The Digital Seeds Program "was born as a necessity on the part of CISA Exportadora to provide a support to the teachers in the schools that are close to the coffee farms where we have presence as part of CISA Exportadora" (Tania Gamez, personal communication, July 25, 2014). Although Digital Seeds arose out of an identified need, the initial technology proposal was met with suspicion, fear and even outright rejection on the part of the teaching staff. While on the road to the Buenos Aires farm on July 10th, 2009, Ernesto Baltodano informed Dr. Ravitch and me that there is a "culture of suspicion" among Nicaraguans towards "sabelotodos" (know-it-alls) that come to Nicaragua and impose their expertise and will on those who they perceive as uneducated, poor locals (personal communication, July 10, 2009). Along with this "culture of suspicion", many Nicaraguans have mentioned a prevailing traditionalism in education, one marked by conformity, rote memorization and centralized authority and control among other characteristics. Additionally, many individuals have become teachers simply because it is a stable, secure salary. However, it is important to note that the field is a mix of committed professionals who pride themselves in their pedagogy and others whose primary concern is economic. That being said, two major challenges to the initial proposal of Digital Seeds was
resistance/reluctance to a commitment of extra time for professional development and an unwillingness to innovate pedagogically through the integration of technology. In fact, during the first days of Penn’s visit to Nicaragua to start the pilot program, Ernesto and Duilio Baltodano shared that CISA Exportadora was actively trying to replace one of the four teachers at the Buenos Aires School because of her reluctance to participate in the initiative (personal communication, July 10, 2009). Apparently, the teacher was not open to (pedagogical) change and she was unwilling to commit additional time to professional development. The case of this particular teacher from Buenos Aires was not the first or the last time that CISA Exportadora would encounter challenges and obstacles in the form of teacher/community resistance to proposed interventions.

However, the *Digital Seeds* initiative did represent something new, a concerted effort to involve teachers and community members (as well as other educational stakeholders) in the development, implementation and study of a program for, with and by the very people it intended to serve. At the time of its original proposal, the initiative was described as such:

> This community and school-based research study seeks to document and examine the effects of the introduction of laptop computers and incorporation of a technology-based curriculum on students and teachers in a community school for the children of coffee farm workers in rural Nicaragua (Ravitch, 2009, p. 1).

The research proposal lists three methodologies: (1) ethnographic methods; (2) action research; and (3) evaluation research. Combined, these methodologies seek to understand the context, to work with teachers in the creation of the professional
development program, and to measure student and teacher progress (Ravitch, 2009). Pulling from his experiences in the business world, Duilio Baltodano is particularly concerned with rigorous, systematic assessment and he emphasizes technology as a means to improve processes and productivity and as a transformative tool when combined with innovative pedagogy.

What technology does in business administration, in the processes, is to simplify the processes, which make life easier for all members of an organization in their daily activities that they have to do always and when an adequate application of technology is know, so we believe that education in a rural Nicaraguan primary school context can be transformative if the ingredients of new technologies are joined with modern and innovative pedagogical concepts (D. Baltodano, personal communication, August 14, 2014).

In July 2009, I moved to the Buenos Aires farm to begin the pilot of what would become the Digital Seeds Program. On the first day, Dr. Ravitch and I met with Nayibe Montenegro, Rosa Rivas, Marco Zeledón and the three teachers to formally introduce one another, begin a dialogue and to refine the focus and goals of the emerging program. Before this first formal meeting, we all walked the dirt road from the farm center up the hill to the school. Along the way, I introduced myself to the teachers and engaged in small talk. I could feel my own anxiety, lack of self-confidence and fear pulsate through my body as I attempted to compose myself and prepare for this first impression with the teachers, farm staff and CISA employees. I asked Eveling Estrada what she had heard about this initiative and what were her expectations, an attempt to understand how the program was being represented and how the teachers understood
Penn's intervention and my specific role. Her response sent shivers down my spine as she told me she believed the program was bringing computers and me to the school to “eventually replace the teachers”. Not only was Estrada embodying what Ernesto Baltodano called a "culture of suspicion", but she also exemplified a need to engage in open dialogue to discuss, debate and develop shared meaning and understanding. Her fear seemed a preposterous notion at the time; but it was an invaluable lesson in the distance between perception versus reality as well as a reminder to constantly challenge my own assumptions and take nothing for granted, including my perception of mutual/shared understanding.

During the visit to the school we convened parents and teachers to present the general ideas and proposal for the program, discussing with them the intention of integrating technology and soliciting their thoughts and feelings and asking how they would like to be involved. Additionally, I personally offered to visit any and all of the families if they invited me to their homes. It was a first step and a concrete gesture to the families and the community that we wanted to increase interactions and strengthen relationships between the school and community, primarily because their participation in education mattered. From the onset, I asked them for their help and support in my processes of learning and understanding the realities, histories and complexities of my new home. Although not intentionally offered as a strategy to build trust, it was a gift of vulnerability, a demonstration that I needed their assistance to do anything of real meaning and that I was there to learn as much as teach. Nobody knew the communities
and the students better than the parents, and I tried to make that abundantly clear. In
the face of strong asymmetrical relations between teachers and parents, I embraced the
onus of initiating activities that helped to reduce the "parents' sense of vulnerability in
these exchanges" (Bryk & Schneider, 2003, p. 28). As a white, highly educated male
from a prominent university in the United States, I was immediately placed on a
pedestal and considered to be "the expert on education." Therefore, even more
responsibility fell on my shoulders to destabilize this power imbalance and try to reduce
these "dividing practices" (Foucault, 1982) by showing a ready willingness to
vulnerability, by espousing and demonstrating that we are all experts and we are all
learners, and through an constant prizing (Rogers, 1980) of the parents, families,
teachers and my counterparts at CISA Exportadora. Vulnerability emerged alongside
humility, fallibility and self-effacement, qualities and characteristics that I strove to
exhibit at every moment as an attempt to increase accessibility and make the school a
more inviting place to families. Silvio Diaz believes, "when you arrive in this more
humble way [...] you have the opportunity that the other people will accept you more
easily" (personal communication, August 3, 2014). Openness and humility represented
an attempt to balance the vulnerability scales by accepting my own vulnerability and
openly presenting it to colleagues, students and parents alike as an invitation into
mutual vulnerability, an acknowledgement of "our shared precariousness in the world,
and (to) draw near in solidarity" (Geddes, 2015, p. 400). Over the course of the first 12
months (2009-2010) and during the subsequent years, Digital Seeds has organized
educational fairs and student-parent classes, invited parents and students to attend and participate at program events in Managua, and made regular visits to the home of the families. These tangible actions help alleviate the sense of vulnerability by the parents, and bring schools and communities closer together, thus presenting more propitious circumstances for the establishment of relational trust (Bryk & Schneider, 2002).

Bryk and Schneider (2002) group the social organization of schooling around four primary relationships: School Professional-Parent Relations; Teacher-Principal Relations; Teacher-Teacher Relations; and Teacher-Student Relations. Through the Digital Seeds program, facilitators, or in the case of the pilot, yours truly and Nayibe Montenegro, support the improvement and strengthening of each one of these dyadic relationships, plus the interactions among students (Student-Student Relations).

Regular, participatory professional development with the teachers structures dialogue and collaboration during the sessions, hoping to inspire collegialism, a supportive school environment, educational norms, shared values and communities of practice among teachers (Lave & Wenger, 1991; Wenger, 1999).

Unfortunately, school cultures, especially in elementary schools, often delimit opportunities for shared norms and practices to develop because teaching happens in isolation or it is heavily influenced by outside institutions (Bryk & Schneider, 2002). In order to effectively and collectively confront school wide or community-related issues and challenges, teachers need to address these concerns as a united faculty and not as isolated individuals acting alone. To build camaraderie, collective action and school
wide norms/values, it is important to work alongside teachers to co-construct these
dynamics, processes, relationships and culture; hence the value of structured
encounters and spaces to facilitate these developments.

Working alongside primary school teachers Eveling Estrada, Jorling Ortiz and
Junnieth Portillo, the professional development aspect of the Program initiated by
getting to know one another as individual human beings, "breaking the ice," and then
reflecting on the current state and practices of education in the school. Evoking John
Dewey, we considered together that "any education given by a group tends to socialize
its members, but the quality and value of the socialization depends upon the habits and
aims of the group" (Dewey, 2007, p. 65). Nayibe Montenegro was assigned by CISA
Exportadora to directly support the pilot, attend the professional development sessions,
and accompany me on home visits. It is important to note that there was an immediate
human connection between the two of us, a bond between two very like-minded,
loving, sensitive and humble individuals. We learned together and we lived the
Program's essence as it emerged. In fact, our serendipitous dynamic and caring nature
were critical to the Program assuming a deeply holistic, respectful and supportive stance
towards local participants, and one cannot place enough emphasis on the power of
individuals and interpersonal relationships in the shaping of an organization's or
program's character and culture. As individuals we brought values and sensibilities that
formed the Program, and our relationship as friends and colleagues modeled a mutual
respect and a collaborative approach that continue to shape the Program's model.
As an emerging pilot project, the first year of Digital Seeds did not lend itself to a predetermined roadmap or a recipe to be followed and clearly understood at first glance. Instead, we were collectively determining the path as we took each step because "we make the road by walking" (Horton & Freire, 1990). An organic, collaborative ethos guided the initial pilot, and after the first few weeks of introductions and planned activities to establish rapport and trust, the program began to develop alongside, with and from the experiences and learnings of the participants. Similar to the notion that trust is most likely to grow in situations where it is given the option to develop naturally (Young & Wilkinson, 1989), the emergence of Digital Seeds required an organic, ecological process. We were creating the program and the model as it unfolded, a seemingly ambiguous and mysterious way of working that left Nayibe Montenegro confused, a feeling she shared with her office mates, "The truth is that they grabbed me and threw me into the water without knowing how to swim' (Nayibe Montenegro, personal communication, August 21, 2014). Upon further reflection and introspection she describes how she understood the emergent quality of the program and my particular process of adaptation and contextualization.

You can with your objectives, your goals, but we started participating [...] I feel as you went...immersing yourself in the reality of our context and through all of those conversations and processes of reflection and dialogue...you started giving it more form (Nayibe Montenegro, August 21, 2014).

However, the organic and qualitative natures of the Program's pilot experience presented numerous challenges. In the area of monitoring and evaluation, Dr. Ravitch
and I compiled monthly reports to share with CISA Exportadora as means to update individuals on the development of the pilot, highlighting specific moments or stories from the school and community to illustrate particular points. These lengthy, qualitative reports provided descriptive accounts of progress, challenges and future plans, organized at the program, school, teacher, student, and community member-levels. Accounts from home visits, community member reactions to the Program, summaries of professional development sessions, teacher process, and plans for the following months told the stories of the Program as they unfolded. Additionally, the reports provided an opportunity to bring to light larger issues effecting the school and community. For example, we made regular pleas for school access to water as well as requested increased participation/support from farm staff. All and all, the lengthy reports, often reaching 40 pages, provided rich qualitative accounts of the Program from the perspectives of those living it in the Buenos Aires School. Unfortunately, reactions and responses to the reports were minimal to non-existent, and it became clear after several months that the qualitative focus of the Principal Investigator and Lead Field Director were not meeting the expectations of the more quantitatively-focused readers. Even so, we remained committed to an ethnographic, inquiry approach as we gradually integrated quantitative measures to create a more mixed-methods approach to the research and monitoring and evaluation areas of the Program.

Steeped in ethnographic methods and a guiding inquiry approach, there was not a traditional structure with a detailed long-term plan beyond the day-to-day steps of
learning and integrating technology and the various educational stakeholders to create something together. To productively and successfully develop such a fluid and seemingly mysterious pilot experience (as well as each subsequent school-specific iteration), trust was paramount. McEvily, Perrone and Zaheer (2003) argue that trust "makes organizations more organic in the sense that members do not need to rely exclusively on mechanistic coordination devices and impersonal rules to manage interdependence in the face of uncertainty" (p. 100).

The purpose of the pilot experience was twofold: (1) to introduce technology to the teachers and students as a means to enrich and innovate the educational experience and the processes of learning and (2) to determine the essential qualities, components, values and activities of a participatory, collaborative model of holistic education that we would co-construct and concretize after this pilot phase. Facilitated through constant reflection and dialogue, the daily professional development encounters with the teachers introduced the XO computer and the broader theme of ICT in Education. Aside from the focused professional development for one to two hours daily, much of my time was spent accompanying the teachers inside and outside of school, sharing in their professional and personal lives, actively listening to them, prizing them and being fully present, "for only that man who is simply and directly present can directly communicate with others" (Friedman, 2002, p. 59). I use the term prizing in the Rogerian sense, "a prizing of his or her feelings, opinions and person. It is a caring for the learner...a respect for the other as having worth in his or her own right.
It is a basic trust" (Rogers, 1980, p. 271). Additionally, as we began to introduce the XO computers into the classroom, the prizing extended to students, couched within the larger school wide initiative to engender more collaboration among students, including direct educational support from advanced learners and upperclassmen to their less-advanced or younger classmates. The creation of student monitors, a group of sixth graders who helped the younger students when it came time to explore the computers, was a concrete example of how the Program structured more student-to-student support, and an overall ethos of camaraderie and collaboration.

As a whole, the Program's focus on mutual trust, constant dialogue and reflection, and collective decision-making represented an evolution from the Adopt a School's status of cooperation/coordination to a relationship that resembled more of coalition/collaboration (Frey et al., 2006; Hogue, 1993). However, there are areas of uncertainty regarding whether or not Digital Seeds represents a coalition or a collaboration because of two specific characteristics: (1) sharing ideas and resources vs. all members belonging to one system and (2) the difference between everyone having input in decisions and consensus being reached on all decisions (Hogue, 1993).

After an initial intensive period of professional development, we began to introduce the computer to the students in the classroom during periodic sessions. Also, home visits were made to the majority of students' homes, and parents and families were also invited to attend workshops and simulated classes in which the students were the co-teachers alongside the school staff, Nayibe and me. However, there were many
parents or guardians who were unable or unwilling to receive us in their homes and/or attend the various events held at the school, and more often than not these parents/guardians tended to be those of struggling or needy students. Therefore, additional, individual efforts (i.e., writing letters, community inquiries, asking friends/family) were made to connect with these parents/guardians in order to better support the students and their families.

As teachers became more familiar with the XO computers and their role in the classroom, they began recognizing the affordances of having technology, from the pragmatic to the profound, often mentioning what things were like pre-computer compared to after having technology. Eveling Estrada provides an example of how she used to approach preparation for class, "if I go to the textbook, the information is brief and unfortunately we are in a country where we don't have access, in each educational center, to a library where we can read, where we can discover, learn, and I believe that the computer gives me this opportunity, via access to the Internet" (personal communication, December 4, 2009).

At the end of the yearlong pilot, Dr. Ravitch and I produced a detailed, 250-page summary of pilot experience, a memory of the initial period of the program's development that included a day-by-day breakdown of the professional development as well as overall values and tips to continue implementation of the Program. Even though that document outlined the daily professional development sessions along with general
approaches and sensibilities, it fell shy of encapsulating the comprehensiveness of the program and the full extent of possibilities for Digital Seeds.

It was at that moment in the life of Digital Seeds that Martha Alicia Moreno, coordinator in CISA Exportadora's CSR division, assumed a prominent role. She was integral in capturing the essence of the freshly co-constructed Digital Seeds model and explicating it clearly to her colleagues. Through constant dialogue with Nayibe Montenegro and tireless efforts to interpret the experiences of the pilot, she concretized how we could create a program, a model and the eventual methodological guide for the Educational Program Digital Seeds (Nayibe Montenegro, personal communication, August 21, 2014).

We were lucky that she (Martha Alicia)...without having lived the process here (at the Buenos Aires School), but upon reading (the original manual) and immersing herself, she began identifying quite easily with the principals that we followed [...] with the philosophy, with the philosophical part of the program (Nayibe Montenegro, personal communication, August 21, 2014).

Following the initial pilot in Buenos Aires and during the preparation to expand the program to a second school, Martha Alicia and I lead the construction of a theoretical and methodological guide for Digital Seeds, a document that facilitated a basic understanding of the newly established educational model and explicated its key components (Tarditi, Moreno, Montenegro, & Ravitch, 2012). We worked together with the Digital Seeds' team and Dr. Ravitch to encapsulate the experiences of the pilot while incorporating explicit language consistent with the Program's collaborative ethos and
emphasis on holistic human development. Ironically, the values of collaboration, mutuality and shared trust were tested during a contentious back-and-forth over authorship credits, and specifically centered around the eventual first and second authors. If it weren't for a solid foundation steeped in candor, respect and trust, the disagreement over authorship might have had far-reaching, negative ramifications. Thankfully, although the conflict produced discomfort and uneasiness, it brought us closer together as a collaborative and we further realized the necessity to clarify terms and expectations in the service of evacuating assumptions.

During the writing of what would later be referred to simply as *El Manual* (The Manual), Joel Montalván joined Nayibe Montenegro as the second official member of the *Digital Seeds* team, and the two facilitators lead the continuation of the program in Buenos Aires and the first replication experience in the Rubén Darío School (Abisinia). Simultaneously, and separately, the rest of the facilitators in the CSR Division continued their work with the Adopt a School program. During this period there were two teams within the division, "the important group," as fellow facilitator María Luisa Herrera described the *Digital Seeds* team, and those in the original school sponsorship program (personal communication, March 20, 2015). With *Digital Seeds* program continuing to grow, the Adopt a School program faced a challenging time when partners stopped their support due to the world economic crisis. In spite of this reduction in outside support, CISA Exportadora continued their commitment to the Adopt a School program.
According to CISA Exportadora's history of Corporate Social Responsibility, "From 2009 through 2013, the Adopt School program has evolved into a more integral model focused on improving the quality of education through intensive teacher professional development, technology integration and strengthening community-school partnerships" (CISA Exportadora, 2014). During this same period, the CSR Division underwent steady changes and culminated with a complete transformation. First, the six adopted schools gradually migrated into the Digital Seeds program and there were plans to have all 16 schools fold into Digital Seeds by the end of 2014. Secondly, the originator of social responsibility at CISA would eventually be subsumed into the holistic, integrated and innovation-centric Digital Seeds. Lastly, the Corporate Social Responsibility Division of CISA Exportadora continued to evolve and led the Mercon Coffee Group to decide to establish an independent non-profit, the Seeds for Progress Foundation in 2013.

**Seasons Change: The migration from Corporate Social Responsibility to Non-Profit.**

Almost 15 years after the inauguration of the Corporate Social Responsibility Division of CISA Exportadora's Adopt a School Program in 1999, the CISA and Mercon Groups embarked on a journey to form the Seeds for Progress Foundation, a U.S. based 501(c)-3. The decision marked a migration of activities and personnel from within the corporation to an outside, independently operated foundation, and the beginning of Digital Seeds as the Foundation's flagship program (and intervention) in Nicaragua's coffee-growing communities.
Looking back on the evolution of social responsibility, Rosa Rivas articulates the changing nature and structure over time.

First, it was coordination, then a more formal social responsibility department was created, and next as this was growing more and more the idea arose to make the decision to create a foundation because there were rather large programs already that couldn't continue encapsulated within the organization, within the company but rather they had already assume their own entity. I believe this step was needed, which is what we are in now, as a foundation (personal communication, October 9, 2014).

Current Chairman of the Seeds for Progress Foundation and the Mercon Coffee Group, Jose Antonio Baltodano adds further explanation why the Seeds for Progress Foundation was created, a justification tied to unified purpose across organizations and to donor funding.

Since this was a project of CISA Exportadora and we had other companies in Nicaragua like Café Soluble, like CISA Agro, we decided that it was important to make something united with the singular purpose that was helping education and health in Nicaragua...and to be able to do this and given that we had donor friends in the United States that were telling us that it was important to have a foundation in the United States so that their donations could be tax deductible...we decided that to formalize this we had to create a foundation (personal communication, December 9, 2014).

The establishing vision of the Seeds for Progress Foundation evoked a more human-centric, capacity-building approach to social responsibility, and I argue that its principal focus of contributing to the development of people was a direct outgrowth of the Digital Seeds program. Further, the new orientation represented a fundamentally different strategy than the assistencialist beginnings of the Adopt a School program.
Specifically, the Foundation envisions, "A world where people can realize their full potential, live self-determined lives and contribute to the development of their communities and society at large" (Seeds for Progress Foundation, 2014). Marco Zeledón from INTERSA agrees that education is the key to empowering communities to take more control over their own futures and not be subjected to outside interventions from governmental or non-governmental agencies because "they are the ones that should begin in the future to propose which are the things that are really meaningful to the community and not projects designed in an office located 160 kilometers or 260 kilometers from the community" (Marco Zeledón, personal communication, March 16, 2011). The best type of project for the community is the one that is developed at and with the community. Gone are the days when NGOs were small-scale actors that "filled gaps" left by the government. Therefore, to solidify their role in civil society, "they may need to shift their areas of interest from limited service provision to capacity development, whatever this nebulous concept may imply" (Ulleberg, 2009, p. 13).

As the year 2014 came to a close, all 16 schools that were once in the Adopt a School program were part of Digital Seeds, and the former program ceased to exist, folded into its more holistic, collaborative and human development-centered sibling. To help summarize the major differences between these two phases of CISA's social responsibility programs (Adopt a School and Digital Seeds), facilitator Silvio Diaz highlights the salient characteristics of the Digital Seeds program.

...there are various elements that enter into the mix, the technological part principally, the research part, the more human aspect of the work,
seeing the person as he/she is, to be able to identify individuals not as collectives. If they form a collective, but seeing them more humanely, more individually and this had been made possible thanks to the processes of motivation and human development, developed within the program (Silvio Díaz, personal communication, August 3, 2014).

The Future of Digital Seeds: Moving Forward in Collaboration with Communities

Welfare and charity are close cousins of assistencialism because they all treat the beneficiary of donations and/or assistance as "a passive object, incapable of participating in the process of his own recuperation" (Freire, 1973, p. 15). Although giving may diminish agency and possibly create relationships of dependency, it is often a necessary piece of a complex strategy to address basic human need (physiological and safety, i.e., food, water, shelter, health and security). Further, it is difficult to support higher level needs such as belongingness, love, esteem and self-actualization when the individual is hungry, thirsty, sleep-deprived or suffering from domestic abuse (Maslow, 1954). CISA Exportadora's School Sponsorship Program may have begun as assistencialist in nature, and it could have included more "capacity-building" strategies or community development projects from the start, but the deplorable schooling conditions demanded immediate action to stop the bleeding before more comprehensive approaches could be implemented. Traveling across the country and visiting all of CISA's and now Seeds for Progress Foundation's schools, I witnessed the dilapidated conditions of buildings and grounds along with instances of overcrowded and/or makeshift classrooms. In one school, students received class outside and behind the main building on dirt floors under a tin canopy, leaving students and desks exposed
to the elements. During rainstorms, a fixture of tropical climates, classes would persist depending on the severity of the downpour and the power of the wind. Inadequate infrastructural conditions are just one tangible manifestation of rampant poverty that affects schooling across Nicaragua. So, the corporation actively and caringly supported the communities in which they operated through social projects in education, health and environment. They offered a tangible response to urgent need caused by extreme poverty in Nicaragua by directly addressing the material components of schooling. A former teacher, administrator and original member of the facilitation team with CISA (and now Seeds for Progress), Nayibe Montenegro explains the importance of physical conditions for education, "To the extent to which there are adequate conditions and the children are more comfortable, they are more ready to learn" (personal communication, August 21, 2014). Marco Zeledón, Project Manager for INTERSA, the company responsible for managing CISA Agro's three coffee farms (one of which is the Buenos Aires farm) agrees with Montenegro.

It is certain that in the quality of the class material that the teacher imparts also has to do with whether the students is in good conditions. That is to say, a student that has a good seat where he/she can work, quality premises, a good space, that he can count on books, that he can count on materials to educate himself, this obviously improves education through the possibility or the access that he has to be able to develop exercises in different subjects (Marco Zeledón, personal communication, March 11, 2011).

Extensive research supports Montenegro and Zeledón's assertions regarding the relationships between the physical conditions of schools and student outcomes
(Lumpkin, Goodwin, Hope & Lutfi, 2014; Lumpkin, 2013; Uline & Tschannen-Moran, 2008). Even so, improving education (and by extension combating poverty) in Nicaragua goes far beyond physical and material improvements, and should ultimately include improving overall school climate and teacher preparation, pedagogy and support among other areas.

However generous and altruistic, donations and welfare do not combat poverty at its root causes. Charity addresses scarcity and not the sources of persisting social and economic issues (Ahn, 2007, p. 63). Instead, welfare and charity alleviate symptoms of poverty and inequality and attempt to reduce immediate human suffering. If we consider poverty as "capability deprivation" and not the widespread notion of low income or a lack of material possessions, it "enhances the understanding of the nature and causes of poverty and deprivation by shifting attention away from means (income) to ends that people have reason to pursue, and correspondingly, to the freedoms to be able to satisfy these ends" (Sen, 1999, p. 90). A program or project that offers support through free material gifts (i.e., donations, infrastructure) with little to no expectation of reciprocity on behalf of the recipient often creates dependency and even reinforces the emphasis on material things as the primary solution or response. In fact, “the recipients of charity are usually destroyed—for once you give a man something for nothing, you set him trying to get someone else to give him something for nothing” (Ford, 1926, p. 179). Critically reflecting on his work in Nicaragua in the 1980s, Orlando Fals-Borda (1988) recognizes the temptations of paternalism and vanguardism, and emphasizes
awareness and restraint of these tendencies. When tempted by the need to remain and
to protect, "these paternalistic attitudes also prevented autonomy from flourishing in
the communities, and impaired the ability of the communities to take control of their
own development" (Fals-Borda, 1988, p. 41).

In conversations with teachers and administrators from the Modesto Armijo
School, I asked how should we all collaborate more, as a family, as a team. The first to
respond, Assistant Director Juana Escalante suggests "in the aspect of didactic materials
that we often lack" and "I was also thinking of the children's stomachs, and in all aspects
I was thinking, because look, sometimes the situation is very complicated...some have
and others do not have possibilities" (Juana Escalante, personal communication, July 24,
2014). She immediately identifies the material needs of school supplies, then food for
her students and finally ends with a general plea to CISA for help with the "complicated
situation." I argue that 15 years of assistencialist programming characterized by
infrastructural projects, donations and unilateral giving to the Modesto Armijo School
has created a lasting relationship of dependency, a historic dynamic and currently a
stark contrast to the model of capacity building and sustainability espoused by the
Digital Seeds Program and the Seeds for Progress Foundation. Nayibe Montenegro
summarizes the challenge faced by Digital Seeds as they work to shed the vestiges and
reputation as padrino and benevolent paternal entity: "We have [...] a philosophy and a
mystique of the Program and what we want is to break with this assistencialism and I
understand that sometimes to obtain resources to be able to maintain the Program
sometimes there has to exist a selling of need, but I don't like it" (personal communication, August 21, 2014). Montenegro points to two complex challenges for Digital Seeds. First, the Program has a reputation as a provider and sponsor, and there are accompanying expectations by communities and schools of what that means. Second, as a Foundation, there is an inherent need to raise funds and obtain financial resources so that the Program can continue to exist. To inspire support from donors, the Foundation must market and promote the Program's activities and the impact it is having on the communities and individuals it intends to serve. Often, Foundations justify their existence through expositions of poverty and destitution, showing poor people living in squalor, often dirty and malnourished women and children as a means to provoke emotional responses and subsequent financial contributions. The example of Save the Children commercials and their "10 cents a day" plea come to mind. For Nayibe Montenegro, this strategy is manipulative and it takes advantage of people, "it is to use people, to use people's need as a means to acquire something" (personal communication, August 21, 2014). Montenegro understands that the Seeds for Progress Foundation needs to obtain resources to execute the Program, but with this aforementioned strategy "we are being a bit disrespectful by using the people to obtain funds" (N. Montenegro, personal communication, August 21, 2014).

In addition to showing poverty (i.e., human suffering) as de facto justification for donations and humanitarian aid, foundations also utilize personal success stories of perseverance and overcoming adversity as effective means to garner support. These
positive tales attempt to show the positive results of an intervention through the audio-visual representation of individuals and communities who attest to how their life has change thanks to X foundation or Y program. Lastly, for those who prefer graphs, percentages and numerical representations, there are ample statistical measures to demonstrate concrete improvements and impacts across particular metrics or variables deemed critical to development, progress or quality of life (i.e. per capita GDP, literacy, numeracy).

The Seeds for Progress Foundation is at a transitional point. Its former focus on physical improvements still matters; however, it is now part of a more holistic vision that includes human development within a emerging partnership in which the Foundation collaborates with local actors to develop capacity, ownership and shared responsibility. Even so, it is undeniable that the physical conditions for schooling are important aspects of quality education, and maintenance, repair and rebuilding are perpetual concerns for any school system across the globe. Yet, as the Seeds for Progress Foundation moves forward and strives to build more lasting impacts and more sustainability, they will need to engender a greater sense of shared responsibility, ownership and commitment to strengthen communities and combat prevailing poverties (Max-Neef, 1992). To achieve this more collaborative, participatory methodology the Digital Seeds Program must "break up voluntarily and through experience the asymmetrical relationship of submission and dependence implicit in the subject/object binomial" (Fals-Borda, 1991, p. 5). Instead of being the objects of
development (and recipients of resources from outsiders), local actors gradually become active agents within a supportive ecology of educational stakeholders. Simultaneously, need is viewed as both deprivation and opportunity (Max-Neef, 1992). For example, a school deprived of working toilets and a culture of teacher collaboration represents an opportunity to pool resources and skills to collectively repair the sanitation system and a chance for *Digital Seeds*’ facilitators and local teachers to learn together and forge spaces for collective sharing and collaborative work. During the year-long pilot program in Buenos Aires, I worked alongside teachers, students and parents to paint the school and on another occasion we improved the physical conditions of the school grounds through an extensive paving project. For these two projects CISA and INTERSA provided the supplies while the teachers, students, and parents provided the expertise and labor. In the end, participants were proud of their efforts to improve the school's appearance and the condition of its grounds. All and all, the fruits of collective labors were constant reminders of the power of partnership and they help engender shared ownership in the school as a physical place for education.

A shared responsibility and ownership over the physical and material implies care and maintenance at minimum, and repairs and reconstruction at best. To combat the one-sided distribution of donations and goods, and reduce the dangers of assistencialism, the Seeds for Progress Foundation has to work tirelessly and purposefully to offer a counter narrative and counter example to CISA Exportadora's lasting legacy of distribution and one-way giving. "The greatest danger of
assistencialism is the violence of its anti-dialogue, which by imposing silence and passivity denies men conditions likely to develop or to 'open' their consciousness" (Freire, 1973, p. 15). Contrary to this anti-dialogue beginnings, Digital Seeds facilitates human development and human capacity building to better prepare, equip and educate students, teachers and families to decide for themselves, accept or reject a proposed project, and actively contribute to the future of their communities. More generally, the legacies of CISA Exportadora's partnership with communities are evident, and the love and goodwill continues to this day. Juana Escalante from the Modesto Armijo school shares, "You have earned the love and respect from this town, from the communities, because they see you as...as someone that has brought something special, a progress for the children" (personal communication, July 24, 2014).

Crucial to the Digital Seeds Program countering the historic assistencialist dynamic and to truly collaborating with communities is a shared sense of responsibility in contributing to a common good. In this particular case, the common good is the education of the community's children (and overall quality education). There needs to be universal recognition by community members and Digital Seeds staff of the mutual beneficence of quality education, and this collective goal must be accompanied by a shared commitment to support and act in service of it. To share commitment requires mutual trust in one another, and "letting other persons [...] take care of something the truster cares about, where such 'caring for' involves some exercise of discretionary powers" (Baier, 1986, p. 240). Baier (1986) argues that the best reason to have this
confidence in the other's responsible and competent care of the matter in question, specifically education or whatever particular role each actor assumes, is a common good. For Digital Seeds, there is an active conceptualization of and approach to respect that requires an anti-hegemonic stance. At its core is an active respect for local knowledge(s) within the multiple “locals” including multiple school sites and communities, multiple staff members within and across these communities and multiple employees at Digital Seeds. If there is to be a fundamental shift in the balance of responsibility and resource contribution among Digital Seeds and the communities it seeks to serve (and partner with), the Program cannot lose sight of its primary ethic of collaboration, viewing one another as engaged stakeholders with expertise, experience and value (Ravitch, Tarditi, Montenegro, Baltodano & Estrada, in press).

Nayibe Montenegro (September 10, 2014) emphasizes the participatory approach as a key to Digital Seeds’ sustainability and overall success over time.

To achieve this participatory level requires another core value, that of respect; respect for the knowledge of others, the knowledge that goes well beyond academic knowledge. We are referring to the knowledge gained through life experiences, in the culture of the community, which we consider fundamental to the program's relevance and sustainability over time. This allows for transforming, adapting and making the program their own; we do not consider that we have a single, foolproof recipe, one that is applied to the different schools, each school takes up, retakes, adapts, discards in consonance with their reality and the characteristics of the community including among these the teacher staff (personal communication)

Eloquently and succinctly stated, Montenegro's emphasis on adaptability and inclusion point to major components of Digital Seeds' ethic of respect and the Program's
participatory ethos. Although seemingly positive and inclusive, participatory
approaches are not immune to establishing or re-enforcing imposition, paternalism, or
dependency, and as Cooke and Kothari (2001) remind us, espoused participatory
methods can easily fall into the trap of imposing academic, Western-centric, privileged
social class assumptions regarding the needs of local communities and the resultant
methods for appropriately fostering change. Additionally, many while participatory
programs may liberate communities from institutions that previously held power over
them, they can create a different form of dependency on the new promotional
organization or program (Gianotten & de Wit, 1991; Oakley & Marsen, 1984). One way
to combat impositional participation and/or dependency exchange is to engage in
constant reflection as the work unfolds. For Digital Seeds, participants must visualize
future relations of interdependence, instead of dependency, between the Program and
local schools and communities (Gianotten & de Wit, 1991). Further, the Program must
strive to reach further congruency between the espoused theory of Digital Seeds'
relational, collaborative approach and the theory-in-use of the Program's actions,
activities and relationships (Argyris & Schön, 1974). In a working paper on Mutual
Accountability and Responsibility in International Aid, Eyben (2008) recommends several
ways of working that she deems 'relational' and 'processual': "decentralised decision-
making"; "multiple diagnoses and solutions"; "messy partnership"; privileging muted
voices"; "political disagreement and debate"; "planned opportunism"; and "capacity
development as energy" (Eyben, 2008, p. 30). While all of these strategies may
contribute to a more relational approach, "capacity development as energy" most resonates with the mission and vision of *Digital Seeds*. Morgan (2005) argues that instead of focusing primarily on the "conventional categories of tasks, functions and hierarchies" (p. 14), more time is invested into "relational processes and patterns" that form and revolve around particular values and ideas and generate capacity in participants, and therefore "capacity is as much about energy as it is about skills and resources" (Eyben, 2008, p. 32). The Program's strategy of accompaniment represents a particular example of how relationships and interactional processes between facilitators and teachers are guided by the core values, specifically those of mutual respect, prizing, trust and shared learning. Instead of focusing solely on tasks and activities, which of course comprise necessary components of planning and execution, *Digital Seeds* emphasizes general guidelines and sensibilities as well as specific settings, values and approaches to shared learning and reflection among teachers and facilitators. During one professional development session, or learning exchange, at the Nicarao School, Elba Garcia engendered a warm, supportive and dynamic energy as she guided the group through discussions and interactive activities related to the central theme of "The Ego." Garcia established and masterfully maintained a friendly atmosphere and a focused attention in the room as the teachers. Processes of reflection, facilitated through individual writing and group sharing, supported the teachers in making connections between theoretical and abstract concepts and their own experiences and understandings. An energy of heighten self-awareness via an exploration of the role of
one's ego in his/her lives inside and outside the classroom permeated the room and showed the teachers the power of introspection and reflection, a critical capacity being developed as a collective.

As Digital Seeds and the Seeds for Progress Foundation move forward, they must further emphasize capacity as energy to facilitate the central values and ideas so vital to the Program's success and long-term sustainability. Along with these capacity-building functions, the Foundation will continue to engage in "gap filling" for the Nicaraguan government by offering pedagogical support to teachers, providing materials and supplies to schools, and improving and maintaining the infrastructural conditions of schooling; however, Ulleberg (2009) would urge the Seeds for Progress Foundation, as a burgeoning NGO, "to shift their areas of interest from limited service provision to capacity development, whatever this nebulous concept may imply" (p. 13) and possibly working with the state to improve its capacity to deliver services and improve Nicaragua's educational system. By continuing to gap fill, although helpful to local communities, the Program and Foundation further enable the state to not assume responsibility for the services and conditions that should be theirs (Degnbol-Martinussen & Engberg-Pedersen, 1999). As Seeds for Progress continues to expand and growth, and perpetually strives for sustainability and sustainable impact, they must decide what role or roles to occupy in relation to the state: "as an actor demanding accountability, as a gap filler, or as a partner strengthening the state's own capacities" (Ulleberg, 2009, p. 14). No matter which role or roles the Program and Foundation
choose to assume, the relationship with the state is paramount to their relevancy and effectiveness, both short-term and long-term, and the desired objectives of the Program will be largely dependent on the decisions made by the state due to their power to determine the political, economic and social contexts and structures within which the Program will operate (Wiking in Benavot, 2010).

(Ad)dressing Nicaragua's Multiple Wounds

As human beings, we are products of our environments and our environments are often shaped by our actions. For a "multiply wounded" country like Nicaragua, many individuals and communities still carry with them the emotional, psychological and physical baggage from years of dictatorial rule, revolution, civil war and natural disasters. The trauma and pain experienced over multiple generations have left deep wounds and noticeable scars, and unfortunately for many Nicaraguans, "they have been unable to work through their experiences" (Cabrera, 2002, p. 2). In particular, Martha Alicia Moreno notes that the repercussions of war continue to reverberate to this day and if left untreated, prevent individuals and societies from growing:

They are the aftermaths that you carry with you, and at the end of the day they limit you in your development because if you walk around with trauma, if you continue in a situation that inhibits you, you can't maximize all the opportunities that you have in your environment (personal communication, February 17, 2011).
It is my contention that the human-centered, relational model of Digital Seeds represents tremendous potential as a sensitive, supportive response to the multiple wounds in Nicaraguan society, and the program is unique compared to many other attempts at "helping" Nicaragua. Martha Cabrera (2002) believes,

An incredible amount of money has been spent in this country on programs to build and strengthen institutional capacity, not just in state institutions but also in nongovernmental and local grassroots organizations. But the strengthening of an institution is based on mutual trust and that is one of the things that’s lost when there is an accumulation of pain and misplaced intolerance and inflexibility (p. 3).

Therefore, Digital Seeds offers a holistic, humanistic approach to education partners with teachers, students and communities to help rebuild the mutual trust and solidarity that have been lost from years of accumulated pain and subsequent neglect (Cabrera, 2002). Specifically, the accompaniment approach of Digital Seeds serves as the critical "point of encounter" among participants, it enables the central relationship in which, people together, attempt to learn and grow (Freire, 1970). Facilitators accompany teachers and students, and together they create the central relational dynamic steeped in authentic dialogue, respect, prizing and active listening, numerous sources and methods of building and sustaining trust. To cultivate this emerging trust, facilitators establish safe spaces for openness (Tschannen-Moran & Hoy, 2000) and acceptance (Rogers, 1980), and openness to and an acceptance of vulnerability. For example, during a professional development session Facilitator Elba Garcia asked teachers to respond to the question, "How am I and who am I?". The four teachers were given time
to write down their thoughts before sharing with the larger group, and during both steps, Garcia responded to clarifying questions, encouraged participants, and affirmed respondents through engaged body language, eye-contact and verbal reactions to teachers' responses. Another significant element of this segment of the session is that Garcia shared her response first, a purposeful attempt to break the ice while also modeling vulnerability. Supported within a warm, caring environment and “founding itself upon love, humility, and faith, dialogue becomes a horizontal relationship of which mutual trust between the dialoguers is the logical consequence” (Freire, 1970, p. 91).

For individuals to enter into a deeper conversation and connection, there must be mutual trust (confianza). According to educational facilitator Elba García, "for an effective dialogue to emerge, you have to take into account, first that the other person is open to sharing, and it has to do with a mix of trust and communication beyond what is natural or quotidian" (personal communication, August 2, 2014). Openness comprises one of the many dimensions of trust, a "mental accessibility (and a) willingness to share ideas and information freely" (Butler & Cantrell, 1984, p. 19).

Garcia alludes to the gentility, respect and care requisite for engaging with one's vulnerabilities. It is this willingness to accept vulnerability "based upon positive expectations of the intentions or behavior of another" (Rousseau, Sitkin, Burt & Camerer, 1998, p.395), and that is at the heart of trust (Baier, 1986; Bryk & Schneider, 2002; Tschannen-Moran & Hoy, 2000). In the pages that follow, I guide the reader through the nature and role of trust in the Digital Seeds program and explore the multi-
faceted accompaniment strategy to demonstrate how the overall human-focused, relational approach of the Program has fomented trusting relationships, and thus contributes to (ad)dressing Nicaragua’s multiple wounds.

**The Nature and Role of Trust in the Digital Seeds Program**

Without the prevalence of trust among educational actors the *Digital Seeds* program would be unable to reach anywhere near the current state of relational richness and collaborative unity. Conversely, Nayibe Montenegro warns that a lack of trust would prevent the team of facilitators from doing anything with the teachers:

> If there isn't trust, we cannot do what we intend to do on a day-to-day basis, because it would create a barrier. If the teacher doesn't trust in our ability to do something together [...] if the teacher isn't certain (that) it is a constructive intention to build something, he/she won't let us enter into his/her intimate environment that is the classroom to a certain point (Nayibe Montenegro, personal communication, August 21, 2014).

Presented with the antithesis, or the absence of trust, we now explore the current state of *Digital Seeds* and how trust is understood and enacted among its participants, but before we begin, it is important to situate the concept of trust within existing literature and research.

**Social Exchanges and Relational Trust**

There is no singular definition of trust (Tschannen-Moran & Hoy, 2000), but there are many overlapping characteristics and facets to this simple, yet complex concept. According to Mayer, et al. (1995), "trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to
monitor or control that other party” (p. 712). Although the general definition of trust is helpful to our understanding of this pivotal construct, Bryk and Schneider's (2002) relational trust is even more relevant to the context of Digital Seeds. Pulling from existing iterations of trust (organic and contractual), they posit that "relational trust represents an intermediate case between the material and instrumental exchanges at work in contractual trust and the unquestioning beliefs operative in organic trust" (Bryk & Schneider, 2002, p. 21). To understand relational trust, one must comprehend the concept of social exchange. According to Molm, et al., (2000), "social exchange occurs within structures of mutual dependence, in which actors are dependent on each other for valued outcomes" (p. 1398). Motivated to achieve more outcomes of value, participants in social exchange provide one another with these benefits and over time these exchange continue between the same participants (Molm, et al., 2000). Social exchanges are of particular importance and salience to schooling, as they contribute greatly to the productivity of the organization and "a complex web of social exchanges conditions the basic operations of schools" (Bryk & Schneider, 2002, p. 20). Central to the functioning and mutual productivity of these social exchanges are the principal characteristics of relational trust: respect, personal regard, competence and personal integrity (Bryk & Schneider, 2002). For the Digital Seeds Program, the concept of trust has a deeply relational ethos and foundation, but it is not a mirror image of Bryk and Schneider's construct. Instead, across the program and its myriad participants there are
multiple definitions and understandings of the term *confianza*\(^6\), which is the closest Spanish equivalent to the English word trust. It is in this diverse milieu of meaning that our journey begins.

**The meanings of Trust in Digital Seeds**

Throughout over six years of listening, observing, interacting and being with the *Digital Seeds* Program specifically, and in Nicaragua generally, I heard the term *confianza* used early and often, with a richness and fullness unmatched by most words in the Spanish language. Out of confusion, curiosity and a seemingly palpable centrality to the term and its meaning to people in education and particularly among those in *Digital Seeds*, I decided to explore the role and nature of trust within the *Digital Seeds* Program. What I found was a wide swath of meanings yet a centralized, cohesive set of essential characteristics. According to the participants in this study, all Nicaraguans besides yours truly, trust (or *confianza*) can mean any and all of the following: intimacy, openness, freedom of expression, discretion, reciprocity, goodwill, faith or hope, reliability, self-confidence, and security.

Intimacy arises out of Maria Luisa Herrera’s definition: "*confianza* from the conceptual point of view is allowing a particular person to enter into intimacy but in a limited intimacy, because the individual gives trust as far as he considers it necessary to do so" (personal communication, March 20, 2015). In other words, trust is letting someone into your personal, intimate space (mentally, emotionally and physically?), but

\(^6\) The complexities and limitations of using *confianza* as a proxy for trust is discussed earlier in this study.
it is not without its limits. Maria Luisa's definition of trust is similar to one of its primary characteristics, openness (Tschannen-Moran & Hoy, 2000), or the extent to which someone shares information and possibly makes him/herself vulnerable by divulging personal information. According to Nayibe Montenegro, this openness "is constructed [...] through co-existence (convivencia) and to the extent that one is able to share with the other, it allows for this dialogue [...] and that the other person in the daily co-existence begins to open up little by little and this mutual respect can be shared" (personal communication, August 21, 2014). In my particular case, I often shared the story of my sister's battle with leukemia, my active role as her nanny during her final year and her eventual passing as a way to cope with loss, to further accept her death, and to offer the gift of vulnerability to friends, colleagues, teachers and community members. Accepting vulnerability and gifting it helped open up the opportunity for others to reciprocate vulnerability and to share stories of their own. Only through convivencia were we able to delve into our personal histories and experiences in dialogue and to truly connect as emotional, sensitive humans, sentient beings full of baggage, wounds, complexity and depth.

Freedom of expression, a definition offered by Silvio Diaz, "is the ability to express oneself freely to the other person...without any restrictions, to be able to tell him/her something" (personal communication, August 3, 2014). The ability to share and express oneself is an extension of intimacy; however, it is an openness that shows no limits, and this distinction is particularly important because "people who are guarded in
the information they share provoke suspicion" and not trust (Tschannen-Moran & Hoy, 2000, p. 558). An openness among colleagues is enriched by a relational trust because "talking honestly with colleagues about what's working and what's not means exposing your own ignorance and making yourself vulnerable. Without trust, genuine conversations of this sort remain unlikely” (Bryk & Schneider, 2003, p.43). That being said, although openness and intimacy are essential to trust, they must be balanced with professionalism and a professional ethic. Discretion is vital to engendering an environment and a relational dynamic in which people can freely express their feelings and thoughts, especially given the sensitivity of the issues and topics being discussed. After describing trust as the ability to speak freely, Díaz urges discretion "since it is something very personal, I cannot tell everyone...or anybody else" (personal communication, August 3, 2014). Joel Montalván shares that having a tranquil, sincere and serene way allows him access to the intimate worlds of the teachers, and "it is something that you keep to yourself because they are trusting you" (personal communication, July 31, 2014). Being sincere is an important aspect of trust, and an essential quality of a trustworthy person (Blomqvist, 1997). Because of the trusting relationship that has been created, "it allows me to address whatever theme, whatever situation that is happening and I feel comfortable doing it and the other person as well" (Martha Alicia Moreno, personal communication, August 19, 2014). In a discussion of the importance of accompaniment in the facilitators' work with teachers, María Luisa Herrera cautions her colleagues to maintain a professional ethic. She states, "I consider
that in that case of accompaniment it isn't recommendable [...] to share so much, that is, all the specific experiences among the team because to a certain point it shows a lack of professional ethics" (personal communication, March 20, 2015). Specifically, the personal examples of success, difficulty, deficiency or challenge need to be addressed with great care and sensitivity. "It would be grave, grave that a teacher became aware that he/she has been the object of commentary, that he/she has been the object [...] of study. He/she would not forgive us for this" (M. Herrera, personal communication, March 20, 2014).

The third common definition for confianza was reciprocity. The Principal from the Flor de María Rizo School, Herminia del Socorro Valdivia Arauz believes that "confianza is to give of oneself (or to let go), to let the other teach me and also give what I can teach the other person, no?" (personal communication, August 18, 2014). Although her definition does not easily fit into a pre-existing facet or definition of trust, reciprocity evokes reciprocal exchanges, a highly effective way of establishing trust between two parties (Molm, et al., 2000). Furthermore, "gifts and their reciprocation are obligatory acts for the maintenance of social relationships (Newell, 2012, p. 201).

The fourth definition of trust is offered by Jose Antonio Baltodano. He describes confianza as "knowing that the person is going to act in a responsible, moral way, with values, ethics for the benefits of others and that he/she is not going to take advantage of a situation" (personal communication, December 9, 2014). Jose Antonio is a very "hands-off" leader when it comes to his role in the Seeds for Progress Foundation, and
his leadership style places great stock in the delegation of responsibility and personal accountability, a balance of independence and responsibility. He shows tremendous trust in the two employees directly under his supervision, Rosa Rivas and Alejandra Rodríguez, empowering them to make their own decisions and execute plans instead of micro-managing or questioning every minor detail. His trust, as the above quote illustrates, is based on a belief in an individual's values and ethics, and an overall sense of responsibility. Embedded in his conceptualization is the idea of goodwill, "an attitude of optimism about the other person" (Jones, 1996, p. 6). The expectation of ethical, moral and responsible behavior by the person being trusted evokes Mayer et al.'s (1995) aforementioned definition of trust.

Another definition is shared by Claudia Pereira, the Director of Human Resources at Mercon Coffee Group, and she served as chief advisor to the Digital Seeds Program during the transition period from CISA Exportadora to the Seeds for Progress Foundation. Her definition of confianza is "to believe, to believe although you don't have the result firsthand, this means believing" (C. Pereira, personal communication, December 11, 2014). Pereira's understanding of confianza as belief is tied to her confidence in the people, concept, model and mission related to the Digital Seeds program. Even so, it is also sounds a lot like faith or hope, which are also very relevant concepts to the field of trust. When confronted with no tangible results or evidence that someone or something is trustworthy, we are unable to make a rational calculation because we don't possess perfect information. Instead, no information to confirm or
deny our belief forces us to take a leap of faith (Blomqvist, 1997, p. 283). To define trust, Nayibe Montenegro provides the analogy of "closing your eyes and letting yourself fall," the proverbial leap of faith (personal communication, August 21, 2014) while Duilio Baltodano describes this as "an act of faith" (personal communication, August 14, 2014). Both definitions evoke a faith, an ineffable belief or a deeply held conviction that someone or something is going to be successful, positive and not cause any undue harm.

When one is not inclined to take this leap of faith, a sense of dependability alleviates one's aversion to risk or uncertainty. Reliability is another meaning of trust, a definition offered by a teacher from the Flor de Maria Rizo School. Yaser Javier Reyes Gonzáles posits, "confianza is that feeling that one has towards another person...that one feels that the other can help him/her in a certain moment during a situation" (personal communication, August 18, 2014). Assistant Director Evelia del Rosario Guardián Herrera from the Modesto Armijo School believes that reliability is important to building trust among teachers. She states, "from the moment that one asks another teacher for help it's because she has trust in the other that she's going to help her [...] so you create trust with one another when you ask for help and it's given" (personal communication, July 23, 2014). Among social psychologists, trust refers to the "reliability of the word or promise and the fulfillment of obligations" (Blomqvist, 1997, p. 283). Additionally, reliability is one of the seven facets of trust offered by Tschannen-Moran & Hoy (2002), and it denotes dependability, which "combines a sense of
predictability with benevolence" (pg. 557).

The last two definitions of trust (confianza) are self-confidence and security. Self-confidence refers to an individual's trust in him/herself while security encompasses self-confidence and confidence in others. According to Eveling Estrada, primary school teacher at the Buenos Aires School, "confianza is based on security in oneself and as a team" (personal communication, August 20, 2014). Maria Luisa Herrera echoes Estrada's understanding of the term by sharing that confianza means "I am sure of myself" (personal communication, March 20, 2015).

It is evident from the aforementioned summary that is no one understanding of the meaning of trust among Digital Seeds participants; however, their responses elucidate the varied nature of trust within the program as a starting point. To further comprehend the nature and role of trust in Digital Seeds it is worth an exploration of the sources and characteristics of trust through the lenses of participants.

Sources and Characteristics of Trust

The inspiration or source of trust is particularly important to a program that espouses a theory of action and strives to enact a deeply relational approach to its programming and work with schools and communities. Therefore, the ways in which trust is established, maintained and/or cultivated are particularly resonant to the current study and to the Digital Seeds Program as they continue to focus on relationship and trust as centerpiece to their overall human-development, holistic ethos. The major sources and ultimate characteristics of trust for participants in the Digital Seeds
Program, specifically teachers, administrators, facilitators, coordinators, directors and Seeds' executive staff are: congruency, honesty, integrity, respect, delegation of responsibility, a common objective, credibility, competence and presence.

According to Marco Zeledón, Project Manager for INTERSA and its three principal coffee farms (including Buenos Aires), trust is earned, not by what one says, but by what one does. Zeledón describes bluntly, "trust is gained [...] not only with what you say but also with what you do, because [...] we have thousands of people that can speak beautifully about everything but if you don't practice it" (personal communication, August 21, 2014). We can all relate to the commonly held belief that "Actions speak louder than words," and this congruency or consistency between words and actions is a crucial criterion for trust discernments (Bryk & Schneider, 2002; Tschannen-Moran & Hoy, 2000). For Tschannen-Moran & Hoy (2000), "a correspondence between a person's statements and deeds characterizes integrity" (p. 558). Further, integrity, character and authenticity determine one's perceived honesty (Tschannen-Moran & Hoy, 2000). If a person is honest and demonstrates this honesty through a consistency between what she says and what she does, then others are most likely to trust her because she shows integrity. This concept of personal integrity is fundamentally about an individual's character, and it "implies that a moral-ethical perspective guides one's work" (Bryk & Schneider, 2002, p. 26). The facilitators also note the importance of honesty and congruency in their relational work with teachers. Maria Luisa Herrera states, "We can have trust in a person according to the coherence that he/she has
between her discourse and her actions. This gives us security to trust in this person" (personal communication, March 20, 2015). Montenegro calls it a "transparency" that is exhibited by a "transparent person," and these qualities promote trust from others (personal communication, August 21, 2014). Freire (1998) would agree with Herrera and Montenegro in that the "diminution of the distance between discourse and practice constitutes an indispensable virtue, namely that of coherence" (p. 63).

Intertwined with honesty and integrity is respect, another key source and characteristic of trust. In respectful relationships and exchanges, individuals prize one another by genuinely listening to what the other is saying and then seriously considering their points of view and taking them into account during decision-making (Bryk & Schneider, 2003). Respect is especially important for dialogue to flow freely and for opposing opinions to be valued (Freire, 1970). Even in disagreement people feel valued when their perspectives, emotions and opinions are respected by their peers. It is a "respect for the autonomy and dignity of every person", and it is "an ethical imperative" among individuals in dialogue (Freire, 1998, p. 59). Nayibe Montenegro describes respect "in the sense that we value the knowledges and the people for who they are and no matter where each one is coming he/she has something valuable to share" (personal communication, August 21, 2014). Duilio Baltodano shares Montenegro's perspective regarding Digital Seeds' deep respect for local knowledge, stating exactly that, that "the program greatly respects these local knowledges" (personal communication, August 14, 2014). An appreciation and acceptance of each individual's
worth extends to their functions and roles, and "they are basic characteristics to be able
gender trust among [...] groups" (M. Úbeda, personal communication, October 9,
2014). To maintain trust, this respect guides the facilitator’s relationships with teachers.
In fact, according to Elba García, a major challenge related to trust is its very
maintenance, for which she suggests, "always respecting [...] what the other person is
feeling, or what the other person is wanting" (personal communication, August 3, 2014).
This maintenance of respect is a fundamental condition for sustaining civil social
exchanges among school community members and Digital Seeds staff (Bryk &
Schneider, 2002). Mutual respect among participants includes a shared sense of
responsibility, "we are all a part of this, each one of us has a small responsibility, and
each one of us shares a mutual respect for the ideas and actions" (J. Montalván,
personal communication, July 31, 2014).

When approaching a school for the first time and during subsequent visits by
facilitators and coordinators when they approach teachers and administrators with
proposals for activities and programming, Rosa Rivas emphasizes the primacy of
exhibiting the utmost respect for teachers. Rivas remarks, "We care a great deal and we
place great value in the capacity, in the experience that the school already has. That is,
we are very respectful of this and we arrive at the school with a disposition to establish
relationships of collaboration, of trust with the teachers" (personal communication,
October 9, 2014). The facilitation team models dialogue, respect, and reflection as
principal sensibilities and characteristics of their internal work as well as their work in
the schools. Telling and showing, and the congruency between their espoused theory and the theory-in-action engender trust by the teachers and better promote open, dialogic engagement by all participants. Díaz states, "the interaction among the team itself, the co-existence that we have had, well this has helped to have better communication, better trust among us [...] so that this trust and this communication are also exercised with the group with which we work" (S. Díaz, personal communication, August 3, 2014). In sum, the respect and trust among the Digital Seeds implementation team exhibits a congruency among the theory of the program, the internal actions and behaviors of the team, and their interactions with local actors.

Another source of trust in the Digital Seeds program is the delegation of responsibility. Specifically, the delegation of responsibilities is a tangible, actionable instantiation of the trusting organizational dynamic among the Seeds team, and this shared confidence in one another empowers facilitators to make decisions based on their intimate local knowledge and guided by their personal strengths and the values they share with the program. Specifically, implementation facilitators (facilitadores de ejecución) regularly make judgments to adapt the specific activities of the program to emerging and consistent peculiarities of each school. They describe them as "particularities" or the "individual characteristics," and it is this adaptability and creativity that embody the Program and strengthen their integration and collaboration with the situated individual-school-community realities. In literature from Organizational Management, it is shown that "trust is especially important for
organizations that operate in turbulent external environments, that depend heavily on information sharing for success, and whose work processes demand effective decentralized decision making" (Bryk & Schneider, 2002, p. 33). Schools require a constant adaptation and fluidity to adjust to changing circumstances and realities on a day-to-day basis. The delegation of responsibility emanates first from and among the internal Digital Seeds team and then extends to the local schools and communities. As director and leader of the Program, Rosa Rivas believes that delegation is important to instill trust in her team.

When I delegate, when you give someone some responsibility you are telling them, 'I trust in you,' that is, 'You are going to do this because I know that you can do it, because I know that you have the capacity and this is to trust" (personal communication, October 8, 2014).

Rivas notes that she wouldn't be able to do absolutely anything if she didn't delegate responsibility and if she didn't have trust in her team. Also, her trust empowers the coordinators and facilitators to be creative, make adjustments, adapt to local contexts, and exercise judgment and decision-making on a regular basis. Asking how one constructs trust (and confidence), José Antonio Baltodano responds, "by giving him/her responsibility and empowerment to the people so that they act [...] almost without supervision [...] giving him/her the freedom to act and that this action be responsible" (personal communication, December 9, 2014). Baltodano believes that without delegation of responsibility there can be no trust, saying, "one cannot develop trust if you don't allow for freedom of action" (personal communication, December 9, 2014).
Delegating is a consistent phenomenon across the Digital Seeds’ staff starting at the top and continuing to the facilitators in the school, and it extends to teachers in schools. The staff at Digital Seeds describes the extension of trust and confidence to the teachers as a gradual process that unfolds in parallel to the development of their skills, confidence and comfort/rapport with teachers. For the Program in general and for Rosa Rivas and Jose Antonio Baltodano specifically, trusting and delegating are simultaneous, mutually reinforcing processes. The holistic, interconnected modus operandi of the team is one of its greatest strength, and a core approach of the program as a whole. It is this collaborative ethos that unites the group and fosters a supportive, caring working environment. However, a lack of specialization and central authority have also been perceived as a potential weakness because they conflict with more traditional work hierarchies in which individuals have specific foci, singular specializations and a clearly separated distribution of responsibilities. For Digital Seeds, specific tasks are performed within an overall ecology in which people, processes, practices and products are interconnected. Trust in general and relational trust specifically are vital to this distributed, interdependent and ecological structure (Abdul-Jabbar, 2013; Bryk & Schneider, 2002), namely because it helps to motivate "actors to contribute, combine, and coordinate resources toward collective endeavors" (McEvily et al., 2003, p. 93-4). Among the Digital Seeds team, everyone contributes to a common goal for the betterment of the team and the Program, a stark contrast to more individually incentivized work cultures. Martha Alicia Moreno notes, "In the end we
don't view the activities as separated but rather we see them together...sometimes I am working on something that I support with Joel and I help Nayibe and vice versa [...] I don't see the limit" (personal communication, May 24, 2012). The teachers have assumed this same collaborative ethos, aided greatly by the model and focus of the Digital Seeds team. Eveling Estrada remarks, "this a joint effort and we aren't three different people, but rather we have to be the same, one person, three in one person" (personal communication, December 4, 2009). To achieve this level of sophistication in their mutuality and collaboration, the three teachers enjoy a strong reciprocal trust maintained by open, honest communication, and "the most important is to have communication" (E. Estrada, personal communication, December 4, 2009). These regular, consistent and open communications help engender a knowledge-based trust as individuals get to know each other, feel more capable to predict the other's behaviors and actions and therefore individuals are able to form clearer expectations based on shared good will (Creed & Miles, 1996; Tschannen-Moran & Hoy, 2000). Overall, reciprocal exchanges of trust are necessary for this collaborative ecology to not only thrive, but also to even exist with moderate success and efficiency (McEvily et al., 2002).

The culture among Digital Seeds is indicative of an organization with high levels of trust. For organizations in general, "Actors must exchange information and rely on others to accomplish organizational goals without having complete control over, or being able to fully monitor, others’ behaviors.” (McEvily et al., 2003, p. 92). Trust establishes and enriches the conditions for the delegation of responsibilities and also for
basic organizational cooperation. Specifically, McEvily, Perrone & Zaheer (2003) believe trust impacts organizations via two major casual pathways, namely structuring and mobilizing. Structuring refers to the creation, preservation, and adjustment of a system of corresponding positions and connections among actors located in social space and mobilizing is the "process of converting resources into finalized activities performed by interdependent actors" (McEvily et al, 2003, p. 97). These two properties impact the interaction patterns and processes that can either facilitate or hinder coordination among organizational participants. In the Digital Seeds program, trust acts as an organizing principle that greatly impacts both pathways and their respective sub-processes. The structuring pathways include transferability, density, generative capacity, multiplexity, delayed reciprocity and stability (McEvily et al., 2003).

Transferability occurs when individuals trust another based on existing relationships and experiences with another person or organization. Members of the Digital Seeds team have previous experience in the same schools, geographies and these individual and shared reputations precede them and foment an predisposition to trust in the team. Maria Luisa Herrera comments, "the references of my colleagues helps me a lot because […] when one walks he/she leaves his/her footprints and these footprints leave lasting marks in some people" (personal communication, March 20, 2015). Walking along the same paths as teachers, administrators and Ministry of the Education employees, the facilitators' rich and diverse experience in education not only affords them intimate knowledge of the realities of schools, communities and the main
governing institution, but it has also created decades of personal and professional relationship with the individuals that make the educational system function. For Herrera, a former departmental pedagogical advisor for the Ministry of Education in the Department of Jinotega, many teachers already know her before she arrives at a school, "all the teachers that work in the Department of Jinotega in some way have a reference to me for the simple reason of having been departmental advisor" (personal communication, March 20, 2015). Her former position in the Ministry and her experience as a teacher give her, and the other facilitators a certain status, confidence and perceived competence among teachers, and they serve as the basis for a characteristic-based trust (Zucker, 1986). Arising from social similarities and cultural norms, this type of trust is based on family backgrounds, ethnicity, social status and class among other characteristics (Tschannen-Moran & Hoy, 2000). The teachers and facilitators share aspects of a common culture, and it is often the understanding by the facilitators of the implicit elements of an invisible culture that aid the intergroup dialogue and emergence of mutual trust (Erickson, 2004).

Along with a shared culture, Martha Alicia Moreno puts herself in the place of the other in order to understand why she/he acts a certain way and to avoid judgment of another's actions and reactions. This approach arose out of several instances in which there were misunderstandings between the Program and some of its partners. At first the team was frustrated by another's lack of commitment to an agreed-upon meeting time; however, upon further inspection and introspection, Martha Alicia and
others realized that the person's actions were products of his/her professional culture and demands, and not purposefully disrespectful or rude to *Digital Seeds*. Reflecting on this learning opportunity, Moreno states, "It is trying to understand why the other person acted in this way and when we get together we ask him/her in what way we can do things better the next time" (personal communication, August 19, 2014). Another important way of building this rapport and strengthening the existing shared culture is the use of common language. Moreno believes that the use of common vocabulary helps to open up trusting spaces. After citing several localisms from the Norteño lexicon, Moreno argues, "These words help them to empathize with you and to feel comfortable and to lose their fear of sharing because you will be criticized or because you said a word that isn't inside the Real Academia" (personal communication, August 19, 2014).

Facilitators are well respected and they enjoy tremendous credibility in the schools because they are seen as esteemed members of the educational family. Elba Garcia believes strongly that the trust they have gained in schools is closely tied to credibility (personal communication, August 2, 2014), and competence and credibility are considered an integral characteristic of trust (Blomqvist, 1997; Tschannen-Moran & Hoy, 2000; Usunier, 1990). Silvio Díaz shares, "all the members of the team and this program *Digital Seeds* are teachers" (personal communication, August 3, 2014), and this is a vital characteristic to legitimacy in schools and their ability to connect with educational actors. Moreover, in general, "people have a tendency to extend trust
more easily to people they perceive as similar to themselves" (Tschannen-Moran & Hoy, 2000, 560).

Another facilitator and former teacher herself, Elba Garcia describes how the team's cadre of educators brings facilitators and teachers together. According to Garcia the team has "this advantage or this gift in the sense that we rapidly relate or identify with one another [...] the fact that there are many teachers within the program, it helps you because the teacher identifies with [...] what the other is suggesting" (E. Garcia, personal communication, August 2, 2014). This identification arises from the characteristic-based trust as well as one whose basis is institutional (Creed & Miles, 1996). Specifically, "institution-based trust is supported by formal social structures that confer trust such as having a license, certification to practice a profession" (Creed & Miles, 1996 in Tschannen-Moran & Hoy, 2000, p. 562). María de los Ángeles Úbeda describes these combined types of trust that exist between teachers and facilitators: "This experience, the wisdom that they have achieved from so many years of experience, has resulted in the teacher trusting the facilitator" (personal communication, October 9, 2014). The relational depth and connection enjoyed by teachers and facilitators represent the power of trust to aid in "multiplexity." Lee, Robertson, Lewis, Sloane, Galloway-Gilliam, & Nomachi (2012) posit that multiplex relationships usually experience higher levels of commitment and need for adaptation, and they tend "to support the development of higher levels of trust" (p. 617). In sum, teachers and facilitators in the Program are dynamic partners in the educational project,
and their reciprocal exchanges contain various layers, dimensions and contents that far exceed a simply professional relationship or more formalized negotiated exchanges (Molm et al., 2000).

The reciprocal trust that exists between teachers and facilitators also stems from a common objective, a common good in which all participants believe strongly. Given the Baier's (1986) understanding that to trust, one must rely on another's competence and willingness to take care of and not harm, something that one cares about, it should come as no surprise that she believes that "the best reason for confidence in another's good care of what one cares about is that it is a common good" (p. 243). Although there are a range of individual and institutional goals from higher pay and technology integration to pedagogical innovation and more centralization in education, most participants in *Digital Seeds* share in one common objective: providing quality education to children. "We all have the same goal," states Rosa Rivas (personal communication, October 8, 2014). From the Ena Sanchez School, Assistant Director Esmeralda Gutiérrez feels that the common objective of learning/teaching unites educational actors in trust (confianza). She shares, "I believe that since it is the same objective that we have [...] this same interest, I believe that it is an important point to have this great trust and this relationship" (E. Gutiérrez, personal communication, July 23, 2014). Most believe in the necessity of education, a sentiment shared by Marco Zeledón, "We, all of us and I repeat partners, general manager, farm manager, teachers, administrative personnel, everyone believes that education is necessary" (personal communication, August 2, 2014). A
shared vision and common objective contribute greatly to the Program's success according to Claudia Pereira. "All the people there are, the entities that are in this component of the program have to function in a synchronized way under the same objectives and same goals, and this, I believe, is also part of the program's success" (C. Pereira, personal communication, December 11, 2014). As part of an integrated network of educational stakeholders, the existence of trust aids in the maintenance of cohesion among participants and requires fewer resources by managers (or in this case, the director and coordinators) because "participants may have greater confidence that others share common purpose and beliefs" (Lee et al., 2012, p. 610). During the beginning stages of the Program's development Nayibe Montenegro noted a disconnect between the more "education-minded" individuals of CISA within the CSR division and those more closely tied to, and informed by the business-side of the corporation (personal communication, May 24, 2012). However, she sees that this diversity and difference, although requiring more effort to understand the other and communicate in a shared language, are sources of great strength and richness. Montenegro comments, "We have learned also that we can from distinct points of view from the involved actors construct something together [...] and in the end it is the goal that we have in common" (personal communication, May 24, 2012). Montenegro's colleague and close friend, Joel Montalván agrees with the seasoned educator. "We are only one in the end and we fight for something, for the same thing" (personal communication, July 31, 2014). While there is agreement among all facilitators that education is the primary objective, there
are nuanced differences about the particular activities and how the Program can best support the communities as a whole. One example relates to the Program's espoused theory of holistic education and the lack of student and parental involvement in accompaniment and training sessions related to human development. Faced with these differences, trust and dialogue are even more important to maintaining open communication and to providing the spaces in which participants can address discrepancies and explore potential resolutions. Even so, agreement on a supreme objective above all else provides the foundation and unifying goal to support trust and to help bring the group together in difference.

Solidarity and unity of purpose are part of a broader sense of harmony and cohesion among participants. A "living mutual relation" (Buber, 1965) indicates the existence of authentic dialogue, a relational dynamic that is closely intertwined with trust. As stated previously in the section on Martin Buber, in a genuine dialogue "each of the participants really has in mind the other or others in their present and particular being and turns to them with the intention of establishing a living mutual relation between himself and them" (Buber, 1965, pg. 19). Trust is necessary for this genuine meeting to occur because it requires each participant to accept vulnerability. In other words, trust and dialogue enable the individual to accept the other person "not as an object of [...] experience but as a human being" (Kramer, 2004, p. 46). To develop trust there must be an open dialogue, something Marco Zeledón identifies: "Only dialoguing with people, getting to know people, communicating among us can we arrive at a level
of trust" (personal communication, August 21, 2014). Since the Program stresses a collaborative, relational approach, the role of dialogue is paramount. In fact, dialogue "is the principal tool to be able to realize our job" (M. Herrera, personal communication, March 20, 2014). Primary school teacher Yaser Javier Reyes Gonzales agrees with Herrera. He shares, "The way in which they have trained us and the way in which they are passing us [...] the torch so that we drive forward [...] the knowledge of the students. All of this is through dialogue" (personal communication, August 18, 2014). A teacher from the Ena Sanchez School coincides with Gonzales, and she believes that dialogue is the key to the schools' success because it opens the doors to improved communication in the face of a previously isolated and silent faculty (T. Gutiérrez, personal communication, July 23, 2014). If facilitators are to continue creating these dialogic spaces, Díaz implores his colleague to establish comfortable environments of care, "the dialogue has to be open and it has to be very comfortable" (personal communication, August 3, 2014). An acceptance of the other as a whole, different being worthy of connection through dialogue is cultivated through genuineness, empathy and warmth (Rogers, 1961).

An interaction that Maria Luisa Herrera's had with a school principal illustrates how the facilitators utilize dialogue to connect with and support their school-based partners and ultimately build trust. The basis of the conversation is a planned construction project of a new teacher lounge. She narrates the phone call in the following section.
So one day I receive a phone call from the director and he says to me, "Luisita," because he speaks to me with this trust and closeness, "Luisita, What do you say" he says, "we are currently installing the floor of the lounge. What do you think if I tell the general contractor that he leave the front part of the lounge a bit elevated, so there is like a space [...] where the person talking is more prominent than the other people that are going to listen?" So, believe me, I closed my eyes, we were talking on the phone, I just closed my eyes and I began thinking, what are we doing with our program Digital Seeds in this school? We have so many years, I say to myself, and we are in the same situation. But then, I breathe deeply and I say to the director: "Professor, tell me for what reason do you need this separate space." (He responds) "So that respect is given to the person talking in front of his/her colleagues." "Hmm," I say to him. "And for what other reason?" (He says), "So that the materials that are doing to there in front are respected by the rest of the people that are going to be there." (I respond), "Do you know how this idea for a teacher lounge came about, professor?" "Yes, so that all the teachers from the school could be there." "Perfect. And with what purpose are we going to gather in this teacher lounge?" "For meetings" (he said). Yes, correct, and are meetings are for sharing, for working with one another, to see us as equals. There's more, there we don't want anyone to be superior to the others, but rather we are all equals, all sharing what we know. Have you taken notice" I said, "how we conduct the accompaniment sessions and training sessions?" "How, Luisita?" "Like that, in the middle of the students, we are never in front, and when we are in sessions we are in the middle of the teachers, we aren't in front of the teachers. Do you know why? Because our philosophy is not about someone giving orders and directing, and commanding, but rather that we all share the feelings of each other and we listen to the opinions of the rest and we take into account what serves us all." "Then, oh, so with this you are telling me that it (the raised floor) isn't necessary..." "Another question, professor, before giving you another answer," I say to him, "do you believe that as principal you need a space like this the one you are describing so that you can [...] give instructions?" And he remains quiet a moment and then he says, "No." "So we don't need this space in this lounge either." "Thank you, Luisita, you have given me an important lesson." (personal communication, March 20, 2014).
The next time Maria Luisa went to the school and visited the newly constructed lounge she noticed that the floor was level and there wasn't a raised section like the one the principal had originally suggested. She was gratified and happy, but she continued to bring up this point of equality in the sessions in indirect ways. Not one person holds the truth, instead we all make mistakes and we all have the right to thinking differently and share what we think and feel. Herrera asserts, "we aren't afraid of making mistakes, but instead we throw caution to the wind because we are going to learn more from our mistakes than our successes" (personal communication, March 20, 2014).

Dialogic engagement is persistent throughout the Digital Seeds network, and it flows freely from within and among the implementation team. The close-knit Seeds team regularly engages in openly reflective sessions to share and learn about the realities and experiences from each school, to evaluate, to debate and discuss and to plan for the future. They are fertile spaces for learning and support, whether one-on-one between two facilitators or among the entire group. Constant dialogue among facilitators creates a consistent feedback loop and insight into previous experiences (successes and failures) with particular professional development modules, accompaniment, and classroom support and to inform sessions in preparation. Helping one another is undergirded and facilitated by trust, respect and authentic dialogue in this vibrant community of practice (Lave & Wenger, 1991). Silvio Díaz comments, "these conversations also help so that in the moment when one is arriving at a session or some activity [...] there is something with which the other person has already experimented"
(personal communication, August 3, 2014). Additionally, the dialogic flow creates linkages among the multiple experiences, lessons and realities of the various schools and communities in which the facilitators operate. For Elba García, "dialogue is established in different places or in different ways and I give you the chain example, you start a dialogue from your school or the problem occurs here, next it you go to another location and so one in succession" (personal communication, August 2, 2015).

Trust is created by dialogue and dialogue exists within "a climate of trust" (Freire, 1970, p. 91). Entering into dialogue enables an opening and a greater possibility for trust. Digital Seeds has provided this opening, an aperture of the teachers related to their own learning and support of one another. Maria Antonia Padilla, a teacher from the Ena Sanchez school, describes the links between trust and dialogue as well as her relationship with one of the facilitators. Padilla states,

...trust opens up to you various spaces of dialogue because if there isn't trust within the system, within the nucleus⁷, within the team things don't go well and this is what Digital Seeds has opened up for us, these spaces of trust, of asking to know, what I don't understand I ask and in a public way I thank Teacher Joel who has given us this trust to be able to ask, to be able to ask for help and we have had this close relationship of dialogue (personal communication, July 23, 2014).

Coordinator Martha Alicia Moreno expands on Padilla’s discussion on trust and dialogue by stating that "to establish trust, you have to dialogue, you have to listen, and in

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⁷ Nucleus refers to the nucleus school, or regional center that serves as the administrative base and site of any region-wide meetings and trainings for the schools under the supervision of the nucleus.
dialogue you listen and also give your points of view [...] they are flowing in a simultaneous way, dialogue and trust" (personal communication, August 19, 2014).

The last common source and characteristic of trust among participants in *Digital Seeds* is presence. According to Paulo Freire (1998), "our being in the world is far more than just ‘being.’ It is a ‘presence,’ a ‘presence’ that is relational to the world and to others. A ‘presence’ that, in recognizing another presence as ‘not I,’ recognizes its own self." (p. 25-26). For Martin Buber, presence is essential to an I-Thou relationship, it is not only an action or stance by one person towards another, but it is also about making another present. To do this is to engage deeply in what the other is "wishing, feeling, perceiving and thinking" (Friedman, 2002, p. 95). Presence is immediacy and togetherness with another human being. Speaking about the accompaniment approach within the Program, Rosa Rivas argues, "all the follow-up that is given with the presence of the facilitator in the school is what helps us to develop this trusting relationship with the teacher" (personal communication, October 8, 2014). Many teachers and administrators attest to the close, trusting dynamic that exists between the schools and the facilitators. For example, Juana Herrera from the Modesto Armijo School laughingly shares how Baltazar Sánchez is always accompanying them when they're learning and discovering, and that the teachers almost drive him crazy sometimes. It is the constant presence and trust that unites them. Reflecting on the school's relationship with *Digital Seeds* staff, Herrera shares that Baltazar, Joel, Silvio and Maria de los Ángeles are all welcome the same, and she states, "We already feel like we are a family, as if they are
always here with us" (J. Herrera, personal communication, July 24, 2014). The consistent and dependable presence of the facilitators' (and Digital Seeds staff in general) is a cornerstone of the Program, and the essence of accompaniment. It has the great potential for mutual learning and growth, an opportunity Nayibe Montenegro feels lucky to have. "I have had the opportunity to be able to share with [...] so many people from which I have learned a lot and it continues to give me the opportunity to interact with all these people" (N. Montenegro, personal communication, August 21, 2014).

Being present alongside the teachers and students in the realities of the school is a great source of firsthand experience and knowledge so that the facilitator can give personalized attention and develop strong relational ties. For the Program, this shared experience with each teacher and student is called accompaniment, and it "is a systematic process of collaboration and exchange of ideas, knowledges, feelings and actions" (Seeds for Progress Foundation, 2016, p. 44).

**Accompaniment**

It is necessary for me to stay close to the earthiness of real experience. I cannot live my life in abstractions. So real relationships with persons, hands dirtied in the soil, observing the budding of a flower, or viewing the sunset, are necessary to my life. At least one foot must be in the soil of reality (Rogers, 1980, p. 44).

Accompaniment is an integral and complimentary component of Digital Seeds' Phase II: Let's Get to Work. It is "a systematic process of collaboration and exchange of ideas/knowledges, feelings and actions regarding innovation, creation and recreation of
learning spaces" (Seeds for Progress Foundation, 2016, p. 41). A "dynamic" process with two-way feedback loop, it emerges organically from the shared experiences of teachers, students and facilitators, and the participants learn without imposition or subjugation to hierarchical structures as they construct "affective and respectful relations" (Seeds for Progress Foundation, 2016, p. 38). The processes of accompaniment provide diverse, opportune spaces to support teachers in their learning, pedagogy, planning and overall profession (Nayibe Montenegro, personal communication, August 1, 2014). The principal actors in accompaniment are the Digital Seeds facilitators, teachers, students, and administrators. Assuming inquiry as a stance (Cochran-Smith & Lytle, 2009), facilitators engage in accompaniment by focusing their curiosity and analysis on understanding the people, places, spaces, and communities of each particular school down to the individual classroom and student. Through personalized visits, informal conversations, working and planning sessions, and classroom participant observation, the facilitator supports the teacher in his/her human and professional development.

Accompaniment emerges out of an agreement and plan between teachers and facilitators, and it is periodically evaluated to monitor processes, advances, and results in order to inform decision-making and to better reach the agreed-upon objectives.

The priorities of accompaniment are co-defined during evaluative and observational sessions. To support student learning, facilitators work closely with teachers to strengthen students' reading, writing, and mathematical skills while optimizing the integrated use of ICT tools. Simultaneously, the process promotes the
development of the teacher's skills at facilitation, a far cry from more traditional teacher roles as the sole arbiter of knowledge and singular, all-knowing authority. Therefore, accompaniment is much more than physically being there and observing (important forms of support nonetheless). Active engagement through the *Digital Seeds* approach to accompaniment favors holistic human development, namely regarding self-awareness, critical self-reflection, positive affective relationships, service to community and others, and an openness to change (Ravitch, Tarditi, Montenegro, Baltodano & Estrada, in press). Eveling Estrada, a long-term teacher at the Buenos Aires school, shares that, "each day we have to be open to changes and new learnings and valuing these in oneself" (personal communication, August 20, 2014).

Ideally, facilitation is a form of mutualism, an interaction beneficial to all participants, a shared nourishment, growth, and/or learning. One example from nature is the relationship between pollinators and flowering plants. The pollinator is nourished from the nectar or pollen while plants benefit from the spread of pollen between flowers. In the case of *Digital Seeds*, teachers and students intertwine and exchange roles as pollinator and plant, at one moment nourishing the other and at another receiving nourishment. Accompaniment and facilitation foster these mutualistic relationships exemplified by the flowering plants and pollinating bees and realized by facilitators, teachers and students in classrooms across Nicaragua.

Depending on the participant and their experiences with accompaniment, they refer to it in a variety of ways: pedagogical and personal support, being present,
observation, a space for sharing, a proposal, an offering, advisory, reciprocal learning, and mutual acceptance among others. Even among the facilitators, their experiences with accompaniment have been varied and they have engage differently with this new dynamic; however, they are all firm believers in the importance and power of this personalized, integral support of teachers.

To successfully achieve the empowerment of teachers in their role, Semillas is based on the continuous and systematic processes of accompaniment as a means to support their development as leaders capable of evaluating and reflecting on their own progress and the progress of their students. This mutual support among actors builds a genuine commitment in the development of their skills and capabilities that ensure program sustainability (Nayibe Montenegro, personal communication, September 11, 2014)

The time inside and outside the classroom represent a sustained presence and a growing familiarity, factors that provide opportunities for the facilitators to prove themselves as useful, trusting participants in education. Following the active engagement and observation in the classroom, facilitator and teacher enter into open, reflexive dialogue, a critical space for growth, learning and connection, and "it is important to offer this space, to be able to [...] establish a dialogue about the things that were present in the development of the class" (S. Díaz, personal communication, August 3, 2014). The dialogic learning cycles through the different educational stakeholders of Digital Seeds, including teachers with facilitators, teachers with teachers, and facilitators with facilitators among others. Overall, "it is a reciprocal learning, it's mutual, it's the teachers and ours" (N. Montenegro, personal communication, August 1, 2014).
Reciprocity is at the heart of accompaniment and the partnership in general. Reciprocal exchanges, growth and transformation facilitate the harmonious actions of the individuals within a collective, working together to improve educational processes, practices and outcomes (Nakkula & Ravitch, 1998).

**Accompanying schools in the development of trust**

An all-day planning and evaluation workshop in August of 2014 served as the setting for group reflection among the Seeds team. They discussed the implementation of the program in general, and specific issues related to accompaniment. There was a vibrant discussion on the challenges of planning and executing when faced with myriad distractions, local variables, unexpected projects and responsibilities with the foundation, as well as the resources, wants and needs of the particular schools, teachers and students. Guided by an emergent design approach (Cavallo, 2000), the Program adapts to the realities on the ground and is purposefully flexible to adjust to the explicit or perceived demands of participants. However, there is often a tension between planned activities and realized activities, especially when considering the unavoidable need to change timelines and reorder trainings because of the unfolding, unpredictable nature of each particular school. Silvio Diaz shares with the team his challenge to cater to the school, "Another thing that should be considered is the necessity of the school because it isn't as much my need to impart what I have brought, but rather what is being demanded of me by the school in that moment and what needs accompaniment or necessitates a session" (personal communication, August 1, 2014).
When accompanying a teacher, facilitator Nayibe Montenegro is focused on addressing the challenge at hand, supporting the teacher and achieving results. Her concern is not how much time she is dedicating or what are the current goals for that period with the school. Instead, she is in genuine dialogue with the teacher and "really has in mind the other or others in their present and particular being and turns to them with the intention of establishing a living mutual relation" (Buber, 1965, p. 19).

Montenegro quickly forgets what the plan was and meets the teacher where he/she is and her focus is on providing the assistance being requested at that particular moment in time. Getting lost in the moment with the teacher in accompaniment is a common theme for the facilitators. Nayibe states, "I believe that it happens to us all when we are with the teachers and we aren't even thinking of how much time am I going to give or how much time am I going to be with him [...] because in reality we are thinking more about the outcome" (Montenegro, personal communication, August 1, 2014). It is this adaptability and fluctuation with the teacher that define accompaniment, and together they enable the development of reciprocal exchanges between teacher and facilitator (Molm, Takahashi & Peterson, 2000). For Molm, et al. (2000) reciprocal exchanges occur when "actors initiate exchanges individually, by performing a beneficial act for another without knowing whether, when, or to what extent the other will reciprocate in the future" (p. 1399-1400). Teachers and facilitators exchange learning. "We have learned that this is a process of shared learning" (Nayibe Montenegro, personal communication, August 1, 2014). In this dialogical engagement, facilitators and
teachers openly share feelings, opinions, suggestions, and questions, and "the more we meet each other directly, without any intention to appropriate, the fuller we share, but there is no reality in us if we do not share" (Shim, 2008, p. 525). The emotionally intelligent facilitators actively and deeply listen to the teachers as a principal means of support and understanding (Mayer, DiPaolo & Salovey, 1990; Rogers, 1980). Martha Alicia Moreno calls the combination of intelligence and emotions "senti-pensares" and she believes that the Digital Seeds team has to be attentive to this "sixth sense," or one's intuition "to be observing all that is happening around you and if something gives the sensation that it came be harmful more than beneficial, than it is better to address it with great care" (personal communication, August 19, 2014). An emotional intelligence implies an "ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). Considering the state of this multiply wounded country, listening and truly hearing someone without criticizing, vilifying or reprimanding has a profound effect on the teachers’ openness to share and accept vulnerability. Carl Rogers (1980) notes that, "when you are in psychological distress and someone really hears you without passing judgment on you, without trying to mold you, it feels damn good! It has permitted me to bring out the frightening feelings, the guilts, the despair" (p. 12). Once again, truly hearing and listening to another provides the open space and the emotionally supportive stance for someone to safely share. Listening and being silent are important elements of an authentic dialogue, and "they
are other forms of communication and of establishing trust" (M. Moreno, personal communication, August 19, 2014). It is particularly important given the fact that "the ability to communicate, to be flexible and tolerant is enormously reduced among people who have a number of unresolved personal traumas" (Cabrera, 2002, p. 2).

Along with more interpersonal and intimate encounters, the accompaniment in the classroom enables facilitators to be present to support the teacher and learn about the reality of the classroom and its participants. A consistent, supportive presence in the classroom contributes greatly to the facilitator's development of credibility among the school actors (teachers, administrators and students). María Luisa Herrera marks the importance of accompaniment in building one of the major sources of trust, credibility. Commenting on the importance of accompaniment, Herrera (2015) remarks, "I consider that it is something [...] that gives us security and it gives us greater credibility in the classroom. That is, for me, personally, it signifies a tremendous commitment" (Maria Luisa Herrera, personal communication, March 15, 2015).

Through observation and deep listening (Rogers, 1980), one is able to better understand how the class is being developed, how the students are responding and what are the opportunities for improvement and alteration. Silvio Diaz comments, "One is observing and is listening to the entire classroom process because [...] the purpose is to see the full development of the class and then offer a space with the teacher and to be able to review everything that happened" (personal communication, August 3, 2014).

Discussing honestly and candidly with the teacher about what is working well and what
is causing her/him challenges exposes potential ignorance and vulnerability, and "without trust, genuine conversations of this sort remain unlikely" (Bryk & Schneider, 2002, p. 43).

**We make the road by walking**

Martha Alicia highlights the contradictory nature of pre-established goals while accompanying teachers in an emerging, unpredictable dynamic. "We think of the goal when we are evaluating and that is natural in the end, but I believe that if we focused on that during accompaniment, it wouldn't be accompaniment" (Moreno, personal communication, August 1, 2014). Because the aims of schooling are diverse and the mechanism to address these aims are complex, Bryk and Schneider (2002) argue that, "Organizational operations under these circumstances demand frequent context-specific decision-making, and success depends heavily on cooperative efforts around local problem solving" (p. 20). Additionally, the social relations and dynamics in environments like schools are vitally important to productivity, especially when compared to more predetermined, routinized processes of production (Bryk & Schneider, 2002; Walton, 1980). A strength of the Digital Seeds program is its emergent, fluid nature, a flexibility and adaptability that allow for the program to constantly evolve and grow as it unfolds. There is a consistent and open feedback loop that provides perpetual information and opportunities to modify and adjust to the realities on the ground. Joel Montalván believes that, "in general things should never emerge from desks, on the contrary they should be procreated collectively and this is
something that helps and favors the moment when you have results, for projects, or whatever" (personal communication, May 24, 2012). The facilitator and former employee of the Ministry of Education lauds the benefits of this emergent approach:

> It is flexible, something that can help you greatly to obtain results because as you begin to create and you begin to see that if you are failing you can...if you encounter something that can compliment this failure then you can modify it in the moment and since it is shared, then everyone has shared responsibilities, not just pointing the finger to person X or Y (personal communication, May 24, 2012).

The *Digital Seeds* team embodies the very same trust and authentic dialogue that they establish with schools and communities. Joel Montalván jokingly shares that, "sometimes there are two or three of us facilitators [...] in different places and the people are amazed to see how we as a team get along and this is what we transmit to the school or to the place where we work" (personal communication, July 31, 2014). Technical Facilitator Tania Gamez agrees with Montalván in that she believes that "to a certain point the team is united in trust [and] it transmits this trust to others, it transmits to the other that he/she can approach you and ask you" about whatever you want (personal communication, July 25, 2014).

Martha Alicia Moreno facilitates an open dialogue among her colleagues, listening and guiding, smiling and serious at the same time, flowing with the conversation and probing for clarity as she promotes group reflection. Members of the team are rarely at a loss for words, and in these vibrant, engaging conversations individuals share perspectives, experiences and propositions in this process of collective
learning. What began as a discussion of facilitator discrepancies in time logs between professional development and accompaniment quickly evolved into a golden opportunity for the team to explore how and why they as individuals and the program as a whole perform accompaniment. In years two and three of the program's initial cycle, accompaniment increases and formal group training sessions (capacitaciones) diminish, a seemingly natural progression from general introduction and induction into the program and more specialized attention. However, there is a growing belief that accompaniment is not only effective, but more time should be spent working one-on-one with teachers. As coordinator Martha Alicia spends more time in the office than in schools, but she has witnessed many accompaniments in her supervisory role, and she sees the impacts and boundless potential of these spaces: "I was present during an accompaniment and I feel that that was much more beneficial and useful than having been [...] in another type of space with the teacher" (personal communication, August 1, 2014).

When asked about the importance of accompaniment, Don Baltazar lauds the positive influence accompaniments have had on his relationships with teachers and his ability to stay connected to the constant changes and realities of the schools. Accompaniment "is an opportunity for us to be closer to the teacher and be able to collaborate and in some situations related to the problems that arise in the development of the classroom content" (Baltazar Sánchez, personal communication, August 1, 2014). Being in the classroom enables Sánchez to open himself to the world
of the teachers (and students) as a means to "become acquainted with their way of
being in the world" (Freire, 1998, p. 122). Sánchez expands on his initial comments and
adds that accompaniment gives facilitators the opportunity to be more aware of the
situations in the classrooms, schools and community at large. Personalized, one-on-one
work with teachers affords intimate access and customized support to the individual
teachers and allows facilitators to bear witness to micro developments in the
individuals, classrooms and school. It is very different from the group trainings or
workshops, Sánchez argues.

Accompaniment has opened up the hearts and minds of the teachers and has
granted further access to the Digital Seeds team to visit and join any school. Sánchez
recounted how the vice director of one school happily shared with me that any
facilitator was welcome at her school. "Here Baltazar can come, Silvio can come, Joel
can come and to us it is all the same" (Baltazar Sánchez, personal communication,
August 1, 2015). A personal closeness with the individual teachers has permitted this
openness by the schools, and the horizontal relationships are not limited to teachers
and facilitators. In many schools, the directors consider the facilitators to be their friend
and ally. The directors at the Ena Sánchez School expressed tremendous gratitude to
Joel for his patience and motivation with them as they struggled to learn technology.
Principal Rosa Molina (personal communication, July 23, 2014) says that Joel is one
more member of the school, and that he "has had this patience, because really, at our
age we had never touched a computer before because it scared us" and Joel "with his
motivation, he helped us a lot." Molina ends by saying, "here, we love Joel like he is one more colleague at this school, we don't see him as an outsider" (Rosa Molina, personal communication, July 23, 2014). At the Flor de Maria Rizo School, the Principal feels the same level of trust in Nayibe Montenegro because of her constant presence and support, "I already feel this type of closeness with her, that she is someone that is supporting us a lot" (H. Valdivia Arauz, personal communication, August 18, 2014).

Authentic dialogue requires an acceptance of difference and an embrace of the wholeness of the other, thus allowing each individual to retain self and for the two parties to reach a mutual understanding, a heightened sense of self and other. In the words of Paulo Freire (1970), "dialogue is the encounter in which the united reflection and action of the dialoguers are addressed to the world which is to be transformed and humanized" (p. 88). Accompaniment provides fertile ground for the emergence of dialogue between facilitator and teacher. It is being physically and interpersonally present. As Elba Garcia describes it:

It terms of space it is being with another person, being with a group, and it is searching for alternatives among the two, taking into account what is the real situation that is being lived by the specific group, precisely to look for alternatives in a shared way, that is what he can see that maybe you cannot see and vice-versa, what he maybe cannot identify, you are identifying and in this way they combine and things work better" (personal communication, August 2, 2014).

Facilitators often speak of the close, trusting relationships they have developed with teachers. These professional relationships are also very human, and even personal in
nature. An example of this personal connection between facilitators and teachers is demonstrated in the following passage from Joel Montalván:

Another one of the things that has happened to me and not only in the schools where I facilitate currently, but also in other schools, is that many teachers approach you and begin to tell you things, including very personal aspects of themselves, very private, intimate details about their family, about themselves and you stop for a second and ask yourself, 'Why are you telling me this if this is not part of that?' But at the same time, you tie it all together and make a knot and you say, 'Yes, ok, yes' you think. 'It is worth it!' You have earned tremendous appreciation and esteem and for that reason they are sharing (personal communication, July 31, 2014).

Montalván's experience exemplifies what Cabrera (2002) refers to as "accompanying people in processing their wounds, which always involved acknowledging, expressing and reflecting" (p. 2). Accompaniment in the Digital Seeds program is not limited to pedagogical support, but also includes personally and emotionally accompanying the teacher in his/her life, which includes baggage and complexities from their worlds outside of the four walls of the classroom. The Program disregards the separation between home and school, instead embracing the physical, psychological and emotional states of the teachers and students. Cabrera (2002) agrees that "the frequently offered advice that one should leave one’s own problems behind when one goes to work is erroneous, if only because it is impossible. People take their baggage with them everywhere they go" (p. 9). Over time, the facilitators build trust with the teachers, earning their appreciation and esteem, and through these multilayered relationships the teachers acknowledge, express and reflect on the challenges, stresses, pains and fears.
A willingness to accept vulnerability (Baier, 1986) enables the acknowledgement, expression and reflection, necessary steps towards healing (Cabrera, 2002). Although trust is vital to the work of the facilitators, they must be careful to limit the boundaries of trust and intimacy. Specifically, Martha Alicia Moreno cautions the team to be aware of the possible and dangerous perceptions associated with the machista culture. For example, "students converge on you and they hug you, but the child and I know that this is part of the trust that we have built, but to the outside eye in some environments they can interpret this differently" (M. Moreno, personal communication, August 19, 2014). Even though the facilitators are transparent and sincere, they cannot control the interpretations and assumptions by others. However, Nayibe Montenegro believes strongly that the transparent, sincere intentions of the facilitators are received and perceived as such, "what we are is what we are, there is nothing hiding behind and you can see this and the people can perceive it" (personal communication, August 21, 2014).

When proposing ideas and suggesting changes, the facilitator takes great care with his/her approach and realizes that the reaction of the teacher arises from his/her socio-emotional state as well their perspective on the proposal itself. Silvio Díaz cautions that,

...you have to be very careful [...] to be able to propose ideas, to be able to work with the teachers [...] because one doesn't know what is the mood of the other person, you don't know if this person [...] is going through a very uncomfortable situation, emotionally, familial, personally [...] so in this aspect you have to be very wise and very careful to be able to propose, you have to wait for the right moment" (personal communication, August 3, 2014).
Awareness, sensitivity and a wisdom to know when and how to approach the teachers are key characteristics to the facilitators' working relationships and dialogic engagements with the teachers. In fact, awareness and dialogue are closely tied to one another because "the limits of possibility of dialogue are the limits of awareness" (Buber, 1965a, p. 10). Equally as influential is the stance of the facilitators toward the teachers, one of equity and sensitivity. According to Program and Foundation Director Rosa Rivas,

This human sensitivity in this type of work is very important. I couldn't arrive at a community viewing the people from above and even less here (in the office). This would make the situation totally different, just as much in internal relations as it would in the communities (personal communication, October 8, 2014).

In 2014, facilitators and coordinators started combining the dissemination of results with a guided discussion on the expectations and goals for the following year. Teachers engaged with facilitators in an analysis of results and the teachers were presented with the numeric objectives for student outcomes in reading, writing and mathematics. Although the establishment of goals for test results (EGMA and EGRA) excluded the teachers because of their assumed deficiency in understanding the test and what would be appropriate goals, results and expectations promoted mutual understanding and ownership of the process and collaboratively produced action plans to achieve particular objectives related to the results. Joel Montalván notices that this shared activity has opened up the relationship with teachers, "They are clear on where we want to go. I believe that this has been a mutual point of opening" (personal
Montalván shares a particular case with one teacher who was stressed over the improbability that her students would reach this year's goal. It was at that moment that Joel explained that the numbers provide them with a comparable objective or a benchmark to motivate the program, but that the quantitative results are not the only things of concern or of focus. Montalván reminds the teacher that, "it isn't so much the number but rather the fact that the students awaken these abilities, or to see how we can work" (personal communication, August 1, 2014). His example illustrates the willingness of teachers to accept vulnerability and share that vulnerable state with the facilitator because they consider them a supportive colleague. Referring to teachers' perceptions of facilitators, Elba García shares that "they know that we are their equals" (personal communication, August 2, 2014).

When initially introduced into the program, not all facilitators were comfortable with an accompanying role because they felt that they were performing the job of the Ministry of Education, and specifically the educational technicians whose designated role is pedagogical support for schools. A former MINED statistician, Joel Montalván, had his reservations, "At the beginning when this things called acompañamiento began I was one of the most negative in this aspect [...] because I felt like I was performing the job of the Ministry of Education" (personal communication, August 1, 2014). Ironically, Montalván is right to think that Digital Seeds' facilitators are performing the task of the Ministry of Education; however, what happens when the state does not provide the service they are designed to do, namely regular and direct pedagogical support by their
pedagogical technicians. In the case of the Ena Sanchez school, the teachers, directors and the pedagogical technician himself all recognize that he is not offering any pedagogical support. Instead, he only arrives to ask for statistical information and Joel has never seen him arrive at the school and enter a classroom. Consequently, the "support that we are given as a Program is very good, very useful" (J. Montalván, personal communication, August 1, 2014). With the passage of time, Montalván noticed the extent to which acompañamiento was not only welcomed by the teachers, but it was clamored for explicitly by the faculty on a regular basis. Based on this outpouring of openness and enthusiasm for acompañamiento, Moreno proposes that the Monitoring and Evaluation System consider integrating more teacher perspectives on this central program activity.

Operational Coordinator María de los Ángeles Úbeda summarizes the conversation by stating that the schools are opening their doors to the facilitators because there is real need in the schools for pedagogical support. Facilitators are evidencing the profound impacts of these "vivencias", because there is "carne" (meat) there and the program should take more advantage of these powerful opportunities (M. Úbeda, personal communication, August 1, 2014). Instead of being frustrated or turned away, the Program is actually spending more time on acompañamiento than they had planned because of the high demand by teachers and approval by the Ministry of Education. This combination of aperture and need/want for support presents Digital Seeds with important decisions to make with respect to their focus on acompañamiento.
The workshop continues, and Coordinator Martha Alicia Moreno guides the conversation, pushing at times for the facilitators to reflect on the overall process of accompaniment and what the facilitators think about what is happening and what should be happening with this increasing chunk of their time in the field. There is consensus among the group that accompaniment provides expansive opportunities. Initially, Nayibe considered accompaniment to be limited to the moments in the classroom working with the teacher; however, she has since altered her view and expanded it to include all individualized or personal support that she provides to the teaching staff. Sometimes accompaniment is one-on-one and at other times it may be a small group of two or three who requested specific assistance with a certain theme.

The future of accompaniment is promising. It remains to be seen; however, how Digital Seeds manages and expands this tremendous opportunity with not only schools but also the surrounding communities to extend its impact to the mothers, fathers and families of students. This will depend mainly on the overall mission and vision of the Seeds for Progress Foundation, and specifically on the role of the Digital Seeds Program towards achieving these goals. Many participants have emphasized the vital importance of engaging more comprehensively with the broader community for the Program to more deeply impact the educational community, to improve the sustainability of the Digital Seeds’ model and to holistically engage with the entire educational triangle (student, teacher, parent). It is my sense that parental involvement with the Digital Seeds program will continue to increase as the Program evolves, refines its strategic plan and
long-term objectives and further recognizes the necessity of engaging mothers and fathers for lasting impact and sustainability.
Accompaniment as pivotal relational dynamic for trust, dialogue and respectful collaboration

Writing about the reciprocal, interactional nature of trust, Luhmann (1979) argues, “It is not possible to demand the trust of others; trust can only be offered and accepted.” (p. 43). An offering and an acceptance of the gift of trust, the gift of vulnerability, undergird the relational dynamic at the heart of *Digital Seeds'* accommodation approach. Being truly and consistently present in the lives and realities of the schools and educational stakeholders (i.e., students, teachers, administrators and families) has had profound benefits to the Program as a whole, and to the relationships among participants specifically. To accompany is to be alongside and to share in mutual togetherness. It is to listen, learn, support, observe, affirm, validate, constructively critique and much more. Facilitators accompany in work, learning, teaching, self-improvement and self-actualization, professional development, student support, discipline and classroom management among other areas. In an educational environment, and its subsequent organizational operations, there is great demand for "frequent context-specific decision-making, and success depends heavily on cooperative efforts around local problem solving" (Bryk & Schneider, 2002, p. 20). Additionally, productivity in these settings is greatly influenced by social dynamics. For the *Digital Seeds* Program to partner with local schools in a relation-based collaboration, the Program staff need to be present and must accompany the schools if there is to be
strong relational trust, authentic dialogue and mutually emergent learning and growth. Facilitators gift trust and vulnerability to the teachers, administrators and students, and “each act of giving still remains a declaration of trust that the other will reciprocate, and each act of reciprocity confirms that trust” (Molm, et al., 2000, p. 1423).

Accompaniment is the locus of activity for the Program. Elba García mentions the importance of accompaniment and her time in the classroom with teachers and students. Specifically, presence and familiarity provides opportunities for the facilitators to prove themselves as useful, trusting participants in education, and this localized trust and familiarity extends up the hierarchy of the Ministry of Education. Elba states, "the fact that we have direct proximity to the classroom, to the teachers, to the directors, and it is how you strengthen also other levels" of the partnership network (E. García, personal communication, August 2, 2014).

For the Program to become sustainable, which means different things to different people, their partnerships with schools must become more shared and collaborative, shedding the vestiges of assistencialism and fomenting even more equality in responsibility. The accompaniment model is emblematic of this equality of responsibility and unity of purpose. Instead of a donor-recipient relationships, the Program staff and school staff are partners in the educational project, each bringing with him or her expertise, experience, knowledge and value. Different from the countless workshops offered to communities to build capacity and empower local populations (Cabrera, 2002), Digital Seeds' holistic, relational approach considers the
entire person, a sentient being with thoughts, feelings and emotions, and a relationship between people, between facilitators and teachers, undergirds and solidifies a larger organizational-institutional partnership. Together they "make the road by walking" (Horton & Freire, 1990). Along the way, the facilitators accompany the teachers in their professional practice as well as their social-emotional and psychological development. Since education is a purely human endeavor, one focused on engendering the character, ethics and morals along with the requisite skills and abilities to positively contribute to society, the Program's theory of action is focused on supporting the holistic development of the individual in a country suffering from multiple wounds (Cabrera, 2002), situated within a historic moment and culture of domestic violence; alcoholism; physical, emotional and sexual abuse; and the larger political context of Sandinista (orteguista) indoctrination and loyalty to the party. Caring, loving support of the individual and a genuine meeting of him/her in dialogue (Buber, 1937/1947) characterize accompaniment and this personalized attention fulfills a glaring gap in the State's ability to actively and comprehensively support teachers outside of basic statistical evaluation and bookkeeping. Therefore, not only does accompaniment fill the gap left by the Ministry of Education's inability (or decision not) to provide pedagogical advisory to its workforce, but it is also a sensitive and caring strategy to address the multiple wounds carried by Nicaraguans, especially in the rural North of the country where most of the fighting and unrest occurred during the revolution and counter revolution of the 1970s and 1980s (Kinzer, 1991).
Although the sensitive, caring strategy of accompaniment has been a source of tremendous growth for the Program and the communities it serves, there is still much untapped potential from this approach. Specifically, program participants have emphasized the need to engage with parents and students more fully, even calling for an accompaniment of children and adults in the same vein as the teachers. If the Program is to fully address the multiple wounds, enrich teacher pedagogy and improve the overall school culture, the inclusion of parents and their children will be critical, especially given the drive towards sustainability. Even though sustainability has varied conceptualizations, the appropriation and continuation of the Digital Seeds model is a universally held objective, and to achieve this the Program must enlist more members of the educational triangle beyond teachers. High levels of teacher turnover and administrative reshuffling create tenuous continuity of personnel and further necessitate a more integrated model of participation. Also, if the Program purports to have a holistic focus, the separation between school and community needs to be closed in an effort to strengthen relationships and bring all participants into the formation and maintenance of an integrated community united by the common objective of education. In the words of John Dewey (1990), these "common needs and aims demand a growing interchange of thought and growing unity of sympathetic feeling" (p. 14)

Lastly, accompaniment is the dynamic in which trust and dialogue emerge, sustain and strengthen, and it provides the Program with intimate access and direct experience in order to constantly adapt to the changing realities of schooling and
needs/resources of teachers. If the Program were to back off of direct, personalized accompaniment, it runs the risk of devolving into any other educational program, project or initiative, one that offers group professional development and sporadic, in-class support. The essence of Digital Seeds is the relational ethos and customized replication of the Program model, and accompaniment is the axis or fulcrum that enables these guiding principles to manifest and germinate in schools across the coffee-producing region of Nicaragua. Moving forward, the Program must reflect deeply about the potentially counterproductive objectives of sustainability and expansion as they consider the real impacts they have had thus far and to what those impacts can be attributed. It is the personalized accompaniment approach that provides the most lasting and deepest impacts on educational actors and schools because of the personalized support and scaffolding embedded in relations of trust and dialogue, openness and honesty, love and respect. A personal, one-on-one encounter with the whole being, this Buberian "meeting" brings about holistic reflection and an openness to change. In the end, facilitators and teachers co-construct the possibilities for the future, a partnership founded in human connection and mutuality, and perpetuated by the intertwined dynamic of dialogue and trust.

**Particularities of Team Facilitate Trust, Dialogue and a Relational Approach.**

Organizations and institutions are comprised of people, and it is the people that make the activities and practices succeed or fail. For Digital Seeds, the collection of individuals chosen to lead, implement and grow the Program embody the very spirit and
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ethic of respect, authentic relationships, trust, dialogue and caring support among other guiding principles. According to McKnight, Cummings and Chervany (1998), particular individuals display attitudes that make them more inclined to offer trust more easily, a sort of disposition to trust. Across schools, teachers and administrators, people speak glowingly of the facilitators and Digital Seeds staff. They refer to them as friends and colleagues, members of the family, and never outsiders or hindrances. For Joel Montalván, "if you arrive in a good mood or a good attitude, smiling, and this and that, then it permits you the ability to interact and they grant you this space that eventually leads to this trust" (personal communication, July 31, 2014). On many occasions I witnessed the warm receptions from teachers towards Joel as he arrived at the school or walked the grounds. Faculty and students alike greeted Montalván with an embrace and a vibrant smile, and they often exchanged small talk marked with smiles and laughter. Across the schools the mutual affection and respect among staff and facilitators were palpable to any onlooker.

Along with emotional intelligence, self-respect and respect for others, foundational ethics and morals, and other interpersonal skills and attributes, the Digital Seeds team is made up of seasoned teachers, experienced administrators, pedagogues, Ministry of Education employees, psychology students and extremely prepared and educated professionals. This mix of interpersonal capabilities and technical skills enables the formation of strong relationships built on respect and trust and enacted in professionally enriching dialogic engagements of support. Teachers have tremendous
confidence in facilitators because of their expertise in education, and this exhibited competence engenders trust. Deepening these relationships are the interpersonal sensibilities that provide caring, supportive spaces for the teacher to share, reflect, open up to profound introspection, accept vulnerability and grow as a teacher and person alongside the facilitator.

As the Program moves forward, the selection of personnel will continue to be critical to this relational approach to educational development. Accompanying the teachers (and maybe also the students and parents) requires sensitivity, gentility and intuition that are difficult to teach, but are often innately present in certain individuals. Even so, Joel Montalván comments that when he joined the in 2010 he was a different person, and because of the familial culture of the existing staff, he became more warm, jocular and amicable.

The Digital Seeds program owes much of its success to the internal team of facilitators, coordinators and director that embody the relational ethos of the Program, display adaptability and creativity in the ever-changing and particular realities of implementation, and continue to grow and evolve as the Program moves forward. Describing these individuals and sharing their anecdotes and musings in the preceding pages falls light years short of truly encapsulating these dynamic human beings, the heart and soul of the Program; however, it is abundantly when you meet them, interact with them or watch them interact with others that they have something special. They possess a grace, a respect and love that can break down any barrier and bring people
together, and they are all motivated by a deep esteem and personal love for education and children in particular. Guided by love, the Seeds staff establishes and lives in dialogic relation to their school partners and to one another, and this “dialogue cannot exist, however, in the absence of a profound love for the world and for people” (Freire, 1970, p. 89).

Trust and dialogue emanate from within and begin by being true and authentic to one-self. They blossom in the confirmation of ourselves and of others. In response to Fritz Perls’ Gestalt Prayer, Walter Tubbs (1976) eloquently articulates the centrality of dialogic relationships, introspection, acceptance of difference and individual authenticity. The following poem evokes the personal, relational and communal essence at the heart of the Digital Seeds program, and its emphasis on introspection, intentionality, authenticity, dialogue, and shared truths.

**Beyond Perls**

If I just do my thing and you do yours,
We stand in danger of losing each other
And ourselves

I am not in this world to live up to your expectations;
But I am in this world to confirm you
As a unique human being.
And to be confirmed by you.

We are fully ourselves only in relation to each other;
The I detached from a Thou
Disintegrates.

I do not find you by chance;
I find you by an active life
Of reaching out.

Rather than passively letting things happen to me,
I can act intentionally to make them happen.

I must begin with myself, true;
But I must not end with myself:
The truth begins with two.

Limitations from Depth over Breadth in Participant Representation

Throughout the duration of the research, I perpetually reflected on the
candidates that would contribute to my understanding of the Digital Seeds program
and to the telling of the Program's story. At first, I leaned towards including multiple
teachers, parents, and students as well as the central program staff. I wanted to tell the
full story from the gamut of participants, a representative sampling that I felt would be
comprehensive and complete. However, when I began the planning and design of the
research, I started becoming aware of the limitations and consequences of this focus on
breadth. Even though I would gain tremendous range in opinions, positionalities,
histories, experiences, etc., I believed that the depth of these encounters would suffer
and ultimately result in superficial or shallow accounts from a multitude of individuals.
It was then that I decided to focus on the Program staff, through interviews, focus
groups, conversations, meetings, correspondences, shared reflexive writing and other
encounters as a means to depict the Program from those who must bring the theory to
practice, the concept to action. This long interest in the connection between theory and
practice and what Paulo Freire (1970) calls praxis ultimately justified my decision to
focus on Program staff over others. Therefore, I am well aware of the limitations of the study if the major thrust of the research comes from interactions with and accounts from the implementation staff. However, it should be noted that much of my participant-observation and personal, professional experience involved encounters with other participants. For the first year of my engagement I lived on a coffee-farm, spending everyday in the Buenos Aires Primary School and regularly visiting the community to spend time with the families of my students. Additionally, my weekends and nights were spent with farm staff and other members of the community who resided on the farm. All and all, the points of encounter that served as what some might call data, stem from a multiplicity of actors and participants and not just limited to the internal Digital Seeds staff.

Although I had these great expectations for interviews and focus groups, the reality of the stay and the respect, trust and relational dynamics have been much more important to me than the collection of data. As much as I want to be interviewing everyone and recording our conversations, I greatly respect people's time, responsibilities and schedules and do not want to impose my will and subject people to my research needs, which are more desires and wants as opposed to necessary actions and interactions. The underlying themes of my thesis are trust, relationships, dialogue and respect, cornerstones of any partnership and interaction, including a researcher-participant relationship. However, when I think of the individuals I identified as people of interest to be included in my research, I consider them friends, colleagues and human
beings before I label them or treat them as participants in my research. Consequently, I am not controlled or motivated by the thirst for recorded, formal data. Instead, I am incredibly cautious and maybe overly respectful--if that even exists--thus I am very reluctant to push my research agenda on anyone.

I am aware that my research and data might be limited or that there isn't sufficient data to tell a complete story or at least a rigorous, in-depth telling of the Digital Seeds program. To those potential critiques and limitations, I counter with the following: Respect is something you live and breath. You are respectful towards yourself first and you share this same level of respect with all other human beings regardless of their position, education, status, class, race, religion, age, etc. Engrained with this holistic respect, I approach the research project with great caution and care. I am cautious with regards to how I present the research, myself and my intentions for others to be included in the study. Careful to avoid imposition, interference, pressure and influence. Informed by and living this caution and care, I quickly realized that I would not be able to conduct as many interviews and focus groups that I had planned to do. I have no desire of arriving at a school and pressuring teachers to participate in an interview or organize a focus group with me. During my first official research visit to a Semillas Schools, I asked Joel to see if the teachers would be willing to participate in a focus group, or a conversation with me as I described it. Expecting few people to show up because it was after classes had ended, I didn't find it to impositional to have Joel ask them if they would stick around to chat with me because I thought they wouldn't stay
and I may speak with 3-4 people. Instead, 9 teachers came to talk with me and I felt terrible. Who am I to show up at a school and make these types of demands on people? Of course they are going to say yes and participate because they feel obligated to, worried about losing support or they truly want to chat with me and be part of an official interview.

How does one conduct respectful, socially conscious research and avoid imposition, pressure, influence or manipulation when these forces can operate and manifest themselves with explicitly participating in these types of behavior? As I stated before, my number one goal is to maintain relationships of mutual respect, trust, open dialogue, collaboration and reciprocity. Instead of pressuring someone to subject him/herself to an interview while they are teaching, working on a semester report, or busy with the family, I tried to negotiate times and dates that worked for both parties. Even so, they dedicated about an hour or more to chatting with me and I often felt guilty taking so much time from my friends, colleagues and family. If I am conducting a research project on trust, how can I not demand the same openness, honesty, dialogue and respect from myself as I am from the basic foci of the research itself. I hope I was able to maintain this high level of respect and understanding of others' time during the extent of my research.

**Limitations: Researcher Bias and Subjectivity**

As mentioned in the section of methodology and researcher bias, it is very clear that my deeply personal engagement with the *Digital Seeds* program and those
associated with the Program can cloud my criticality and openness to find fault, problem
or weakness. Although subjectivity is unavoidable and inherent in anyone conducting
any sort of research, my subjectivity was clothed in a particularly intimate garment, a
cloak of insider or member of the very team and Program that I am attempting to result
objectively. That being said, the insider perspective allowed me unprecedented access
to the participants of my research, and I believe that it engendered even more
authenticity and openness from those with whom I spoke and interacted. In other
words, I admit that researcher bias and subjectivity do limit the extent to which I
criticized the Program and its participants and may have clouded my sensitivity to
differentiating cultural versus personal matters; however, my role as a participant-
observer could not have been more integrated or personal connected. I am a member
of the Digital Seeds team and I have been involved in the Program since before it
existed, and therefore, my access affords a perspective imbued with deeply personal
experience, history and dynamism. I speak and write as a member of the team, a part of
the Digital Seeds family, and I am unapologetic about this particular stance. For me,
research is not impersonal, objective and disconnected from the people and places that
are the sources of data. Instead, research is deeply personal, it is emotion, and my basic
humanity always guides my existence and being in these research engagements.
Therefore, my position as insider brings with it the potential weakness of bias and
subjectivity, but it also enables an insider perspective that is almost truly insider except
for the minor detail that I am white male from the United States working among mostly
Nicaraguan women. All and all, the social-economic, cultural and historical distance between me and those with whom I work and conduct this research serve to balance my insider perspective and infuse a bit more outsider, generative distance and unbiased criticality, yet my profound researcher bias and subjectivity are still important limitations to note.

**Implications for Practice: Deeper Engagement with Students and Families**

Across participants there was consistent clamoring for more involvement by parents and students in the human development focus of the Program. Specifically, parental absence from the Program beyond some isolated cases is seen as a major concern for the facilitators because it is a golden opportunity to be more fully integrated program that deals with the entire community and culture of the school context and not limit their intervention to the four walls or the school grounds. Additionally, an expansion of the human development focus will create a more unified collective of educational stakeholders, and therefore aid in the cultivation of local capacity and the ultimate sustainability of *Digital Seeds*. Increased unity among participants would arise from multiple sources, one of which is the fostering of intergroup dialogue (Nagda, 2006). This intergroup dialogue occurs through pedagogical, communication and psychological process, and the ultimate goal is to bridge differences. Within the central processes of communication, participants engage in appreciating difference, engaging self, critical self-reflection and alliance building (Nagda, 2006). To bridge the existing gaps between parents and schools, a widespread reality in Nicaraguan schools, there
must be opportunities for collective interaction and participation, couched with inviting, open and respectful spaces so that parents and students alike feel less vulnerable to share and engage, and thus engender more relational trust among actors (Bryk & Schneider, 2002).

Elba García is one of many facilitators who see the untapped possibility of more parental involvement. If we consider the famous educational triangle (students, teachers and parents), the Program is neglecting the third node in the triangle, the parents. Faced with high rates of teacher turnover, parental involvement is even more vital. She recognizes the vital importance of the mothers and fathers, and of the community at large, to the immediate and long-term success of Digital Seeds. García states, "we know there is potential in the communities and [...] they (parents) will always be in the community regardless of whether the program is there or not...they remain. We cannot view them as strangers or outsiders to the process" (personal communication, August 3, 2014). Maria Luisa Herrera agrees with García in that "they cannot be disconnected from one another. That means, they are different but they are complimentary to each other" (M. Herrera, personal communication, March 20, 2015). Herrera points to the importance of parents in the validation and support of the students as a necessity of the Program moving forward.

If Digital Seeds is to fully address the totality of the multiple wounds present among the individuals and communities in which the Program operates, they must begin to integrate students and parents into the processes of human development, and
even consider an off-shoot of the accompaniment approach. To address the reality through one actor and leave out the rest of the integrated network of interconnected individuals severely limits the effectiveness, acceptance and sustainability of the Program's intervention. Additionally, the generational link between parents and students often results in the passage of these wounds and its subsequent symptoms from father/mother to son/daughter (Cabrera, 2002). Therefore, *Digital Seeds* must decide to what extent they want to intervene in community-wide education and development, especially as they relate to social-emotional and psychological health. A partnership with or the possible integration of an individual or organization with a psychology background and/or social work experience would enable the Program to offer quality, appropriate support in not only addressing the multiple wounds but also providing treatment to heal them.

In the end, parents are willing, ready and able to collaborate with the school. It is on the school to provide the opening, to offer the space, and to facilitate an opportunity for participation by parents. For the students, an even more delicate approach is needed, but necessary nonetheless as a means to incorporate the entire educational triangle in the processes of human development.

**Implications for Practice: Integration of Human Development Metrics.**

For a Program steeped in relational, human development, the current Monitoring and Evaluation (M&E) System falls short of representing the central activities and purposes of *Digital Seeds*. I write this as a co-designer of the M&E System,
and I have noticed a shift from the beginning days of exploratory and expansive qualitative measures to the recent history of standardized reading, writing and math exams amidst other secondary metrics. Given the richness of holistic support and the shard processes of integral development, there is a paucity of metrics that monitor and evaluate the processes, relationships, outcomes and impacts of the Program core foci. Once again, Elba Garcia offers keen insight into the current state of the M&E and what would be more representative of the espoused theory of the Program. She recommends less emphasis on academic results and literacy/numeracy metrics, and more monitoring and evaluating of human development-related metrics and psychological and emotional progress. Elba García explains, "if you cover this emotional theme with the teacher, they are going to respond in kind with the students and the students will received a different type of treatment which is what we are looking for" (personal communication, August 2, 2014).

The nature, characteristics, processes and types of trust represent several potentially powerful and relevant metrics to include into an expanded and refined Monitoring and Evaluation System. Hoy and Tschannen-Moran's (2003) Omnibus T-scale is one particular method and instrument that could help enrich the congruency between the Program's theory and practice as well as incorporate measurement of this vital relational quality and collaborative lynchpin. Measuring trust of and among educational actors would provide Digital Seeds with empirical evidence to show how levels of trust are impacted by the Program's intervention. Although trust is not a
common metric in educational development projects, and there is little opportunity for comparability across programs and contexts, it is an appropriate and powerful data point for a Program that espoused and enacts a deeply relational approach. That being said, *Digital Seeds* and other relation-focused development projects could consider the Omnibus T-scale as a starting point towards constructing a truly holistic system for Monitoring and Evaluating, one that includes social-emotional and human development related metrics.

**Implications for Theory and Practice: The multiple wounds phenomena**

The contexts of Nicaragua offer a particular set of realities, considerations, resources and needs, and for any development project to have success, let alone function respectfully and in collaboration with local partners, there must be purposeful attention to the social, emotional and psychological (Cabrera, 2002). We are holistic beings who require more than the basic human needs of food, shelter and security to thrive as a species. Moreover, the purpose of education far exceeds basic literacy and numeracy, and should include morals, ethics and values as central to preparing students to be positive contributors to society (Dewey, 2007). If we accept the notion that development and education are fundamentally about human beings, and that these two fields are intertwined, mutually reinforcing endeavors, than Cabrera's (2002) multiple wounds construct represents a contextually appropriate approach to educational development projects in Nicaragua. Seeking to support "affective and spiritual reconstruction," the work of Cabrera (2002, p. 1) serves as a guiding model for
development in areas affected by years of tragedy, pain and human suffering, exacerbating by an absence of acknowledgement, expression and reflection. It is not a deficit orientation but rather a recognition of the lived experiences and historical legacies that stay with us and that we carry as baggage. The fact that Nicaraguans carry emotional and psychological baggage from past pains and sufferings are not exclusively negative and it does not imply a lack of strengths or resources. In fact, the multiple wounds are a source of tremendous experience and wisdom, and "working through personal trauma is nothing other than transforming it into wisdom for oneself and for others" (Cabrera, 2002, p. 9)

Painful and tragic human experiences leave lasting scars and (open or closed) wounds on those who carry on, but these injuries are not indicative of weakness or deficit, especially if they are appropriately acknowledged, accepted, reflected upon and healed. If outside or inside interventions in Nicaragua intend to truly support the development of individuals and communities, the concepts of capacity building and empowerment must be integrated within a consideration and attention to the multiple wounds and subsequent baggage carried by many Nicaraguans, especially those in the areas most affected by natural and man-made tragedies. As a theory, the multiple wounds phenomenon facilitates the understanding of the lasting emotional, physical and psychological impacts of pain and suffering, and as a practice, it enables a more sensitive, human approach to addressing people's pain and suffering within the context and field of development.
Appendix A: Semillas Digitales Program Overview and Theory of Action

Directed by Sharon M. Ravitch, Ph.D. Matthew Tarditi, Ed.M., Senior Researcher, PennGSE
Revised February 12, 2014

Project Overview

Semillas Digitales (Digital Seeds in English) is a collaboration between the Seeds for Progress Foundation, the Mercon Coffee Group, and CISA Agro in Nicaragua, and the University of Pennsylvania Graduate School of Education (PennGSE) in the United States. Semillas Digitales is a community and school-based action research program that cultivates a holistic, sustainable and capacity-building model of educational innovation focused on digital literacy, technology integration, professional development, pedagogical and curricular enrichment, community partnership, as well as expanded and supportive learning environments, all guided by an intentional focus on active collaboration and mutual respect. As action research, the approach develops and evaluates the emerging model simultaneously. The study of the Program seeks to document and examine the effects of the incorporation of a technology-enriched and culturally responsive curriculum combined with intensive teacher professional development in selected schools in mostly rural, coffee-producing communities of Nicaragua. Alongside educational specialists from the Seeds for Progress Foundation, the PennGSE team facilitates and studies the Program for implementation and replication purposes, including evaluating impact – on students, teachers, supervisory staff, and community members – and the relationships between community contexts and the Program. The research documents how the implementation of Semillas Digitales influences: (1) school environment, culture and functioning; (2) student learning, skills development, performance and educational/professional aspirations; (3) teacher knowledge, pedagogical approach, performance and classroom evaluation; and (4) school, family and community relationships, communication and engagement.

Semillas Digitales, now in its fifth year, uses the integration of technology as a catalyst to innovate and enrich pedagogical practices, curriculum and learning; to enhance school organization and communication; to increase student engagement and community participation; and to improve the overall quality of education guided by an emergent design approach. The Program seeks to enrich and expand students’ skills in reading, writing and mathematics as well as their digital literacy, critical thinking skills and character development by engaging educators, students and community members in the co-construction of a personalized, contextualized and respectful approach to sustainable educational innovation.

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For further reading:

and technology integration that purposefully incorporates local *funds of knowledge*\(^9\) within an emerging blended learning environment\(^{10}\). This innovative model facilitates the stakeholder-driven development of teachers, students, administrators and community members as critically engaged and technologically savvy learners, leaders and professionals within a growing and interactive community of educational stakeholders.

**Semillas Digitales Theory of Action**

*Semillas Digitales* was developed and is guided by the following principles and theories:

1. Community-Centered Approach Grounded in Ethnographic Research;
2. Action-Based, Rigorous Mixed Methods Research and Evaluation;
3. *Funds of Knowledge* as Foundation for Collective Innovation and Partnership;
4. Co-Constructed Capacity Building: Development of Expertise through an Emergent Design Approach;
5. Collaborative Approach to Sustainable Organizational Development;
6. Professional Development Approach to Teachers as Experts, Leaders and Researchers;
7. Curricular Enrichment through an Aligned and Integrated Approach;
8. Sequential Knowledge and Skills Development within and across Stakeholders;
9. Technology Integration as Catalyst for Comprehensive Educational Innovation;
10. Cultivation of Local, National and International Partnerships.

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1. Community-Centered Approach Grounded in Ethnographic Research

An ethnographic research approach – which seeks to deeply engage with, understand and document perspectives, experiences, knowledge(s) and relationships in each community – serves as the starting point and foundational mode of engagement that informs and guides the development, implementation, monitoring and evaluation of *Semillas Digitales*. A systematic, ongoing collection and analysis of diverse ethnographic data (e.g., interviews, focus groups, informal conversations, town hall meetings, home visits, classroom observations as well as community and school data) facilitates a collaborative and critical reflection on existing school culture, student experiences and teaching practices and supports broad pedagogical innovation and the creation, development and incorporation of an overarching educational model. The identification of and focus on leveraging human capital, funds of knowledge and local resources in each community enables a resource-oriented educational approach that is essential to maximizing the fit and sustainability of the Program. Guided by a participatory action research framework, the Program stresses the importance of partnership, collaboration and dialogic engagement with teachers, students, families and community leaders in the strengthening of relationships and communication between community, home and school. Specifically, the promotion of community involvement in education, and the school specifically, fosters increased bonds between school and community and facilitates a more culturally relevant and enriched content, curriculum and pedagogy while also improving student engagement, attendance, retention and community-school collaborations.

2. Action-Based, Rigorous Mixed Methods Research and Evaluation

Central to supporting, measuring and analyzing the Program is a rigorous Monitoring and Evaluation (M&E) system focused on the people, processes, results and impacts of *Semillas Digitales*. To measure outcomes and impacts on the various stakeholders and targeted characteristics/skills there is ongoing, evidence-based support through direct monitoring combined with systematic evaluations and a broad dissemination of findings among stakeholders. Due to the intentional flexibility of an emergent design approach and the formative evaluation components of *Semillas Digitales*, improvements and adjustments are implemented on a real-time basis, thus constituting a true action research approach to educational innovation. Because of the need for in-depth, contextualized data as well as quantitative measures of student and teacher progress, the Monitoring and Evaluation system employs a mixed methods approach. Enriched by a strategic combination of both quantitative and qualitative research methods, instruments measure processes and results of various indicators related to students, teachers, community members, and the overall program which include: (1) program implementation; (2) attitudes, behaviors, and perspectives on education; (3) future aspirations (e.g., educational, personal and professional); (4) skills and knowledge development (e.g., digital literacy; skills in reading, writing and mathematics; critical thinking skills, and specific content knowledge); (5) participation, engagement and retention; (4) school leadership and management; and (6) communication, collaboration and coordination. Quantitative and qualitative methods support the implementation and progress of the Program through constant monitoring and evidence-based feedback while simultaneously constructing comprehensive, analytical and personal accounts of the Program’s impact on stakeholders. Quantitative measures include
surveys, questionnaires, school and national data, and ongoing reading, writing and mathematics skills assessments. Correlations between grades, attendance, digital literacy, skills development, and other variables are analyzed in order to understand the effects of the educational technologies, professional development, community participation and other elements of the project on school, teacher and student performance goals. Qualitative data sources include interviews, focus groups, informal conversations, home visits and classroom observations and are used to contextualize and deepen the quantitative data using descriptive analysis, direct accounts and personal narratives.

3. **Funds of Knowledge** as Foundation for Collective Innovation and Partnership

The *Semillas Digitales* model is built upon a systematic, relational and data-based exploration of and engagement with the local communities and educational stakeholders as means to identify and understand the diversity and depth of resources, skills, realities, contexts, histories, needs and knowledge(s). Ongoing community-based engagement and rigorous data collection seeks to assure meaningful inclusion of stakeholders and provides the contextual foundation for the customized development of the Program, including the co-construction of: (1) a revised, culturally relevant curriculum; (2) pedagogical innovation and performance assessment; (3) professional development themes, resource enhancement and areas for skills development; (4) school-community collaboration and engagement; and (5) overall approaches to reimagining the school culture and learning environment. By directly informing what constitutes appropriate, relevant and respectful curricular and pedagogical approaches and professional development strategies, local context, information and understandings shape every aspect of the Program. Alongside teachers, students, community members and educational stakeholders, the *Semillas Digitales* team collectively identify and facilitate the growth of the skills and areas of knowledge mastery required to implement an innovative, student-centered, data-based pedagogical model that resonates with existing resources and meets the needs of teachers, students and communities on a case-by-case basis. Further, these data help to link program strategy to the needs, interests, learning styles and cycles of the agricultural year thereby forming the contextual understanding necessary to develop culturally relevant curricular content (e.g., agronomy, community values and skills, as well as agricultural cycles that affect the community). Guiding the process is a consensus-based decision-making structure among the *Semillas Digitales* partners. These decisions inform the direction of the Program, systematize local participation and strengthen the overall partnership network.

4. **Co-Constructing Capacity: Development of Expertise through an Emergent Design Approach**

Communities and schools provide the context in and from which the Program and attendant evaluation are implemented. Informed by ethnographic methods, an emergent design approach enables the ongoing recognition and incorporation of local talent, skills, knowledge, resources and concerns into the structure, strategy and development of a sustainable educational program. Understanding the context and intricacies of the

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11 *Collective Innovation-Decision* is “the choice to adopt or reject an innovation that is made by consensus of the members of a system.” (Rogers, pg. 28) - Rogers, E. (2003). *Diffusion of innovations* (5th Ed.). New York, NY: Free Press.
educational and broader community environment is essential to the creation, implementation and sustainability of a capacity-building approach, one that works from an engagement with and incorporation of local resources and needs in relation to educational development and innovation rather than from an impositional or deficit orientation. Central to the design of *Semillas Digitales* is the ongoing recognition and cultivation of stakeholder expertise and leadership through participation in multiple aspects of program design, development and implementation. Using a systematic, adaptable and flexible approach, stakeholders co-construct the professional development components, strategies to enrich learning experiences and the overarching educational environment, pedagogical innovation, and curricular enrichment aspects of *Semillas Digitales*. The Program is built upon a model of “customized replication” which requires systematic engagement with each community context as a means to consider, understand and integrate the rich particularities of communities and to co-construct a sustainable, contextually relevant and localized iteration of *Semillas Digitales*. This systematic incorporation of stakeholders’ perspectives and concerns in each individual community is indispensable to the sustainability, longevity and overall success of the Program.

**5. Collaborative Approach to Sustainable Organizational Development**

Central to *Semillas Digitales* is stakeholder-driven capacity building at multiple, intersecting organizational levels. Assessments of the organizational structures at the macro (company and university) and micro (individuals and groups of supervisors, teachers and support staff) levels, including an examination of their areas of overlap and intersection, is essential to co-constructing, with local players, a critical and progressive understanding of organizational structures, strengths, resources and areas of additional support. Engaging in a collaborative, stakeholder-driven, critical examination of organizational frameworks, processes, accountability structures and communication pathways drives collective problem-solving, interdependent responsibility and accountability, and overall program development in ways that are informed by a sophisticated, data-based, holistic understanding of organizational systems. As mentioned above, resource-oriented capacity building undergirds every stage of these dialogic and networked processes to ensure that learning and organizational growth are co-constructed and collectively determined, and therefore made institutionalized and sustainable.¹² Moreover, a responsive, emergent design approach addresses immediate concerns, needs and circumstances without distracting from the longer-term goals and overall design of the Program. In sum, a collaborative approach cultivates and instills a shared set of principles, practices, processes and relationships that emphasize negotiation, communication, responsibility and accountability and promotes a shared organizational culture that permeates all aspects of the Program.

**6. Professional Development and Support for Teachers as Experts, Leaders and Researchers**

*Semillas Digitales* is built on the design and enactment of teacher ownership and leadership of program development and emergent curricular and pedagogical innovations. Teachers are experts on multiple levels, and their knowledge(s) and understandings of the national curriculum and educational contexts (i.e., students, school and community) are essential to

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the successful design, customization, implementation, monitoring, evaluation and evolution of the Program. In order to build and leverage teacher skills and expertise, it is imperative to co-construct the conditions, practices and supports that teachers identify as necessary for their professional development as well as the adoption of a pedagogical and professional stance as educational leaders and teacher-researchers. As they transition into the new role of teacher-researchers, it is vital to support teachers with the skills and strategies necessary to critically evaluate and reflect on their experiences, approaches and pedagogies as well as examine the current educational environment as it relates to students’ experiences, knowledge, learning processes, needs and overall progress. To create a sustainable, capacity-building model in which the teachers are centralized as facilitators and co-producers of knowledge (along with their students), the Program sequentially supports teachers in the process of pedagogical innovation and technology integration and in the development of in(ter)dependence and leadership roles within and beyond Semillas Digitales.

7. Curricular Enrichment through an Aligned and Integrated Approach
As a starting point, Semillas Digitales facilitates the integration of technology into the existing Nicaraguan Ministry of Education (MINED) curriculum for primary and secondary schools. During the lifespan of the project, technologies are adapted to the national curriculum established by the Ministry, resulting in a model that is aligned with national standards and appropriate for replication throughout the country. To fully integrate technology into the MINED curriculum, the development and critical review of daily lessons plans, objectives and interdisciplinary projects is essential because they constitute the building blocks (i.e., the activities and practices) of an overarching educational model and paradigm enriched by technology. Furthermore, a customized integration of existing and emergent curricular components with information and communication technologies (ICT) and educational technologies (e.g., strategies, pedagogy, practices) facilitates the incorporation of technology as a ubiquitous and fully integrated component of the learning environment. The primary goal of the curricular alignment and integration is to incorporate technology into the existing set of content and pedagogical approaches while simultaneously facilitating individual, collective and emergent innovation in the design and implementation of learning experiences and educational environments.

8. Sequential Knowledge and Skills Development within and across Stakeholders
To build upon and enrich the understanding of existing content and practices as more complex and advanced understandings emerge, it is imperative to instill a collaboratively constructed, sequential approach to knowledge and skills development. Guided by an inquiry stance framework, students and teachers engage in open dialogue around the roles, possibilities, affordances and challenges related to technology broadly and to the integration of technology in the classroom specifically. Following a critical exploration of technology’s role in education and learning, the learning turns to the basic skills and digital literacy associated with technology use. As time progresses, the focus shifts to enriched content

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knowledge; interdisciplinary, project-based learning and blended learning theory, and advanced technology skills. Transitions from basic to intermediate to advanced knowledge and skills mastery – at the teacher and student levels – are mapped out and guidelines are provided to help ensure the iterative scaling up – and evaluation – of knowledge and skills development over time. The generative interaction of knowledge (e.g., content and technology) and skills development (e.g., informational, communication, critical-thinking, problem-solving, synthesis) are facilitated, discussed, learned, tested and integrated into practice and learning in a sequential manner as a means to improve the connections and foundations between past, present and future knowledge and skills. It is through engaging in this sequential, iterative approach that existing knowledge and skills are examined and deepened as teachers and students continue to develop new skills and knowledge.

9. Technology Integration as a Catalyst for Comprehensive Educational Innovation

The focus on educational innovation in and beyond technology integration is central to the Semillas Digitales model. Innovation guides the development and implementation of new approaches to understand, assess and facilitate student learning, teacher professional development, teacher pedagogy, content enrichment, curricular alignment and technology integration. The model relies on the systematic integration of educational and information technologies (e.g., computers, tablets, Internet resources) as well as more emergent, critical and constructivist approaches to pedagogy with the goal of developing advanced digital literacy, critical thinking skills, analytical and communication skills, and content knowledge and understanding—all within an environment of care and mutual respect. As this relates to curriculum and teacher professional development, an innovation orientation is crucial to the continuous integration of meaningful and comprehensive engagement with teachers and to specific curricular enrichment. The Semillas model builds on the existing MINED curriculum through collective exploration and incorporation of the resources and needs of individual communities (in terms of knowledge, skills, history, culture and references) juxtaposed with regional, national and international advances in educational practices, theories and approaches to technology integration.

10. Cultivation of Local, National and International Partnerships

Building on post-colonial theories of development, critical ethnography, and participatory action research, Semillas Digitales works to cultivate strategic partnerships and dialogic engagement with multiple individuals and communities aimed at mutual capacity building, “reciprocal transformation”, shared beneficence and sustainability. Within this broad range of relationships (e.g., local, regional, national, international), considerable attention is paid to fostering strategic partnerships among and across local, national and international organizations, institutions and individuals to facilitate a cohesive network of diverse entities in the realms of education, development and social impact (among others). The Semillas Digitales program frames research collaborations as multi-lateral exchanges that can foster authentic partnership and resource exchange and help individuals and organizations to cultivate an applied reflexivity and collaborative examination of the ways in which

individuals and groups are engaged in “dialectics of mutual influence”\textsuperscript{16}. In this model, local participation is intrinsic to developing sustainable educational programs, practices and policies. Concurrently, over time we have seen that non-local participation can also provide necessary perspectives as distance allows us to perceive and connect local developments across regions in relation to global discourses and models\textsuperscript{17}. It is through these relational networks that partners critically engage with and exchange expertise, knowledge, skills, experiences and practices and ultimately establish concrete ways to work together, support and challenge one another, consolidate activities and share resources. \textit{Semillas Digitales} works from the belief that sustainable partnerships beget sustainable programs.

Thank you to the vast network of stakeholders and partners who have made this program possible and who continue to move it forward.

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At Seeds for Progress Foundation:
Rosa Rivas (rrivas@seedsforprogress.org)

\textsuperscript{16} Ibid.

## Appendix B: Descriptive and Analytic Codes

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### EL TERCER ESPACIO  
**3RD**

| 3RD: Formación | 3RD-FORM |
| 3RD: Hibridad | 3RD-HYB |
| 3RD: Juntos en la diferencia | 3RD-JUNT |
| 3RD: Orientación hacia las Fortalezas (Resource-Orienteación) | 3RD-FORT |
| 3RD: Espacio de inclusión | 3RD-INCL |

### TEMAS GENERALES  
**TG**

<p>| Amistad | AMIS |
| Apertura al cambio | APER-CAMB |
| Apertura a otras opiniones | APER-OPIN |</p>
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| Term                                      | Code       |
| NICARAGUA                                 | NICA       |
| NICA: Contexto                            | NICA-CONT  |
| NICA: Contexto-Cultura                    | NICA-CONT-CULT|
NICA: Contexto-Económico | NICA-CONT-ECON
---|---
NICA: Contexto-Educación | NICA-CONT-ED
NICA: Contexto-Guerra | NICA-CONT-GUER
NICA: Contexto-Latinoamérica | NICA-CONT-LA
NICA: Contexto-ONGs | NICA-CONT-ONG
NICA: Contexto-Político | NICA-CONT-POL
NICA: Contexto-Tecnológico | NICA-CONT-TEC
NICA: Historia | NICA-HIS
NICA: Historia-Política | NICA-HIS-POL

**COLORES**
Celeste y Amarillo - General
Verde - Vulnerabilidad
Gris - Meta - Investigación - Proceso
Marón - Audio-visual

**LOS CODIGOS PRINCIPALES**

**El DIÁLOGO:** No hay una sola conceptualización del concepto "diálogo." Para el uso de esta investigación, enfoco en el espectro del término y su existencia en las relaciones interpersonales humanas. Burbules (1993) propone que hay cuatro tipos del diálogo: como conversación, como indagación, como debate, y como la instrucción. En su organización del diálogo, Burbules conceptualiza el fenómeno como una (inter)acción entre personas, algo observable, concreto y mayormente práctica. En cambio, según Martin Buber (1947), el diálogo es una manera de ser y estar en relación con otros seres, y la intención es establecer una relación mutua viva, una aceptación del uno al otro en diferencia. Hay tres instancias del diálogo, el diálogo genuino, el diálogo técnico y el monólogo disfrazado como el diálogo (Buber, 1965). En un diálogo genuino, que no necesariamente requiere una comunicación verbal, existe un "entre," una dimensión accesible exclusivamente a los dos participantes, una verdadera esfera de comunidad en que cada uno tiene la intención de establecer una relación mutua viva. Es más, cada participante en el diálogo tiene en mente el otro o los otros en su ser presente y particular, aceptando la totalidad y particularidad del otro como un sujeto entero (whole-being). Los dos tipos de relaciones entre seres son de I-It and I-Thou. I-It representa una relación monologa entre un sujeto y un objeto en la cual el objeto está al servicio del sujeto y no hay una relación mutua. En cambio, una relación I-Thou es una relación dialógica, un encuentro directo.

Freire and Macedo (1995) describen el diálogo como una manera de saber, una relación epistemológica. Ellos argumenta que "Yo participo en el diálogo porque reconozco lo social y no meramente la carácter individualista del proceso de aprendizaje. En este sentido el diálogo se presenta como un componente
imprescindible de los procesos de aprendizaje y conocimiento" (Freire & Macedo, 1995, 379). Para poder entrar en esta relación de aprendizaje y conocimiento del diálogo requiere curiosidad, amor, humildad y fe, y existe dentro de un ambiente de confianza mutua (Freire, 1970).

Para Semillas Digitales el diálogo (en sus iteraciones varias) sirve como base fundamental y continua de las relaciones interpersonales entre los participantes en el programa. Para que el programa se evolucione y se adapte según los actores y contextos particulares de cada escuela y comunidad, hay que haber una apertura hacia la diferencia y una intención de abrirse al otro para establecer una relación mutua de entendimiento. Es más, el diálogo es una clave para poder formar una colaboración auténtica en que hay una apreciación y aceptación de la diferencia entre personas, prácticas, políticas, epistemologías, percepciones y conocimientos.

En el estudio actual quiero examinar las significancias, las características y los procesos del diálogo (las tres sub-categorías de los códigos) para poder entender como se entiende el concepto, el fenómeno, la acción, la manera de ser, la sensibilidad y la presencia para los participantes, y especialmente dentro del programa. A través de mi experiencia activa y directa en Semillas Digitales desde su fundación en 2009 he notado el rol clave del diálogo en las relaciones interpersonales entre los miembros del equipo (p.ej., los facilitadores, los coordinadores, directores) y los participantes en el programa (p.ej., docentes, estudiantes, MAPAS, MINED). Junto con la confianza, el diálogo facilita el establecimiento, mantenimiento y evolución de una colaboración auténtica entre actores diferentes, la emergencia de estos terceros espacios para la creación y re-imaginación de una cultura inclusiva y híbrida.

LA CONFIANZA: La confianza es la base de cualquier interacción humana y tiene una calidad atmosférica en que habitamos un ambiente de confianza y que lo reconocemos como nos damos cuenta del aire, solamente cuando sea escasez o contaminado (Baier, 1986). Se siente la existencia de la confianza o su ausencia cuando uno entra en un lugar y/o cuando uno participa en una interacción entre seres humanos (y incluso con animales). Es palpable, abstracto y inefable a la vez. La confianza transcende disciplinas, campos y escuelas de pensamiento, un reflejo de su importancia general y su aplicabilidad universal acerca de los quehaceres humanos. El término "confianza" presenta un reto socio-lingüística y cultural por dos razones principalmente, su diversidad de significados en español y por extensión, sus traducciones al inglés. Entre el espectro de significados existen: confidence, trust, reliance, faith, reliability, belief, hope, familiarity, trustfulness y dependence. En español la confianza es un sinónimo de confidencia, fe, esperanza, responsabilidad, confiabilidad, seguridad y convicción entre otras palabras. Por lo tanto, es interminablemente difícil definir y traducir un concepto tan flexible y profundo. Sin embargo, por fines académicos y institucionales he decidido concentrar en la literatura acerca de "trust" para poder entender sus principales campos teóricos, conceptuales y empíricos. Aún con un enfoque exclusivamente en "trust" el mundo de opciones no se ha reducido mucho. De hecho, tuve de decidir, basado en mis
experiencias con el programa y la articulación de ello por sus participantes, cuales son las áreas o enfoque de la confianza más relevantes a mi propio estudio. Resulta que la confianza relacional (relational trust en inglés), hecha popular por Bryk y Schneider (2003) a través de sus estudios en varias escuelas en Chicago, se convirtió en una de las ejes centrales de mi entendimiento del término. La confianza relacional está fundamentada en el respeto social, y estos intercambios sociales están marcados por la escucha genuina y por la apreciación de estos puntos de vistas en las acciones que siguen. Como un recurso moral, su reserva se aumenta a través de su uso y la existencia de la confianza reduce el sentido del riesgo, especialmente asociado con el cambio (Bryk & Schneider, 2003). Los componentes de la confianza relacional son el respeto, la estima personal, la competencia y la integridad personal. Al considerar el enfoque del programa Semillas Digitales en las relaciones interpersonales, el desarrollo holístico y el respeto entre otros elementos, se ve más claramente la relevancia de la confianza relacional al lado del diálogo.

Además de Bryk y Schneider y la confianza relacional, el trabajo de Tschannen-Moran y Hoy (2000), Blomqvist (1997) y Baier (1986) ofrecen teorías y conceptualizaciones adicionales sobre la confianza. Annette Baier (1986), una filósofa moral feminista describe la confianza a través de una relación diádica, y "la confianza es la dependencia a la competencia y disposición del otro de cuidar, en vez de dañar, a las cosas que nos importan" (Baier, 1986, 259). Entonces, "la confianza es la vulnerabilidad aceptada a la posible pero no esperada mala voluntad del otro hacia uno" (Baier, 1986, 236). Basado en el trabajo de Baier (1986), Tschannen-Moran y Hoy (2000) concentran en la multi-dimensionality, las dinámicas y las facetas de la confianza. Las dimensiones son: (a) la integridad, la honestidad y la veracidad; (b) la competencia, el conocimiento y las habilidades técnicas y interpersonales requeridos para cumplir con una actividad; (c) la consistencia, la confiabilidad, la previsibilidad y el buen juicio; (d) la lealtad o los motivos benevolentes, la voluntad a proteger y mantener la credibilidad para una persona; y (e) la apertura o la accesibilidad mental, una disposición al compartir de ideas y información (Butler & Cantrell, 1984). Las dinámicas de la confianza, o los procesos de su existencia, son iniciando, sosteniendo, rompiendo y reparando mientras las facetas son (1) una vulnerabilidad disponible, (2) la benevolencia, (3) la confiabilidad, (4) la competencia, (5) la honestidad y (6) la apertura (o transparencia).

Estos elementos, dinámicas y características de la confianza guían el sistema de códigos para mi estudio además de fundamentar el modelo de Semillas Digitales a través de sus documentos y actividades, ambos protagonizados por los actores claves del programa.

LOS CÓDIGOS ESPECÍFICOS
DIÁLOGO = DIA

DIA: Características. La identificación de las características del diálogo establece los elementos claves y comunes del fenómeno entre los varios participantes. Al tener una
diversidad de características, se puede organizarlas para ver tendencias, relaciones y correlaciones entre los elementos y los individuos del programa. Me interesa saber si hay ciertas características que son: (1) universales entre todos o entre grupos; (2) particulares de un grupo u otro; (3) sobresalientes; y/o (4) ausentes en su declaración a pesar de que son centrales en la literatura o en estudios anteriores. Según Buber (in Friedman, 2002), en una relación de I-Thou (indicativa del diálogo), la relación es mutua y está caracterizada por mutualidad, franqueza (directness), intensidad y inefabilidad (p. 70).

**DIA: Características-Comunicación Abierta.** Una apertura comunicativa es necesaria para entrar en diálogo. Según Eisenstadt (1992), la existencia del diálogo, de la apertura comunicativa es la característica central de las situaciones en que la creatividad cultural puede ser desarrollada, fomentada, y promocionada y es conducente a las fuerzas y condiciones sociales que crean las posibilidades para la cristalización de la creatividad humana en sus varias, múltiples expresiones.

**DIA: Características-Honestidad.** He encontrado en mis experiencias, tanto dentro del programa Semillas Digitales como en las interacciones con una diversidad de personas, que la honestidad es céntrica al establecimiento, mantenimiento y fortalecimiento del diálogo. Es ser honesto con uno mismo primero y por extensión ofrecer esta honestidad al otro. Entonces, la honestidad refiere a la comunicación abierta, la presencia, la transparencia y el respeto, todos juntos de una autenticidad humana.

**DIA: Características-Humildad.** Freire (1970) argumenta que una de las condiciones necesarias para el diálogo es la humildad. Esta humildad abre la posibilidad de un encuentro de dos personas. En otras palabras, el reconocimiento de su mortalidad y falibilidad posibilita la oportunidad de aprender del otro y valorarlo como un sujeto igual y propio.

**DIA: Características-Presencia.** Estar y ser presente en una relación son características fundamentales para tener un diálogo con otra persona (o ser). Según Gordon (2011), "la relación entre (la practica) (d)el habla y (d)el escucha es una de reciprocidad y dependencia mutua, y que el escucha juega un rol esencial en la iniciación de muchos diálogos a través de crear un espacio en el cual dos personas puedan aceptar uno al otro como individuos completos" (p. 217-8). Un elemento fundamental en ser presente es el escucha. Además de ser ligado a la curiosidad e interés en lo que va a decir el otro, el escucha contiene un aspecto ético. Particularmente, escuchar al otro le permite "el poder de establecer su propia presencia como una fuente de significancia y autoridad" (Gurevitch, 1990, p. 188). Es importante diferenciar entre escuchar y oír, especialmente escuchar activamente. Se puede oír las palabras del otro sin tratar de entender la significancia de su punto de vista o perspectiva. Para colmo, mientras estas oyendo, en vez escuchar uno está simplemente esperando su turno para hablar. En cambio,
escuchar activamente significa un esfuerzo para entender lo que el otro quiere decir y involucrándose en su mensaje y pelando las capas para llegar a su esencia.

**DIA: Características-Respeto.** El respeto es una virtud comunicativa y es una característica imprescindible de una relación dialógica (Buber, 1964; Burbules & Rice, 1991; Freire, 1998; Lefstein, 2010). Wals & Schwarzin (2012) propone que en una interacción dialógica un elemento vital es "una atmósfera de respeto mutuo, confianza y cooperación" (p. 16). También, para sostener una relación dialógica a lo largo del tiempo, Burbules (1993) dice que es importante tener un respeto entre los participantes además de confianza, apreciación, afecto y esperanza. En un programa compuesto de diversos actores con varias historias, culturas y realidades, el diálogo es aún más importante, y es crítico tener un respeto, el entendimiento y la tolerancia entre tanta diferencia (Burbules & Rice, 1991). Elbow (1996), en su descripción del "Juego de la Creencia," localiza la prioridad de una interacción en el establecimiento de una relación comunicativa de la confianza y la apertura, y en tratar de abrazar nuestro lado de simpatía y respeto cuando una conversación inicia (Burbules & Rice, 1991).

**DIA: Características-Transparencia (o autenticidad).** Qué quiere decir transparencia o autenticidad? Cómo puede ser importante para el diálogo?

**DIA: Procesos.** Además del concepto filosófico del diálogo presentado por Buber, Isaacs (2001) lo describe como una habilidad procesable y disponible a individuos y equipos, es un fenómeno y una teoría de la práctica. Implica "un proceso altamente disciplinado de la reflexión y la indagación, ambos sobre la calidad del razonamiento interpersonal, y sobre la naturaleza del subyacente terreno compartido de la significación en el cual la gente interactúa" (Isaacs, 2001, p. 712).

**DIA: Procesos-Inicio.** El comienzo del diálogo es importante identificar y aclarar para poder entender cuales son las características, condiciones y elementos de este momento en la vida de fenómeno y práctica. Nos ayuda a definir como se inicia el diálogo según los participantes en el programa, enfocando en los aspectos o procesos comunes entre ellos además de las inconsistencias.

**DIA: Procesos-Mantenimiento.** Después de iniciar el diálogo hay que mantenerlo para que represente una dinámica continua y impactante para los participantes en ello. Mantener el diálogo no tiene una receta pero está compuesto de características, actividades y fenómenos, unos comunes entre varios mientras otros son más particulares. Identificar las tendencias y las particularidades sería esencial para poder informar organizaciones, programas y proyectos sobre como se puede facilitar el diálogo en sus culturas y prácticas.
DIA: Procesos-Fortalecimiento. La evolución natural del mantenimiento es el fortalecimiento. Además de mantener el diálogo, representado por seguir con el status quo, los participantes pueden profundizar la relación y abrir los canales de comunicación a través de fortalecer aún más el diálogo que ya existe. No hay un solo tipo del diálogo y siempre nuestro diálogo está en fluyo, implicando que siempre hay posibilidades de fortalecerlo.

DIA: Procesos-Ruptura. Nada es permanente, y esto incluye el diálogo. Resulta que hay casos en que el diálogo se rompe o se desaparece por varias razones y múltiples factores y quiero entender porque y como para aprovechar de estos casos como oportunidades de aprendizaje. Es por eso que quiero identificar, documentar, categorizar y analizar los procesos que causan una ruptura en el diálogo.

DIA: Procesos-Reparación. Igual que los procesos anteriores (inicio, mantenimiento, fortalecimiento, ruptura), la reparación del diálogo es parte de la vida dinámica del concepto en su existencia vibrante y activa. No es simplemente un fenómeno estático, congelado en el tiempo. El diálogo es una práctica, compuesta de procesos activos. Entender como reparamos el diálogo después de una ruptura es significante para cualquier relación y interacción humana u organizativa.


DIA: Significancia-Entendimiento/Relación Mutuo (o Intersubjetivo). Según Isaacs (2001), entrar en el diálogo habilita que los participantes tienen una imagen dramáticamente diferente sobre como los seres humanos en general pueden hablar y aprender juntos. En vez de ser células atómicas separadas, existe la posibilidad de ser actores interdependientes, operando en un espacio potencial compartido (Isaacs, 2001: 718). Es decir, el diálogo es directamente ligado a la creación del Espacio Tercero. Buber (1937) y Gurevitch (1990) enfatizan el acto de "dar la frente al otro" como el momento humano clave en el diálogo. En este "dar la frente al otro," uno enfrenta la alteridad total del Otro, una forma social de despertar la presencia de si mismo (self) vis-á-vis un Otro mientras uno dota al Otro el derecho de su alteridad (Gurevitch, 1990). El diálogo genuino existe cuando cada uno de los participantes realmente tiene en mente el otro o los otros en su presente y particular ser y se da la vuelta a ellos con la intención de establecer una relación mutua viva entre él mismo y ellos (Buber, 1965, p. 19). Buber clarifica que una relación dialógica no requiere el habla. El diálogo puede ser compartido en el silencio. También, una vida dialógica continúa incluso cuando los dos participantes están separados físicamente. Este diálogo está posible porque la presencia del otro sigue a pesar de que él/ella no está. Hay una conciencia perpetua
de la alteridad del otro y uno actúa y piensa en relación a esa alteridad. Alguien en diálogo con otro está consciente de la unicidad y totalidad de cada uno, una relación recíproca de seres completos y activos, que toma lugar en el "entre," una dinámica que existe exclusivamente entre los dos seres (Friedman, 2002, p. 65).

Es importante aclarar que para Martin Buber la mutualidad de la relación no significa empatía ni igualdad (sameness) sino la aceptación del otro como diferente y único (Friedman, 2002). El diálogo nos permite ir más allá de la colaboración - literalmente trabajando juntos - para encontrar un nuevo nivel del entendimiento mutuo sobre lo que significa crear juntos (Isaacs, 2012, p. 10).

**DIA: Significancia-Escucha Compartida o Activa.** En las palabras de Isaacs (2001), el diálogo significa "crear un ambiente y una atmósfera donde se puede oír la fuente del pensamiento detrás de las palabras, incluyendo las suyas"(p. 1). No es una cuestión de estar de acuerdo con el otro sino la escucha compartida de tal manera que uno oye posibilidades imprevistas. Es importante diferenciar entre escuchar y oír, especialmente escuchar activamente. Se puede oír las palabras del otro sin tratar de entender la significancia de su punto de vista o perspectiva. Para colmo, mientras estas oyendo, en vez escuchar uno está simplemente esperando su turno para hablar. En cambio, escuchar activamente significa un esfuerzo para entender lo que el otro quiere decir y involucrándose en su mensaje y pelando las capas para llegar a su esencia.

Para facilitar la escucha activa, Rogers y Farson (1987) proponen que es necesario crear una clima de "igualdad y libertad, permisividad y entendimiento, aceptación y cariño" (p. 2). Dentro de este ambiente, podemos escuchar para la significancia completa (Total Meaning). Cuando una persona comparte un mensaje, este mensaje tiene dos componentes: el contenido y el sentimiento o actitud. Entonces, la escucha activa intenta entender estos dos componentes para que uno pueda responder a los sentimientos del hablador mostrando que le entendemos y valorizamos sus emociones y su mensaje.

**DIA: Significancia-Indagación Social.** William Isaacs (2001) define el diálogo como un proceso de reflexión y indagación. Es más, él argumenta que el diálogo es una forma de indagación social, una indagación sostenida sobre los procesos, los supuestos y las certezas de las experiencias cotidianas.

**DIA: Significancia-Proceso de Aprendizaje y Conocimiento.** Según Paulo Freire (1970), el diálogo es un proceso de aprendizaje y conocimiento. Además, el diálogo es una manera de saber por la relación epistemológica que uno reconoce cuando está en diálogo. Hay una caracter individual y social del proceso de saber, y es por eso que entramos en diálogo y implica la naturaleza social y dialógica del aprendizaje y conocimiento (Freire & Macedo, 1995, p. 379). Para un programa educativo como Semillas Digitales, el diálogo es aún más importante considerando la centralidad del aprendizaje y la enseñanza. La educación da lugar cuando hay dos estudiantes quienes
ocupan espacios diferentes en un diálogo continuo (Aronowitz, 1998). Es más, el objetivo del proceso pedagógico, según Freire (1998), es "explorar que sabe cada uno y cada pueden enseñar uno al otro" (p. 8).

**DIA: Significancia-Reflexión.** "El intercambio dialógico invita a los participantes a reflexionar sobre la calidad del lenguaje y la indagación que traen a la conversación, y para llegar a ser auto-reflexivo sobre como sus filtros gobiernan su pensamiento y actuación" (Isaacs, 2001, p. 718).

**CON: Diálogo o DIA: Confianza.** Según Freire (1970), el diálogo existe dentro de un ambiente de confianza mutua. El argumento central de mi tesis es que el diálogo y la confianza se desarrollan simultáneamente, o en paralelo, para abrir los espacios terceros, lugares fundamentales para la creación, cultivación y maduración de colaboraciones auténticas y justas.

**CON: Confianza**

**CON: Características.** Según la filósofa feminista Annette Baier (1986), la confianza entre dos personas requiere la aceptación de la vulnerabilidad y el riesgo. Yo, persona A, confío en persona B con una cosa preciosa C. Esta cosa preciosa puede ser yo mismo (mi salud), mi dinero o otro objeto sobre el cual comparto la responsabilidad de su cuidado con la persona B. Entonces, "la confianza es la dependencia en la competencia del otro y su disposición a cuidar, en vez de dañar, las cosas que a uno le importan" (Baier, 1986: 259). Además de esta significancia filosófica, Bryk y Schneider (2003), desde un contexto escolar, proponen el concepto de la confianza relacional, una confianza "basada en el respeto social que viene de los tipos de discurso social que toma lugar a través de la comunidad escolar" (p. 41). Para el servicio de codificar las características de la confianza, utilizo las conceptualizaciones ofrecidas por Tschannen-Moran y Hoy y Bryk y Schneider.

Tschannen-Moran y Hoy (2000) caracteriza la confianza por su multi-dimensionalidad y sus varios componentes. Ellos proponen seis facetas de la confianza: la disposición a la vulnerabilidad, la benevolencia, la confiabilidad, la competencia, la honestidad y la apertura. Bryk y Schneider (2003), en su definición de la confianza relacional ofrecen cuatro componentes (o características): el respeto, la consideración personal, la competencia y la integridad personal.

**CON: Características-Benevolencia.** La benevolencia es la buena voluntad que uno tiene para cuidar algo querido por otra persona. Aceptar la vulnerabilidad, un componente central para tener confianza, viene con la expectativa de que la otra persona no hara daño a la cosa querida y que tendrá en mente el bienestar del otro. Es decir, la benevolencia hacia la persona y/o la cosa permite la creación de la relación de
confianza y su persistente existencia abre las posibilidades para una confianza más fuerte y profunda.

CON: Características-Confiabilidad. La creencia de que alguien cumplirá con una promesa o una expectativa forma la base de la confiabilidad. “Reliability” en inglés, esta característica es fundamental para la formación, el mantenimiento y el fortalecimiento de la confianza. Butler and Cantrell (1984) propone que la consistencia, la confiabilidad, la previsibilidad y el buen juicio en el manejo de situaciones es una de las dimensiones de la confianza. Además de Butler and Cantrell, Tschannen-Moran and Hoy (2000) mencionan la confiabilidad como una faceta de la confianza. La confiabilidad “combina un sentido de previsibilidad con la benevolencia” (Tschannen-Moran & Hoy, 2000, p. 557). Rotter (1967) utiliza la confiabilidad en su definición de la confianza interpersonal: “La confianza interpersonal es la expectativa mantenida por un individuo o grupo que la palabra, la promesa, la declaración verbal o escrita del otro individuo o grupo puede ser confiable” (p. 651). La confiabilidad es especialmente importante en situaciones de interdependencia. Por ejemplo, cuando el director de una escuela puede confiar en sus docentes para cumplir con las expectativas establecidas en la escuela o el contexto educativo nacional.

CON: Características-Competencia. Según Blomqvist (1997), la confianza (trust) es la dependencia en la competencia y disponibilidad del otro para cuidar (o vigilar) las cosas sobre las cuales a uno le importan. También, en los estudios de Bryk & Schneider (2003) sobre la confianza relacional, mencionan “la competencia” como uno de sus componentes. Para tener confianza en alguien yo asumo que el o ella tiene la competencia (técnica o moral) de poder cumplir con el acuerdo implícito o explícito. La competencia moral se refiere a la confianza que uno tiene con su amigo, y esto implica lealtad, amabilidad y generosidad (Jones, 1996). El tipo técnico tiene que ver con la confianza que tenemos con profesionales. Tengo confianza en el plomero porque el/ella es un profesional competente en su trabajo. Es importante notar que la existencia de una buena voluntad es parte del cuidado de algo especial y querido, pero es insuficiente si la persona hace falta la competencia de cuidar este mismo objeto. En otras palabras, la intención (disponibilidad) combina con la competencia para crear las dos componentes necesarios de la confianza.

CON: Características-Consideración Personal. La consideración personal viene del concepto de la confianza relacional por Bryk and Schneider (2003). Según ellos, esta consideración personal surge de la disponibilidad de extenderse más alla de los requisitos formales de una definición laboral o un contrato sindical. La cultivación de un ambiente en el cual la consideración personal es la norma en la comunidad (escolar) es un factor fuerte en establecer y mantener un nivel alto de la confianza relacional (Bryk & Schneider, 2003, p. 43).
CON: Características-Honestidad. La honestidad reﬁere al carácter, integridad y autenticidad de la persona. Ser honesto es contar la verdad según su perspectiva o entendimiento de la realidad y no mentir o fabricar una historia falsa. También tiene que ver con una autenticidad humana. Esta autenticidad significa que uno acepta la responsabilidad de sus acciones y evita la distorsión de la verdad que resultaría en trasladar la culpa al otro. La honestidad es una faceta vital para la confianza (Baier, 1986; Butler & Cantrell, 1984; Hoy & Tschannen-Moran, 1999).

CON: Características-Reciprocidad. La reciprocidad es fundamental en los sistemas de intercambio. Según, Mauss (1950) en The Gift (El Regalo), hay tres obligaciones: para dar, recibir y devolver. Estos dar, recibir y devolver pueden ser con objetos concretos (dinero, propiedad, etc.) o en la forma de gestos, acciones o otras manifestaciones de sentimientos o actitudes. Las expectativas de que alguien devolverá el favor o actuará de la misma manera, siguiendo el modelo dado por una persona, refleja una creencia en la reciprocidad. Según Molm, Schaefer y Collett (2009), los intercambios recíprocos (una situación en que actores unilateralmente provee beneficios a uno y al otro sin tener acuerdos formales) producen una confianza más fuerte que los intercambios negociados que son asegurados por acuerdos obligatorios (p. 1). Aunque los intercambios recíprocos son más riesgosos que los intercambios negociados, la existencia del riesgo produce una necesidad para mayores niveles de la confianza (Molm, et al., 2009). En otras palabras, el intercambio recíproco involucra el riesgo de dar sin la reciprocidad, por tanto exigir tener confianza en el otro y permitir la demuestra de la confiabilidad (fidedigno o trustworthiness).

CON: Características-Respeto. El respeto, igual que la confianza, forma la base que cualquier relación sano. Según Bryk, Camburn y Louis (1999), “cuando docentes confían y respetan uno al otro, un recurso social poderoso es disponible para apoyar la colaboración, el dialogo reflexivo y las características de la desprivatización de una comunidad profesional” (p. 767). La confianza relacional está fundamentado en el respeto social y los intercambios respetuosos son marcados por la escucha genuina y la consideración de lo que uno escucha en la toma de acciones y decisiones. Inclusive cuando gente está en desacuerdo, los individuos pueden sentir apreciados si los otros respetan sus opiniones (Bryk & Schneider, 2003, p. 41). Es por eso que Bryk & Schneider (2003) nombra el respeto como uno de los componentes de la confianza relacional con la consideración personal, la competencia y la integridad personal.

CON: Características-Vulnerabilidad. Según Blomqvist (1997), “la incertidumbre, la vulnerabilidad y la posibilidad de evitar el riesgo o de tomar una decisión basada en el juicio, son vistos como las condiciones necesarias para la existencia de la confianza” (p. 283). Esta perspectiva está consistente con la posición de Annette Baier (1986) quien dice que “la confianza es la vulnerabilidad aceptada al posible pero no esperada animadversión del otro” (p. 236). La aceptación de la vulnerabilidad se puede derivar de
un estado psicológico, contractual (legal), relacional o cultural entre otros, pero es importante notar que tener confianza en alguien o algo le expone al que confía al riesgo por su estado vulnerable.

**CON: Procesos.** Las dinámicas de la confianza son importantes para entender la evolución de su existencia. El fenómeno confianza no es concepto estático ni terminado. En cambio, está siempre en flujo como el diálogo. Iniciar, sostener, romper y reparar son procesos comunes ofrecidos por Tschannen-Moran and Hoy (2000), y yo propongo otro proceso, fortalecer a la cadena activa de este fenómeno.

Según Zucker (1986), hay tres modos de construir la confianza, uno está basada en la institución, otra en el carácter y la última en el proceso. En pocas palabras, la confianza basada en la institución está ligada a las estructuras sociales formales, la confianza basada en el carácter está ligada a la persona y la confianza basada en el proceso está ligada a un intercambio previo o esperado. Entrando en más detalle, la confianza basada en el carácter (character-based trust) es la tendencia humana de tener confianza en otros quienes perciben similar a ellos mismos. Las normas de obligación y cooperación están raizadas en la semejanza social (p.ej. los acontecimientos familiares, el estado social y la etnicidad). La confianza basada en una institución está apoyada por las estructuras formales que conferir la confianza (p.ej. una licencia o certificado o mecanismos como garantías, seguros o contratos) (Creed & Miles, 1996).

**CON: Significancia.** El hecho de que la palabra confianza tiene varios significados requiere una articulación explícita (o implícita) para poder definir con bastante certeza lo que uno quiere decir cuando utiliza el término. Para colmo, además de tener el significado articulado en español, es el labor del investigador traducir o interpretar el término a su par en inglés. Entre múltiple posibilidades de significancia, hemos decidido ofrecer cinco opciones para guiar y establecer unos límites y ejemplos acerca del significado de confianza.

**CON: Significancia-Confiabilidad.** Como se menciona arriba la confiabilidad “combina un sentido de previsibilidad con la benevolencia” (Tschannen-Moran & Hoy, 2000, p. 557). Para unos, la confianza significa confiabilidad en la otra persona, organización, institución, etc.

**CON: Significancia-Confidencia.** Según Rousseau, et al. (1998), “la confianza reside en el grado de confidencia que uno mantiene cuando enfrenta el riesgo.” Ocupar un estado de incertidumbre depende de la confidencia que uno tiene en la persona, organización o institución que esta cuidando la cosa querida (alguien mismo o un objeto).

**CON: Significancia-Esperanza/Fe.** Además de ser características posibles de la confianza, la fe o esperanza pueden ser sinónimos del término. Entre las razones por el...
cual alguien confía en el otro o tiene confianza en algo, la fe y la esperanza representan dos ejemplos mencionados en la literatura. Según Tschannen-Moran y Hoy (2000), "la decisión de exponerse al riesgo del otro podría ser basado en muchos factores, incluyendo necesidad, esperanza, conformidad, impulsividad, inocencia, virtud, fe, masoquismo y confianza" (p. 557).

CON: Significancia-Seguridad. En las conversaciones que he tenido con los actores de SfPF, varios mencionan la seguridad como un sinónimo, característica y/o producto de la confianza. Entonces, la existencia o la sensación de seguridad en una relación de confianza es importante examinar y categorizar entre los varios participantes para ver si hay tendencias, semejanzas, diferencias o consistencias en como definen la confianza. La seguridad puede ser psicológica, financiera, personal, corporal, etc., y es significativo diferenciar los matices acerca de como cada uno utilizar el término y que quiere decir cuando se refiere a "la seguridad."
### Appendix C: Hoy & Tschannen-Moran Trust Questionnaire

#### Omnibus T-Scale

**Directions:** Please indicate your level of agreement with each of the following statements about your school from **strongly disagree** to **strongly agree**. Your answers are confidential.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teachers in this school trust the principal.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Teachers in this school trust each other.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Teachers in this school trust their students.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The teachers in this school are suspicious of most of the principal’s actions.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Teachers in this school typically look out for each other.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Teachers in this school trust the parents.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The teachers in this school have faith in the integrity of the principal.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Teachers in this school are suspicious of each other.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9. The principal in this school typically acts in the best interests of teachers.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>10. Students in this school care about each other.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11. The principal of this school does not show concern for the teachers.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12. Even in difficult situations, teachers in this school can depend on each other.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Teachers in this school do their jobs well.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>14. Parents in this school are reliable in their commitments.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>15. Teachers in this school can rely on the principal.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Teachers in this school have faith in the integrity of their colleagues.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Students in this school can be counted on to do their work.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. The principal in this school is competent in doing his or her job.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. The teachers in this school are open with each other.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Teachers can count on parental support.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. When teachers in this school tell you something, you can believe it.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Teachers here believe students are competent learners.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. The principal doesn’t tell teachers what is really going on.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Teachers think that most of the parents do a good job.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Teachers can believe what parents tell them.</td>
<td>0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>26. Students here are secretive.</td>
<td>0 0 0 0 0 0</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Appendix D: Interview Protocol

Foto (S/N)
Hora Inicial: ______________
Hora Final: ______________
Fecha: ______________
Lugar: _______________________________________________________
Entrevistado (Nombre y Título):
________________________________________________________________
Entrevistador:
________________________________________________________________

Documentos Obtenidos:

Comentarios pos-entrevista:

**Introducción.**

Gracias por estar conmigo el día de hoy para participar en esta entrevista. Le he identificado a usted como persona de interés para mi estudio porque usted tiene experiencias importantes para compartir sobre el programa Semillas Digitales. Mi estudio se enfoca en las historias, perspectivas y experiencias de los participantes para ver cómo hacen sentido del programa y su participación. Entonces, la investigación intenta documentar el entendimiento del programa de cada participante y cómo su sentido del programa compara con los objetivos y las actividades de ello. Especialmente, hay un enfoque sobre cómo entiende cada uno los roles y los significados de la confianza y el diálogo dentro del programa.

Para facilitar mis apuntes y para proveer contenido para mi evaluación, me gustaría grabar nuestra conversación hoy. ¿Está bien si grabo la conversación? Favor de firmar el formulario de consentimiento. Para que sepa, no es obligatorio que firmes.

Calculo que esta entrevista dura alrededor de una hora. Durante este tiempo quiero tocar varios temas. Si el tiempo queda corto, es posible que sea necesario interrumpirle para que podamos terminar la lógica de las preguntas. Le parece a usted?

Las temas centrales y las preguntas específicas de esta entrevista sirven para responder a cuatro preguntas principales de la investigación.

**Las Preguntas Centrales de la Evaluación.**

(1) ¿Cómo entienden los participantes del Semillas Digitales el programa en sí y su involucramiento en ello?

(2) ¿Cómo entienden los participantes del programa Semillas Digitales el rol de la confianza dentro del programa?

(3) ¿Cómo entienden los participantes del programa Semillas Digitales el rol del diálogo dentro del programa?

(4) ¿De qué manera da forma o influye el programa Semillas Digitales el enfoque a la confianza relacional y el diálogo?
Acontecimientos del Entrevistado.
¿Qué es su profesión? ____________________________________________
¿Por cuánto tiempo ha estado...
_______ en su puesto actual?
_______ con esta organización, empresa o institución?
Qué es su nivel de educación más alto?
________________________________________________________________

Preguntas de la Entrevista.
1. ¿Qué me puede contar sobre el programa Semillas Digitales?
   a. ¿Cómo entiende usted el programa Semillas Digitales y su participación en ello? (RQ1)
      i. ¿Cuáles son las características principales del programa? ¿Cuáles son los valores principales?
      ii. ¿Cuáles son los objetivos principales del programa? ¿Cuáles son las actividades principales?
   b. ¿Cómo aprendió usted sobre las características, los objetivos, los valores y las actividades del programa?
   c. ¿En su opinión, cómo se han comunicado los objetivos del programa a los participantes?
   d. ¿Puede compartir un momento memorable para usted durante su participación en el programa?
      i. ¿Por qué es este momento memorable? ¿Qué significa para usted?
   e. ¿Me puede explicar cómo el contexto (político, cultural, económico, etc.) influye el diseño y la implementación del programa?

2. Describe como ha sido su experiencia con el programa Semillas Digitales hasta la fecha.
   a. ¿Cómo se involucró usted en el programa?
   b. ¿Siente usted que su participación en el programa ha tenido un impacto personal o profesional?
      i. ¿Me puede dar un ejemplo de cada uno?
   c. ¿Puede describir un momento crítico en el programa que ha influído como hace sentido de ello?

3. ¿Cuál es su rol en el programa?
   a. ¿Cómo relaciona su rol con los roles de los demás participantes en el programa?

4. ¿Quién considera usted los participantes principales del programa? ¿Por qué ellos?
   a. ¿Puede describir sus relaciones con estos individuos?
   b. ¿Cuáles son sus roles respectivos?
   c. ¿Puede describir los roles de los distintos participantes del programa?
d. ¿Puede describir las relaciones entre los varios participantes?
e. ¿Puede hablar sobre cómo se comunican entre los participantes del programa?

5. ¿Cuál es el rol de las relaciones (personales, profesionales, etc.) y la comunicación dentro del programa?

6. ¿Qué significa la confianza para usted? - Los componentes principales de la confianza
   a. ¿Cuál es el rol de la confianza dentro del programa? En la educación en general?
   b. ¿Hay maneras específicas en que ha visto el desarrollo y el mantenimiento de la confianza dentro del programa? ¿Me puede dar un ejemplo?
   c. ¿Qué desafíos ha visto con respeto a la confianza dentro del programa? (construir, mantener, reparar, crecer)
   d. ¿Me puede dar un ejemplo de la confianza o una relación de confianza dentro del programa?

7. ¿Qué significa el diálogo para usted?
   a. ¿Cuáles son los componentes principales del diálogo?
   b. ¿Cuál es el rol del diálogo dentro del programa? ¿En la educación en general?
   c. ¿Me puede dar un ejemplo de cómo el diálogo es parte del programa?

8. ¿De qué manera la confianza y el diálogo influyen en el enfoque del programa Semillas Digitales?
   a. ¿Esta frase hace sentido para usted en el programa Semillas Digitales? (dentro del marco de relaciones que tenemos)

9. ¿Tiene usted alguna sugerencia para mejorar en el programa?

10. En educación nadie sabe todo. Cada día uno aprende de todos los que participan en el proceso. ¿Qué significa esta frase para ustedes? ¿Cómo la relaciona con el programa Semillas Digitales?

11. ¿Tiene alguna pregunta para mí?
Appendix E: Focus Group Protocol

Hora Inicial:  
Hora Final:  
Fecha:  
Lugar:  
Participantes: 

__________________________________________________________________________

______

__________________________________________________________________________

______

Moderador: Matthew J. Tarditi  
Documentos Obtenidos:

Comentarios sobre el Grupo Focal:  

*Introducción.*
Gracias por estar conmigo el día de hoy para participar en este Grupo Focal. Le he identificado a usted como persona de interés para mi estudio porque usted tiene experiencias y aportes importantes para compartir sobre el programa Semillas Digitales. Mi estudio se enfoca en las historias, perspectivas y experiencias de los participantes para ver cómo hacen sentido al programa y sus objetivos además de su participación en ello. Entonces, la investigación intenta documentar el entendimiento del programa de cada participante y cómo su sentido del programa compara con los objetivos y las actividades de ello.

Para facilitar mis apuntes y para proveer contenido para mi evaluación, me gustaría grabar y filmar nuestra conversación hoy. ¿Está bien si grabo y filmo el Grupo Focal? Favor de firmar el formulario de consentimiento.

Calculo que este Grupo Focal dura alrededor de treinta a cuarenta minutos (30 a 40 minutos). Durante este tiempo quiero tocar varios temas. Si el tiempo queda corto, es posible que sea necesario interrumpirle para que podamos terminar la lógica de las preguntas. ¿Le parece a usted?

Las temáticas centrales y las preguntas específicas de este Grupo Focal sirven para responder a cuatro preguntas principales de la investigación.

**Las Preguntas Centrales de la Evaluación.**

(5) ¿Cómo entienden los participantes el programa Semillas Digitales y su involucramiento en ello?

(6) ¿Cómo entienden los participantes del programa Semillas Digitales el rol de la confianza dentro del programa?

(7) ¿Cómo entienden los participantes del programa Semillas Digitales el rol del diálogo dentro del programa?

(8) ¿De qué manera da forma o influye el programa Semillas Digitales el enfoque a la confianza relacional y el diálogo?
Preguntas:

Para la primera pregunta quiero que todos respondan.
1. ¿Cómo se llama y cuál es su trabajo?
2. ¿Desde cuándo ha estado involucrado en Semillas Digitales?
3. ¿De qué manera está involucrado en el programa?
4. ¿Cómo describen el programa a sus amigos o a personas que no lo conocen?
   - ¿De qué se trata el programa Semillas Digitales?
   - ¿Cuáles son las características claves del programa?
5. ¿Cómo han sido sus experiencias con el programa? ¿Desde de que llegó el programa, pueden recordar un momento memorable?
6. ¿Quiénes son los participantes en el programa? ¿Cómo son las relaciones entre ellos (los participantes)?

Pensando en las relaciones entre los varios participantes en el programa...
7. ¿Cuál es el rol de la confianza? ¿Qué significa la confianza para ustedes?
8. ¿Cuál es el rol del diálogo en el programa? ¿Qué significa el dialogo para ustedes?

Reflexionando sobre los temas que abordamos hoy...
9. ¿Tiene una sugerencia para mejorar el programa?
10. ¿Cómo podemos colaborar más para mejorar el programa? ¿Quienes debemos involucrar más y cómo?
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Respuestas Cortas

Orientaciones: Favor de responder brevemente a las preguntas siguientes.

1. Cuál es su rol en el programa Semillas Digitales?

2. Cuáles son los objetivos del programa Semillas Digitales?

3. Cuáles son las primeras cinco palabras que entran en su mente cuando piensa usted en el programa Semillas Digitales?

4. Cuáles son o han sido los mayores desafíos del programa Semillas Digitales?

5. Cuáles son o han sido los mayores éxitos del programa Semillas Digitales?

Si usted tiene preguntas, favor de escribirlas aquí.
## Appendix G: Facilitator Trust Questionnaire

### Cuestionario de Semillas Digitales

#### Equipo Facilitador

**Fecha:**

**Nombre y Apellido:**

**Escuela:**

**Grado:**

**Orientaciones:** Favor de indicar su nivel de acuerdo con cada oración sobre su escuela y el programa Semillas Digitales de Fuertemente en Desacuerdo a Fuertemente De Acuerdo. Sus respuestas son confidenciales.

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</tr>
<tr>
<td>38. Los facilitadores del programa son competentes en hacer sus trabajos.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. Los docentes típicamente actúan con los intereses de los estudiantes en mente.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. Los estudiantes tratan al uno al otro con respeto.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. Los estudiantes entienden los objetivos del programa Semillas Digitales.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix H: Trust Questionnaire Protocol

I. DESCRIPCIÓN

La confianza es un término y un concepto bien amplio y complejo y se basa en múltiples factores además de ser influido por el contexto, la historia y las características de los individuales involucrados. Por lo tanto, cada persona tiene sus propios entendimientos y conceptualizaciones de ella. Según Cunningham y Gresso (1993), la confianza es la fundación de la eficacia escolar por su impacto sobre el trabajo de los docentes y las relaciones entre los habitantes de la escuela entre otros. Tschannen-Moran y Hoy (1998) definen la confianza como la disposición de un individuo o un grupo a ser vulnerable a otro actor basado en la seguridad que el otro es benevolente, confiable, competente, honesto y abierto. Basado en el análisis conceptual y empírico de Tschannen-Moran y Hoy, desarrollaron una prueba para evaluar el estado de la confianza en escuelas.

El instrumento es una combinación de la prueba original de Tschannen-Moran y Hoy (la Escala-T Omnibus) y unos elementos demás. A través de los resultados, el cuestionario mide la confianza de los docentes en: (1) la dirección; (2) sus colegas; y (3) sus clientes (p. ej. estudiantes, padres y madres de familia). Además de la versión original en que se concentra en los docentes, elaboré dos versiones más, una para los facilitadores del programa Semillas Digitales y otra para el Equipo de Seeds for Progress Foundation (p. ej. Coordinadores y Directores). La primera parte del instrumento es una serie de frases con números al lado que representan el nivel de acuerdo o desacuerdo con lo que dice cada elemento. La segunda parte tiene unas preguntas abiertas para respuestas cortas.

II. PROCEDIMIENTOS

Por lo general, los procedimientos a seguir son iguales para cada actor educativo.

1. El facilitador explique a los docentes que el cuestionario intenta entender el estado de confianza;
2. Llenar la información biográfica y básica al inicio de la primera página;
3. Seleccionar de 1 a 6 para cada frase (1 a 41);
4. Responder a las preguntas abiertas.

En total, se calcula que debe delatar unos 15 a 20 minutos a completar. Hay dos opciones posibles para completarlo. Una es hacerles llenar el cuestionario en la presencia del facilitador. La otra es dejarles llenarlo en su tiempo libre y regresar a coleccionarlo después. Si hacen la segunda opción, favor de decirles que tienen que hacer el cuestionario solos y no pueden colaborar con sus colegas sobre las respuestas.
Procedimientos específicos por participante:

(1) Cuestionario de Confianza - Versión Docentes (Pestaña 1)
   a) Se aplica el cuestionario a cada docente dentro del programa Semillas Digitales. Si ha sido parte del programa directa o indirectamente debe participar en el cuestionario. Por ejemplo, si es maestro de secundaria y ha participado en las capacitaciones, se incluye en el cuestionario.

(2) Cuestionario de Confianza - Versión Facilitadores (Pestaña 2)
   a) Cada facilitador llena el cuestionario para cada escuela. Por ejemplo, Nayibe tiene que llenar este cuestionario primeramente para Flor de María Rizo y luego otra vez para Buenos Aires, dos cuestionarios en total.

(3) Cuestionario de Confianza - Versión Equipo SFPF (Pestaña 3)
   a) Las coordinadoras y directoras de Semillas Digitales y la fundación respondan al cuestionario al nivel programático y no hablando de una escuela específicamente.

III. PROCESAMIENTO DE DATOS: (Mateo lo hará III y IV)

Los resultados de los ítems en el cuestionario corresponden a las siguientes categorías:

- Confianza de Maestros en sus clientes - Ítems 3, 6, 10, 14, 17, 20, 22, 24, 25, 26*
- Confianza de Maestros en el Director - Ítems 1, 4*, 7, 9, 11*, 15, 18, 23*
- Confianza de Maestros en sus colegas - Ítems 2, 5, 8*, 12, 13, 16, 19, 21

*El puntaje es al revés. por ejemplo: 1=6, 2=5, 3=4, 4=3, 5=2, 6=1

- Confianza de Maestros en sus clientes (TCI) = El puntaje para ítems 3, 6, 10, 14, 17, 20, 22, 24, 25, 26* está sumado y dividido por 10.
- Confianza de Maestros en el Director (TP) = El puntaje para ítems 1, 4*, 7, 9, 11*, 15, 18, 23* está sumado y dividido por 8.
- Confianza de Maestros en sus colegas (TCo) = El puntaje para ítems 2, 5, 8*, 12, 13, 16, 19, 21 está sumado y dividido por 8.

Puntaje Estándar para Confianza en Clientes (TCI) = 100(TCI-3.53)/.621+500
Puntaje Estándar para Confianza en el Director (TP) = 100(TP-4.42)/.725+500
Puntaje Estándar para Confianza en sus colegas (TCo) = 100(TCo-4.46)/.443+500

IV. ANÁLISIS:

Hemos estandarizado los puntajes de la escuela contra los datos normativos proveídos de un muestro de Ohio. Por ejemplo, si el puntaje de una escuela es 700 en la confianza de los docentes en sus colegas, son dos desviaciones encima del puntaje promedio de la confianza de docentes en sus colegas de todas las escuelas del muestreo; es decir, la escuela tiene más confianza de docentes en sus colegas que 97% de las escuelas del muestreo.

- Si el puntaje es 200, es menor que 99% de las escuelas.
  Si el puntaje es 300, es menor que 97% de las escuelas.
Si el puntaje es 400, es menor que 84% de las escuelas.
Si el puntaje es 500, es al nivel promedio.
Si el puntaje es 600, es mayor que 84% de las escuelas.
Si el puntaje es 700, es mayor que 97% de las escuelas.
Si el puntaje es 800, es mayor que 99% de las escuelas.

V. REFERENCIAS:
Appendix I: Voluntary Informed Consent

You are being invited to take part in a research project about the experiences, perspectives and understanding of participants in the Semillas Digitales Program. Your participation is voluntary. Before you decide if you want to participate, Matthew will tell you more about the project and give you this document to read. You do not have to make a decision now. If you do not understand what you are reading, ask Matthew to explain. You can also ask someone to read the form to you. If you decide to participate, please sign both copies of this form and keep one so that you can have our contact information and answers to questions about the study.

What is this project all about? What do I have to do? The purpose of this project is to learn more about the experiences, perspectives and understandings of participants like you that have been a part of the Semillas Digitales program. We plan to use content from your interview in a doctoral dissertation that will include written text and audio-visual material in the form of short films. We may select segments of the video that contain your picture and your voice. These short films will be shown to help people better understand the Semillas Digitales program through participants’ experiences and perspectives. We may also use small segments of your video in a presentation of research made to professors and students at a university, to researchers at a conference, or to the public at large.

What do I get out of it? Do I have to participate? There is no direct benefit to you if you participate. If you do participate, you could help us understand more about the experiences and perspectives of participants in the Semillas Digitales program like you. This may help improve the program and inform its direction moving forward. You do not have to participate if you do not want to, and there will be no penalty for not participating. If you decide to participate now but decide you don’t want to continue at any time, just let us know and you can stop participating.

Who do I call if I have questions or complaints? You can contact Matthew Tarditi (matthew.tarditi@gmail.com or +1 609-238-9574) or Martha Alicia Moreno (mmoreno@seedsforprogress.org or +505 2255-9200 ext: 1402) for more information. If you can’t reach us or want to talk to someone else, you may contact the Office of Regulatory Affairs at the University of Pennsylvania with any questions, concerns, or complaints. Their phone number is +1 215-898-2614.

When you sign this document, you are agreeing to be videotaped.

Please check this box if you give your consent for portions of this videotape to be shown for educational purposes.

Name ___________________________ Signature ___________________________ Date ___________________________


Appendix J: Consent to Photography, Film, Record and/or Interview - Adult

I hereby irrevocably agree to allow The Trustees of the University of Pennsylvania, owner and operator of its Graduate School of Education, and its employees, independent contractors, personnel, and other agents, representatives, affiliates, successors and assigns (collectively, “PennGSE”) to take, distribute, display, publish, perform and use photographs, film, and images of me. I also hereby irrevocably consent to the recording, distribution and use of my voice and images, appearance, and likeness in any media now known or hereinafter discovered, including but not limited to film, videotape, audiotape, still photography, broadcast, and digital media.

I understand that Matthew J. Tarditi currently plans to use my name, voice, images, and/or appearance and likeness in a doctoral dissertation and documentary film and derivative works of the Film, which might include advertising or publicity for the Film. I acknowledge that Matthew J. Tarditi owns and will own all right, title and interest in the Film and the Derivatives, and that I do not and will not own any part of the Film or any Derivatives. I also acknowledge that I do not have any right to inspect or approve or review in advance any Film, Derivative, or other uses by Matthew J. Tarditi of my voice, images and/or appearances and likeness.

I hereby irrevocably release Matthew J. Tarditi from any and all claims, demands or causes of action, and from any and all financial liability, in connection with this consent and the use of my voice, images, and/or appearance and likeness in accordance with this consent, including, but not limited to, any claim regarding invasion of privacy or a right of publicity.

I am signing this consent, understanding that I have not and will not receive any money or other compensation for signing this consent. I also hereby irrevocably waive any right I might have, if any, to any payment or other compensation in connection with the dissertation, Film, any Derivatives, or any other uses of my name, voice, images, and/or appearance and likeness. I am signing this consent because I have read and understand the terms in this consent, and have had an opportunity to ask questions and discuss this document before signing it.

I am over eighteen (18) years old.

Please Print Your Name:____________________________________________________________

Your Signature:____________________________________________________________________

Date You Signed:___________________________________________________________________

Your Contact Information (Current telephone and/or email address)—We request this in case we need to contact you about this document:
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Appendix K: IRB Approval Document

Sharon M. Ravitch
Grad School of Education
3700 Walnut St
rvitch@gse.upenn.edu
Attn: Matthew Tarditi
mtarditi@gse.upenn.edu

PRINCIPAL INVESTIGATOR: Sharon M. Ravitch
TITLE: Digital Seeds Case Study: A phenomenological exploration of stakeholders' experiences in an educational program in Nicaragua
SPONSORING AGENCY: No Sponsor Number
PROTOCOL #: 820711
REVIEW BOARD: IRB #8

Dear Dr. Ravitch:

The above referenced protocol and was reviewed and approved by the Executive Chair (or her authorized designee) using the expedited procedure set forth in 45 CFR 46.110, category 6,7, on 05-Sep-2014. This study will be due for continuing review on or before 04-Sep-2015.

Approval by the IRB does not necessarily constitute authorization to initiate the conduct of a human subject research study. Principal investigators are responsible for assuring final approval from other applicable school, department, center or institute review committee(s) or boards has been obtained. If any of these committees require changes to the IRB-approved protocol and informed consent/assent document(s), the changes must be submitted to and approved by the IRB prior to beginning the research study.

If this protocol involves cancer research with human subjects, biospecimens, or data, you may not begin the research until you have obtained approval or proof of exemption from the Cancer Center’s Clinical Trials Review and Monitoring Committee.

The following documents were included in this review:
- HS ERA Application, confirmation code: bgaicaf, submitted 8.29.14
- Interview Form, uploaded 7.10.14
- Semillas Digitales Questionnaire (Spanish), uploaded 7.10.14
- Study Procedures, uploaded 7.10.14
- Informed Consent Form (Spanish), uploaded 8.29.14
- Informed Consent Form (English), uploaded 8.10.14

When enrolling subjects at a site covered by the University of Pennsylvania's IRB, a copy of the IRB approved informed consent form with the IRB approved from/to stamp must be used unless a waiver of written documentation of consent has been granted.

If you have any questions about the information in this letter, please contact the IRB administrative staff. Contact information is available at our website: http://www.upenn.edu/regulatoryaffairs.

Thank you for your cooperation.

Sincerely,

IRB Administrator
BIBLIOGRAPHY


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Kearns, L. (2016). The construction of 'illiterate' and 'literate' youth: the effects of high-stakes standardized literacy testing. Race, Ethnicity and Education, 19(1), 121-140.


http://www.merconcoffeegroup.com/about-us/our-history/


