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The Green Classroom Initiative: Developing a non-formal educational resource to promote positive youth development in an elementary school in the Central Valley region of Costa Rica.

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Youth Development in Costa Rica:

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Dedication and Acknowledgements

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List of Abbreviations

Community Economic Development   CED

Course-Linked Capstone   CLC

Diagnostic and Statistical Manual of Mental Disorders   DSM

Ministerio de Educatión Pública (Ministry of Public Education)   MEP

Patronato Nacional de la Infancia (Child Protection Agency)   PANI

Peace Corps Costa Rica   PCCR

Peace Corps Volunteer   PCV

School for International Training   SIT

Teaching English as a Foreign Language   TEFL

United States Agency for International Development   USAID

United Nations International Children's Emergency Fund   UNICEF

Youth Development   YD

Youth Program Leadership   YPL

ABSTRACT

While Costa Rica is not the most under-developed country in Central America, it still experiences poverty and school drop outs on par with neighboring countries and some exceptional regions of the United States. The primary focus of this thesis is to discuss how the "Green Classroom" initiative, a Peace Corps Volunteer's attempt to create sustainable change, is rooted in modern educational theories; and how they have influenced the organizations and practical methodologies used to engineer this project. A secondary focus is on the process the volunteer and vital project partners experienced to create a sustainable educational resource for a primary school in the central valley region of Costa Rica. Survey responses from educators and other school staff offer final insights into the real impact of the Green Classroom as a resource that engages community members at all levels.

We shall not cease from exploration

And the end of all our exploring

Will be to arrive where we started

And know the place for the first time

-T.S. Elliot

<u>Introduction</u>

As part of the requirement for a Master of Arts in Sustainable Development from SIT Graduate Institute, I completed my six-month practicum while serving two years as a Peace Corps Volunteer (PCV) in Costa Rica. For me joining Peace Corps provided an opportunity to witness and participate in the painstaking process of the sustainable or grassroots approach to development that I had studied at SIT the previous year. Peace Corps Costa Rica (PCCR) provided me the opportunity to do this work, more specifically, through youth development. The PCCR program places a strong emphasis on training for by requiring all volunteers to participate in a three-month intensive training program before being sent to their assigned sites. The training program is designed to create clarity in their role and function for volunteers as they venture into their communities to become development professionals. In addition to intercultural competency and language instruction, we were given technical tools, such as the SWOT analysis that helps the community self-identify **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats. This and similar tools allowed us to discover the unique realities in our sites. They helped to uncover a number of unmet needs within the school I was volunteering at, Los Jardines Elementary, as well as potential project partners willing to collaborate with me in addressing these concerns.

Prepared with skills of analysis from SIT and practical tools from our training, my next two years became a constant activity in deconstructing and exploring a new understanding of grassroots youth development. As a volunteer I participated, assisted, and led many different projects with multiple counterparts and with varying levels of responsibilities. The featured project of this thesis was the only project I watched grow with great potential from the beginning. The "Green Classroom" idea was an organic progression of a proposal my project partner had set in motion before my arrival. His idea was to transform part of the school's

property into a functional outdoor educational setting while simultaneously bringing back native trees and plants to a barren hilltop, essentially reforesting the area. This original idea included a level of community engagement, hoping to broaden the benefits for the entire community, including some at-risk families. The "Green Classroom" now represents the transformation of school grounds enhanced with the environmentally resourceful elements, such as a rain-water collection tank, compost structure, a designated area for individual classroom gardens and a grassy play area that serves as a safe zone in evacuation scenarios for students. The student's participation in gardens and group projects adds a layer of leadership development as well. The momentum it has gained comes from the vision and understanding of the educational possibilities while it benefits teachers, staff, students, parents and the community as a whole. The Green Classroom also serves as an invitation for educators, students and relatives to continue to think outside of the box regarding education and learning.

Primarily, this paper's focus is to connect a brief theoretical review to the influence behind the evolution of the Green Classroom initiative from idea conception to leveraging existing resources to creating a sustainable resource for a priority population. The secondary focus regards the impact it has had on the teachers and staff as they have adapted to going beyond their classroom to teach their students and create positive learning environments. The paper is constructed in a Course-Linked Capstone (CLC) format, revisiting relevant theory from the Youth Program Leadership (YPL) course taken during the on-campus phase at SIT. Personal reflections from hands-on experience will balance the concepts explored in the studied theories with the practical applications examined in the off-campus phase as a Peace Corps Volunteer (PCV) Youth Development (YD) Coordinator.

The initial writing will focus on creating a theoretical knowledge base of child and youth development. The influence of iconic psychologists, such as Erikson and Piaget, play a major role in laying the ground work for modern non-formal educational theory, from which the Green Classroom benefits greatly. The principles of youth development will also be explored as this project utilizes them to create the next generation of successful leaders in their communities. Examples and concrete applications of youth development are identified as well, including those acquired through Peace Corps Trainings. In addition to relevant theory and modern approaches to youth development, we will explore the collaborating institutions whose visions and missions reflect a growing commitment to positive youth development. That will later be followed by the history and evolution of the Green Classroom project as it became the primary focus of my work as a Peace Corps Volunteer. In the subsequent section, I will present the feedback from a survey that was sent to all available teachers and staff at the Los Jardines Elementary school in San Ramon of Alajuela in Costa Rica; the site for the implementation of the Green Classroom.

Methodology

The survey was formatted with open-ended questions, giving the respondents an opportunity to add qualitative feedback. It was not made mandatory, and there was no incentive to participating. The survey questions asked the responder to reflect on the condition of the school before the project began and their opinion on how the "Green Classroom" project addressed challenges the school faced. It also asked their opinion on the sustainability of the project, whether it was something that would maintain value in the future. In total, 15 teachers, staff and administration were offered this survey. The answers received are presented anonymously, and their non identifiable written responses will be available as an Appendix, with the exception of the Guidance Counselor's whose document was incompatible with the software

used for this thesis. The goal here is to reveal their perspectives on the project as a whole, whether it serves them as teachers and offers something to the students, and if they feel it addresses the existing needs of the school. As the timeline of a Peace Corps Volunteer is generally not be long enough to see a truly sustainable project all the way through, it is often left to the community to carry on with it and grow as the project grows, to see it become a permanent fixture in that community, or whether it is sustained at all. I will rely, therefore, on feedback from the people whom the project was handed off to and those who stand to benefit the most from the project to get genuinely invested perspectives on the project's impact.

This thesis hopes to contribute an example to the growing field of positive youth development practices while offering supportive theories from a variety of directly and indirectly related fields of study. The intent is not to advocate for a total education revolution, but rather to demonstrate the added benefits of implementing non-formal education techniques as an alternative to traditional methodologies.

<u>Development Theory</u>

While attending SIT Graduate Institute, one of the hardest assignments I had was to define "Sustainable Development" in ten pages or less. Even after studying theories of social change, economics, globalization and other related fields, the answer seemed far less obvious than anticipated. Youth development, as a sub-category has turned out to be equally interdisciplinary and broad in definition. Steven Hamilton, Mary A. Hamilton and Karen Pittman explain the nuance of development by defining it as a process and not a goal. They quote John Dewey (1938) in identifying that the purpose of development is to enable a person to continue to develop (2004). There is no end product but rather a capacity that is built out of the process. Merriam-Webster defines it as simply, an "act or process of creating something over a period of

time" (n.d.). Therefore, while versatile in application, it needs clarification depending on which field you are discussing. For example, this thesis briefly explores concepts from child and human development in the field of psychology. Development here refers to an individual's advancement through those stages based on biological processes. This helps to inform the "why" behind customizing programs to be age, culture, and environmentally appropriate. In greater depth, this thesis will discuss positive youth development and its application in individual and community growth. These particular fields inform the "how" behind the successful frameworks of alternative education practices as they become more contextualized.

Interdisciplinary Origin

Hamilton, Hamilton, and Pittman provide a three-prong definition of youth development. The first is the "natural process" or the "growing capacity for young people to understand and act on the environment" (2004). The other two are "principle" and "practice" and will be discussed in greater detail in subsequent sections. This first of three components refers to the human and psychological elements inherent in humans as they play out in the larger social context. Child development is commonly understood through stages that many psychologists have reiterated in different models over the last century. Piaget and Erickson offer two different frameworks that identify specific changes in cognitive abilities as youth age, with each stage building on the one before. Piaget's stages emphasize an on-going learning process indicates that children are not less intelligent than adults but rather that learning is an "inherently active process" they participate in all the time (Cherry, 2015). Out of his four main stages, the third stage, children 7-11 years old, is the concrete operational stage where children begin to demonstrate logic and self-awareness of their own unique ideas. Erikson, on the other hand, outlines developmental stages throughout a lifetime, not just in childhood. His fourth stage identifies youth at 6-11 years

old who have come into the Industry vs. Inferiority stage. At this stage, a child's social environment expands and includes classmates, and they begin to take pride in accomplishments (Cherry, 2015). Here we also see the origin of the Constructivist theory and experiential learning. Both of which are based on the observation that youth, and adults, construct their own understanding of the world, through experiencing things and reflecting on them", (WNET Education, n.d.).

Engaging with peers, finding a sense of competence, achievement, and self-confidence are the main skills developed in this stage. Traditional models of education have students sitting in desks listening to lectures and taking notes. By using the garden space and Green Classroom elements, teachers cultivate a space for students to set goals and share ideas. They are encouraged to use their creativity for group problem solving. At these stages those enrolled in school will be in a primary or elementary school, positioning these institutions as the platforms where the majority of this foundational experience takes place. It sets the stage for leadership and self-confidence building, adding to a list of strengths that will allow them to take on more challenges in the future. Recess at the school where the project takes place is an example of where their behavior and social interactions were observed in a larger setting than just in the classroom. It was time, at the end of every second lesson, for students to run around and release pent-up energies. If it was raining or they couldn't play soccer, they would play the games they made up, which were most often chasing and tagging games. The leaders were frequently louder than the rest and had the final say in game regulation calls. They were usually older than the others and had behavioral issues for which they were sent to the school psychologist or guidance counselor on occasion. Girls rarely played soccer; if they did they were usually younger. The older girls were either leaders in other games or kept to themselves in a quietly huddled group.

Outside of school, these groups would hardly have the opportunity to interact, again establishing the school as an opportunity to build leadership skills and offer creative outlets. It also gives students a safe space to interpret their relationship between peers, friends, and authority figures as social awareness emerges and peer pressures are introduced. During this stage, as Erickson points out, the sharing of experiences and accomplishment shape a child's sense of industry and competence. The school environment provides positive guidance, decreasing the potential negative impact of building confidence in social situations, often caused by peer rejection. This fascinating period in life is the perfect stage for creating a school-wide project that all can participate in, explore learning opportunities, and discover positive social skills with guidance from educators and support from the community.

In the example of our minimally structured recess, we still observed the students taking it upon themselves to create their own games. This shows how essential play is to the development of young people, whether they realize it or not. The significance of play has gained global momentum. Organizations like the United Nations (UN) have a plethora of reports citing the positive impact sports and play in education have on the overall development of youth and children. The UN's Millennium Development Goals stress this point and conclude that play motivates youth to make healthier lifestyle choices and improves concentration in school (United Nations, 2009). It includes elements of child psychology by examining an individual's behavior within the context of play. It creates a place free of guidelines where youth are fully engaged in self-discovery and building social skills (Yalowitz, 1995). In a designated physical green space for play, children are free to set goals, succeed, or fail and try again. They can build on their experiences from failing or succeeding while using their imagination. With no grades at stake, they are allowed to be as industrious, collaborative or inventive as they wish. This idea of play

complements the previous theories of stage development from Erickson and Piaget. Capitalizing on this moment in life, when social skills and a sense of accomplishment are most important, we lay groundwork for later stages where self identity and drive and work ethic become our focus.

A movement found in schools around the world has been the increased attention on growing your own food locally. From Peace Corps projects to United Nations International Children's Emergency Fund (UNICEF) initiatives, there are small urban gardening programs popping up globally, encouraging youth to explore and develop skills in planting, harvesting, stewardship and conservation. Creating the school garden provides opportunity for teachers to integrate *teachable moments* in their daily lessons by connecting their outdoor experience with the subject matter or teaching transferable skills such as leadership and collaboration. It allows students to participate at their comfort level and build on existing strengths, like leading, creating, or motivating. The pressure to perform is eliminated when there is no grade, and yet there is still a goal to reach. The students are free to use non-curriculum based resources to problem solve and work together to create a tangible product they can bring home and in the case of the school garden, they can even eat it. These skills are difficult to nurture in a traditional classroom setting which is why recreation and alternative education models are a critical part of primary school education.

A considerable amount of gratitude is owed to the interdisciplinary elements behind the Green Classroom. It goes beyond general community youth empowerment projects and gives the power back to young people, having a voice in learning activities while inspiring interpersonal growth. Without the progress of modern theories, in psychology, education and youth development, this project would be implausible. Without the support and input of diversely trained professionals, the idea for an outdoor classroom wouldn't have been endorsed. A wealth

of research has been done in each of the aforementioned fields. While it cannot all be presented in this thesis, these examples reflect the organic development supportive theory behind the Green Classroom project and the interconnectivity of related fields of study. The following section and sub-sections explore the values and principles that guide modern non-formal education theory and the concrete practices and tools born from the interdisciplinary approach of youth development.

New Approaches; Principles and Practices

Referring to Hamilton, Hamilton, and Pittman, the final two of three components of their definition of youth development are "principles" and "practice". These principles reflect an approach that emphasizes active involvement in growing capacity in young people while the practice refers to the programs designed around these principles. "Youth development arose as a counter-balance to the emphasis in problem prevention and treatment programs on categorizing youth according to their deficits and trying to remedy them" (2004). With 1.5 billion youth globally, the need for organizations and governments to include a youth element in their vision and goals is increasing (UNICEF, n.d.; United Nations, 2009). It wasn't until the middle of last century that the federal government started funding initiatives to address issues unique to the needs of young people in the United States (UNICEF, n.d.). Youth have historically been excluded from involvement in their learning process. Perhaps it was because what constitutes general education has traditionally been defined by council members and certified professional adults. Young people have also been considered dependents and in need of guidance to mature successfully into adulthood. Youth development has come a long way to be currently positioned on a positive platform, where youth are understood as full of potential, equipped with "unique talents, strengths, interests and future potential" (Damon, 2004). Early child psychology reflected

a cultural acceptance that we were born with deficits or problems that were society's responsibility to fix. Young people are often depicted in the media as problem initiators and delinquent. Each revision of the Diagnostics Statistical Manual (DSM), we were introduced to new deficits, disorders, and syndromes.

> "This problem-centered vision of youth has dominated most of the professional fields charged with raising the young. In education… a huge share of resources has been directed to remediating incapacities of young people with syndromes, such as attention-deficit/hyperactivity disorder. In child psychology, intense attention has been directed to self-esteem deficits, especially among girls…" (Damon, 2004, p.14).

As recent as the 1980's research begins to reflect a shift in the way we, as practitioners, understand our roles in their development. Research began identifying youth attributes, potentialities, and competencies instead of deficits and disabilities. By studying *resiliency*, researchers like Norman Garmezy and Emily Werner shed light on the assumption that children are fragile. Their research identified *resiliency* as a quality developed and used to overcome many adversities, actually being able to thrive under significant stressors. Bonnie Bernard later expanded on Werner's research and connected *resilience* with other positive qualities such as hopefulness, persistence, success orientation, and a sense of purpose (1993). "Such claims and data created underpinnings for the positive youth development approach" (Damon, 2004). This research started the discussion of positive youth attributes in a world of negatives. The 1990's brought Peter Benson and colleagues who established "developmental assets," an approach that focused on an array of contributing factors that influence youth development, both external and internal, that can be built upon to create positive social identity and behavior (Damon, 2004).

Asset-Based Approach

The Search Institute is the leading agency that has been conducting research in asset-based youth development for decades. Since the 1990's, they has surveyed over 3 million youth

from diverse backgrounds and circumstances. One of their most versatile tools for application or guidance has been the 40 Developmental Assets checklist. This is a list that examines internal and external attitudes, values, and support systems of participants. According to the Search Institute's Scales and Leffert, the more assets someone can identify with, the more likely they present with positive behaviors and attitudes concerning leadership, good health habits and success in schools. Additionally, they show stronger resiliency facing adversities and challenges such as the risk of drug/ alcohol abuse, a tendency towards violence, and unhealthy sexual practices (2004). Support, empowerment, boundaries and expectations and constructive use of time at home, school and in the community are key external factors they have identified as assets. Internal assets are based on the individual's commitment to learn, their positive values (i.e. honesty, responsibility, integrity and equality), their social competency and positive identity (i.e. self of purpose, personal power, and future outlook) (Search Institute, 2004). These assets offer protection from risks they may be exposed to as well as present opportunity for achievement. The Green Classroom, for example, offers a place for students to learn new skills, explore interests and potential career options, apply a positive outlook to future prospects, as well as gain awareness of how one's actions impact the larger community (National Collaborative on Workforce and Disability for youth [NCWD], 2004). The student's direct interaction with the environment and conservation technology creates a sense of responsibility and connects the student to their school campus.

It is important to understand youth in terms of strengths and potentiality as program development is guided by these perspectives. The Search Institute's research has been "widely utilized" all over the world to help identify "a set of skills, experiences, relationships, and behaviors that enable young people to develop into successful and contributing adults"

(Research: Developmental assets section, para. 1). Programs such as the Youth Development

sector of Peace Corps benefit from this research as it narrows their focus to specific attributes

and skills for youth and/ or their support systems to improve upon. This perspective, for

example, can gear projects towards encouraging positive self esteem, leadership in communities,

visualizing a positive outlook of their futures by committing to staying in school to accomplish

goals they learn to set for themselves.

While most definitions qualify youth development with the ability to complete critical

tasks or attain certain objectives (NCWD, 2004), the Search Institute, and other youth

development organizations recognize the utility of these skills as youth engage in employment

opportunities. The NCWD has adapted the following working definition to guide their mission

and program goals:

"Youth development is a process which prepares young people to meet the challenges of
adolescence and adulthood through a coordinated, progressive series of activities and
experiences which help them to become socially, morally, emotionally, physically, and
cognitively competent" (2004, pg. 3-4).

The long term vision incorporated into program develop gives a greater scope to the

possibilities. Programs that invest in the aforementioned attitudes, skills, and knowledge are

optimal for preparing youth to manage and benefit from future choices and situations they may

face as they advance into adulthood.

Education Reform

The idea that one size education should fit all is no longer sufficient. Therefore an

updated approach to effective teaching strategies has become a meaningful area of research. One

alternative analysis for non-traditional or progressive education is described by Kohn in his book

The Schools our children Deserve: Moving Beyond Traditional Classrooms and "tougher"

standards. First, he outlines the two "schools" of thought on education, identifying the traditional four-wall education system as ineffective. Alternative education techniques, as Piaget and Freire have identified, promote the active learning process, as opposed to static memorization. It is the idea that education "engages discovery and innovation, reflection and problem-solving," (1999). In his book, Kohn points out those earlier philosophers such as Piaget and Dewey confronted the status quo and helped to reimagine education to be more democratic and fluid. Piaget is mentioned for his analysis of the relationship between the learner and their environment. The traditional two- dimensional classroom layout, with teachers up front and students quietly seated in rows, was challenged when it was proposed this was not the best way for anyone to learn, especially young learners. They suggested a more dynamic process that included analysis, synthesis, and reflection of an experience. While this concept was not considered mainstream at first, this approach would inspire others to challenge the existing state of education for years to come. So essential are their theories that they are still taught today in fundamental education courses.

Kohn also analyzes the efficacy of traditional education and the difficulties progressive education has faced and still faces trying to make a significant impact on educational reform. A good indicator of the longevity of this particular battle is "banking", a term Freire coined in the middle of the 20th century as a result of his critique of the Western model of education. "Banking" refers to the static classroom setting where teachers recite a narrative to students for them to memorize, effectively "depositing" new information. The result of this practice produces passive students and makes the teachers sole responsible party for the all new data acquisition. The "banking" methodology, together with a rigid predetermined definition of education, has lead to a standardization of testing now used to identify intelligence, or to judge how much of

this new information the students have retained. This narrowing of the definition of education

has led to programs such as "No child left behind"; a program that swept the United States in the

early 2000's. It set a national bar for all students, without regard to ability or circumstance.

While it may have begun with good intentions to bring a functional baseline that all educational

institutions could use, it has not been as successful in practice. It "judges schools and children

based solely on standardized test scores at the expense of preparing them with 21st century

skills" (National Education Association, 2009). This program has fostered a "teach to the test"

ideology that "narrow(s) the curriculum and divert(s) resources from art, music, social studies

and physical education" (National Education Association), tying the hands of many educators

and stunting the creative process of learning for many students.

This ideology has spread to developing countries as cultural practices are shared and

adopted. The Ministry of Public Education (MEP) of Costa Rica also administers a standardized

testing program in order to advance in grade level, both in primary and secondary institutions. I

observed an overwhelming amount of students who were held back either in one or two classes

or by entire grade levels and parents who regarded it as normal. Art, music, and physical

education were suspended for lack of financial resources; essentially viewed as non-essential

core subject material. When approached with proposals for projects, most teachers were hesitant

about using classroom time for workshops and even less inclined to utilize time before or after

class, as this cut into planning and committee meeting time for most of the year. This restriction

on creativity can be just as detrimental for teachers as it is for students and the learning process.

> "For apart from inquiry, apart from praxis, individuals cannot be truly human.
> Knowledge emerges only through invention and re-invention, through restless, impatient
> continuing, hopeful inquiry human beings pursue in the world, with the world, and with
> each other" (Freire,1968).

Here, Freire hints at one of his most influential ideas; that education is political. The relationship he brings to light has helped influence the shift away from "banking" and static teaching methods towards more of a focus on individual inquiry and an emphasis on knowledge rather than information acquisition. The Green Classroom project gives students the chance to participate in a garden or the maintenance of a compost project. Space was also built into the design for future projects, inspiring critical thinking, and resourcefulness. Engaging youth at a critical level teaches a transferable skill, something Freire though should be present in education, making them more engaged in the larger context of society as adults.

When we examine how the Costa Rican government prioritizes education in its spending, more so than most governments spend on their military, we see hints of Freirian sentiment; accepting that education is a political value, an investment in the betterment of their citizens and therefore a more stable, inclusive, and fruitful society. Not just any education, but an education taught independent of an overpowering dichotomy that understates the potential of students. While this sentiment is reflected in MEP's organizational vision and objectives (see Appendix A), the reality for each institution depends on the availability or management of human and financial resources. These variables indicate room for growth in the Costa Rican education system as well as in the work Peace Corps is doing with MEP.

Experiential Learning

Experiential learning is the practical archetype in response to non-traditional education theory. It has been developed as a hands-on tool for designing a learning environment, from workshops and trainings to general teaching praxis. Depending on whom you ask, the explicit definition of experiential learning varies. Kolb, who is not the originator of experiential learning, but whom is often cited in non-traditional education theory, explains in his book on Experiential

Learning Theory (2014) the difficulty experiential learning has had along the way. Some empirical scientists have criticized it for being an erroneous method of learning, full of bias with a lack of any new real information gained from the actual experience. Over the years it has been recast in the visually expression of a continuous cycle: experience, reflective observation, drawing conclusions and active (re)experimentation. The cornerstone of learning, as Kolb reflects Piaget's influence in the field, is based on the "continual transaction between assimilation [of experiences into existing schemas] and accommodation [of schemas to experience]" (Kolb, pg 23). He makes the point that the experience alone is not necessarily the crux of learning potential, but rather the reflective practice afterwards where the learner identifies a new perspective. The Experiential Learning Theory is based, first, on the individual, their learning styles and the context in which they are learning. "When learning is conceived as a holistic adaptive process, it provides conceptual bridges across life situations such as school and work, portraying learning as a continuous, lifelong process" (Kolb, 1984). This emphasis on process over outcome sets experiential learning theory apart from traditional approaches to learning.

Other professional contributions in the field of education include Jennifer Moon who wrote "A Handbook of Reflective and Experiential Learning: Theory and Practice" in 2004, in which she draws together a foundation for the process of learning in general then examines the reflective practices that define experiential learning. It is not unusual, Moon says, for activities on courses such as "brainstorming, syndicate work, and games or simulations to be described as learning methods" or facilitation methods. Moon separates learning from essentially instruction in a traditional perspective, which it is to be "absorbed" by the learner. When she rejects the "brick wall" methodology and applies the constructivist model, we see learning as a building of a

network of connections, linked ideas that the learner uses to make sense of their world (Moon, 2004). With this new understanding we can then make more informed decisions going forward, rounding out the experiential learning cycle.

The progress youth development has experienced in the last few decades has made leaps and bounds in being able to reach students at their level. It has become more inclusive and dynamic while attempting to steer away from treatment and problem based approaches. The research that the Search Institute conducts continues to expand and is accessible as a resource for educators and youth support systems. Youth development, with global recognition has become has become, for many countries, a political issue. Poignant theories from Freire and Piaget are still actively called upon to explain modern education praxis. Despite early non-acceptance of its scope and relevance, their challenge to tradition has expanded the discourse of education and brought to light an alternative to tradition and innovative methodology. Progressive models like asset-based and experiential learning theory are now recognized for their efficacy and application in educational settings around the world. The subsequent section presents key institutions in Costa Rica and in the United States that have been heavily influenced by these advances in education and youth development.

Collaborating Institutions

Peace Corps

The Peace Corps and Costa Rica have maintained a relationship almost as long as Peace Corps itself has been established. In 1961, The United States Congress passed the Foreign Assistance Act, enacting the United States Agency for International Development (USAID) which later created the Peace Corps. From 1963 to present day Peace Corps Costa Rica (PCCR) has leveraged over 3,600 volunteers in the effort to help fulfill their development goals (Peace

Corps, n.d.). For over 50 years PCCR has worked closely with Costa Rican government establishments and community partners to identify and address the needs of the country. While the needs continually evolve with the development of Costa Rica, three main areas of focus have been determined by collaborating institutions to build the framework for PCCR; Youth Development (YD), Community Economic Development (CED) and Teaching English as a Foreign Language (TEFL). While these are country specific, Peace Corps also has three overarching global goals (see Appendix A). The first goal of Peace Corps is to meet the needs for trained men and women in interested countries. In other words, Peace Corps does not exist in countries that have not solicited the organization for help. This ensures that the development initiatives are community-based and not imposed by an outside government or governing agency. The two other global goals prioritize bringing awareness of cultural realities from host country nationals to volunteers and from volunteers to friends and family of the volunteer in the United States. Even though USAID has stopped direct funding of Peace Corps in Costa Rica, it survives based on a grant from USAID that allows for the continued collaboration between the Peace Corps and Costa Rica.

While other areas of focus continue to play a significant role the grassroots development of Costa Rica, the evolution of the YD program is the most relevant to the development of the main project in this thesis. "The Youth Development Project began in 1990, in collaboration with the Costa Rican Child Protection Agency (PANI), a government institution dedicated to the promotion and protection of child and adolescent rights" (PCCR, 2012). Volunteers would work in field offices, primary and secondary schools on prevention and projects with PANI, however, the scope was so broad it became difficult to provide effective training, monitoring and reports to the Washington, D.C. headquarters. The YD program staff attended a series of events in Costa

Rica that spotlighted the most imperative social issues and a network of institutions and organizations which were dealing with them. From there the program's framework narrowed in focus and expanded in resources.

> "As a result, the project framework limits the work of volunteers to promoting life skills and healthy lifestyles in a way that promotes that they stay in school, provides them with quality information related to sexual health and gender equality, and involves them in activities that serve as healthy alternatives to alcohol and other drug consumption. In order to make the work with youth more sustainable, the second Project goal aims to create and strengthen support networks for youth that includes work with parents and youth service providers." (PCCR, 2012).

This increase in efficacy allows for the training to specialize in skill building while working with existing positive youth development initiatives, from community and government levels. PANI and MEP are the two major government agencies that have a reliable presence throughout the country with an established collaborative relationship with PCCR. Other non-profit organizations are limited to their specific community but are also vetted and included in the site assignment process to make the best use of the volunteers' time in site.

Ministry of Public Education

From the education perspective, MEP provides an array of program areas ensuring multi-dimensional support in education and life-skills. For example, they have government programs specifically geared towards the improvement in the quality of life and access to opportunities in identified priority communities, especially in rural areas that face unique needs. They also have an established a grant system which allows for families to apply for financial assistance in paying for school supplies and lunches. One of their more hands- on initiatives requires teacher and staff leadership of various committees in arts, technology, science, and environmentalism. They require that these committees are active through the local, regional and nationally organized events that take place year-round. For example there is an annual Student Art Festival

and their first school-wide competitions are held midway through the academic year to qualify for the regional events. If a competing school makes it to the national level, they could be practicing and attending events up until the end of the year.

In addition, the Costa Rican government fully realizes the issue of climate change and has made historic and innovative strides towards raising awareness and taking action. Recently they have switched to using renewable energy grids and have incorporated many policies that support a definitive effort on behalf of the citizens as well as the government. For teachers and fellow MEP employees, this means a greater emphasis on their environmental stewardship groups in schools. The Blue Flag or "Bandera Azul" committee is responsible for initiating conservational activities and programs. Schools are recognized for their accomplishments and receive a flag with an additional star for each successful initiative. This collection of objectives outlined by MEP reflects the practical implications of a more integrated approach to education, based on surveys and studies that show the notion that traditional methods are not sufficient to raise the bar for the type of education they want their youth to receive. It shows that Costa Rica recognizes it is a country of many needs but as they are looking to affect the most positive change they have committed to a comprehensive education system. For this reason, and the more obvious direct impact they have on youth development, they serve as an irreplaceable partner of PCCR youth development program.

Peace Corps Training

As an organization, the Peace Corps has also modified their training program objectives to reflect the evolving global conversation in prioritizing participatory and grass root development. For Peace Corps Costa Rica this translates into a three-pronged training program to help volunteers better understand their role as development professionals as they enter into their

service. The comprehensive training in PCCR is split between program, sector, and language training. As previously mentioned, PCCR has three sectors; Youth Development, TEFL, Community Economic Development. Sector training dives into the institutions volunteers will be working with, the municipal structure, and networks they can also use for personal and professional development while operating in their assigned location. As a Youth Development Volunteer, working primarily with the youth population in either primary or secondary schools, we were trained to employ proven effective tools and resources that would help us reach sector objectives. These resources could include teacher workshops on non-formal education techniques to non-violent communication workshops for parents. Peace Corps staff provides volunteers with community development tools as well, designed to capture strengths and challenges and insight into how best to approach them. According to the Youth Development Plan (2012), by the end of training, all volunteers are expected to be able to complete all, but not limited to, the following:

- Plan, facilitate and evaluate a team building activity that promotes positive youth development, using the 4MAT session plan template
- Describe how staying in school, sexual health and gender equality, and healthy alternatives to drug consumption can positively impact Costa Rican youth
- Demonstrate interest in and knowledge of Costa Rican youth reality, culture, and needs
- Demonstrate knowledge of national partner organizations' goals and their link to the YD project, (Peace Corps, n.d.)

Kolb is noted also for his influence in the development of the 4MAT model (McCarthy, 1990). From this model, a 4MAT template was adopted by PCCR to help volunteers design, plan and facilitate educational experiences; an example being a workshop for students on recycling. It requires at least one of each of the following as sections: motivation, content, conclusions, and application. These four elements, when facilitated properly, ensure that at the end of the workshop or lesson, the audience can apply new information in real life situations. This template

is used to train volunteers and taught as a tool for them to use in their communities, expanding its usefulness in capacity building within communities.

The successful collaboration of these institutions is due in part to the positive community development each has committed to, whether explicit in their mission and vision or in their more detailed programmatic frameworks. Every year there is a survey offered to both volunteers and project partners. For the YD and TEFL sectors, these partners are usually MEP employees as these sectors partner directly with MEP to place volunteers in schools around the country. The project partners work closely with the volunteers to create positive change in their communities throughout the two year service commitment. The volunteers self-assess their effectiveness and level of integration and safety while the project partners are asked to rate the volunteers on professionalism and efficacy. This feedback allows for frequent evaluation and opportunity to redirect when needed. In the 50 years of working in Costa Rican communities, Peace Corps has been part of the education transformation and results have been overwhelmingly positive. The following section gives one of many examples of this process.

Green Classroom Initiative

As a Youth Development (YD) volunteer, I was assigned to the semi-urban community of Los Jardines, a smaller community two kilometers outside of the greater metropolitan area of San Ramon. The larger township of San Ramon is situated along the Inter-American highway, a central vein that connects North and Central American countries. During the first three months, volunteers are expected to use community development tools to conduct a diagnostic that reflects initial conversations, interviews, surveys and conclusions of the needs of the community based on these interactions with community members. The conclusions I was able to draw from my community reflect three major areas of focus, or issues. Being that Los Jardines is a low-income

neighborhood, many of the homes were government or church subsidized. Many of the students who attended the primary school also lived there with their parents or other family members, who often had season jobs and therefore not a steady income flow to the household. From surveys conducted by their local health division, young people make up over 35% of the population in this community but there were few options or areas for recreation. The compact housing situation forced any play activities into the streets where they were exposed to transient and adults and insecure areas near roads.

Another conclusion identified potential for youth drug use, student drop-out rates, domestic issues within the family dynamic, seasonal work opportunities and poverty as other key challenges this small community faced. Many youth in the community could not identify with some of the positive external or internal assets from the 40 Developmental Assets list previously mentioned. Teachers and staff reported many students had little support or encouragement at home and did not exhibit positive social competencies that would offer a layer of protection against the risks they are exposed to in their communities. While there were many challenges, there were also dedicated staff, parents and community leaders working hard to address them. MEP also has implemented a "priority" system in certain schools throughout the country. Schools that identify with a significant population of students who struggle with learning or behavioral difficulties are staffed with an inter-disciplinary team that consists of a psychologist, a social worker and a guidance counselor. As a volunteer, my ability to help was limited by my professional experience, but I was able to connect with this team and provide support for their preventative projects.

This was the situation when the idea for the "Green Classroom" took root. My first year in my community, I learned about an on-going project the social worker had initiated to make

use of the "backyard" of the school, which previously was overgrown with weeds and virtually

forgotten. The school social worker was interested in bringing back local flora and bird

populations unique to the west central valley area. Thinking broadly, he wanted this experience

to not only benefit the school cosmetically but wanted the community engagement to be a

component. He solicited the collaboration of the national level Joint Institute for Social

Assistance (Instituto Mixto de Ayuda Social, IMAS), who's mission, translate from their website

is:

> "(To) promote decent living conditions and social development of individuals, families
> and communities at risk of poverty or social vulnerability, with emphasis on extreme
> poverty; providing opportunities, services and resources from knowledge of the real
> needs of the target population, with a focus on rights , gender equality and territoriality ;
> with the active participation of different stakeholders and transparency , spirit of service
> and solidarity" (IMAS, n.d.).

Working through IMAS, he was able to engage over 15 families connected to the school and

who had women as heads of households who were, at the time, unemployed. They were paid

depending on the manual hours they contributed at the school and their attendance to weekly

workshops on financial responsibility, teamwork, self and family care, and other life and

professional skill development.

At the end of my first year, the social worker became one of my main project partners as

we began collaborating on what the future of the project would look like. After many inspiring

conversations about why he was doing this project and the awareness and identity it could excite

in the community, we had the idea to integrate into the school on a larger scale. Originally it was

to be a space for students to utilize on weekends as a park or forest where select students who

showed initiative to be trained to give tours for community groups or other schools. Based on

discoveries from my initial diagnostic, there was a shortage of green spaces available, which

made the idea exceptionally fitting. This particular school was unique in the amount of property it had for a school so close to a major city. Re-foresting the area would make it a point of interest in the region. As the potential for this project grew so did our goals. The concept of the "Green Classroom" was created from the desire to improve the livelihoods of students by making it accessible and useful for students, teachers and the community.

All of the brainstorming eventually led to the idea for a rain-water collection tank. Considering the area experiences significant rainfall during their rainy season and, due to a decade of climatic change, they also experience an increase in months without rain during their dry season. Often there are water shut offs, like power outages when there is too much or not enough rain because the municipal system gets overwhelmed and cannot deliver to all of it local residents at the same time. Looking at the school's annual expense for water was also an indicator that there was room for improvement. From these two existing facts, the rain water tank would be used to supplement water used in their toilets and wash basins the custodians used for cleaning the floors. These elements would, again, be unique to the school but would also raise awareness of natural resource conservation; a growing concern at the local and government level.

The start of my second year, I began the process of grant writing. Being able to collaborate with teachers and administration throughout this process brought new ideas for what this grant would be able to cover. Almost a full year later we were awarded the grant for about 3,000 USD from Peace Corps small grant system, designed to support small scale volunteer initiatives. We were able to get a 7,500 liter rain water tank, and materials to install a compost structure and a flat grass covered area for the pre-kindergarten and kindergarten classes that doubled as a safe zone during earthquakes and fires. During the time of construction, we kept in constant communication about the progress of the project and new ideas we could work in. The

construction and physical implementation of the project took almost a month to complete and within another couple of weeks the tank was full and ready to be used.

Getting the students involved was a personal mission for both my project partner and me. Not only this, but building the capacity for educators and youth support systems to see youth as resources is a key PCCR YD objective. The non-formal educational values derived from theory began to unfold at this stage in the projects evolution. Logistically, one garden for the school would be overwhelmed by the large number of students. One of the original ideas to avoid the eventual clustering was for the teachers to identify individual classroom projects that they considered an educational experience for their class. My role would be to help design and facilitate the project and curriculum around the project. For example, the 3rd grade class would plant and maintain trees to build the forest element on the school grounds, the 4th grade class would be in charge of keeping up the compost pile and the 5th grade class would build a hydroponic garden. The teachers would be able to choose a subject and relate it to the on-going classroom project. Subjects like math, science, social studies, and geography were suggested as easy topics to pull lesson plans from and adapt them to an outdoor educational experience. This was our first attempt to appoint non-formal methodologies into the project and bring education and hands-on activities together. As time went on, however, the idea was reimagined for each classroom to have their own space for a smaller garden instead of complete projects. We were able to set up eight different mounds and asked local hardware and agriculture centers for seed donations. In place of amending entire curriculums, I created a series of workshops for each grade level that introduced environmental stewardship and basic plant and tree anatomy and bio-chemistry. At the end of the series, we were able to take the classes out once a week for an exercise in planting or maintenance of their gardens. These activities rounded out my two years

of service as it did the end of their school year. The following section will present the insights

and opinions of the staff involved or influenced by the project over the course of two years.

<u>Survey Responses</u>

The teachers and staff were chosen to provide insight of the real and potential impact the

Green Classroom project because their positions as educators and connection and experience

with the students. While the entire staff cares for the well-being of their students, a few make the

effort to really connect with them. Many have seen first-hand how limited developmental assets

and family issues can affect their students in the classroom and that these struggles do not stop at

the school entrance. The imposed standardization leaves many students repeating year after year

and with a lack of support at home, motivation is left up to the teachers. Serving a student

population with learning and behavioral challenges, the teachers see the value in using various

teaching methods and are open to alternatives. When presented with the concept and motivation

for this Green Classroom at a staff meeting, immediately appreciated and they were excited to

contribute their ideas. Coming up with concepts for educational and recreational spaces for

students was turning into space for the teachers and staff to freely express their creativity and it

was incredible to witness.

The survey created for the purpose of inquiry on the efficacy of the Green Classroom

project was delivered to all the available staff at the elementary school in Los Jardines with

active e-mail addresses. While not everyone responded, I received survey feedback from enough

participants to have a variety of perspectives. Responses came from three (3) administrative

staff, including two from the interdisciplinary team, and three (3) teachers, one teacher who is

the lead for the environmental committee. At the end of each year, the primary school instructors

are given an opportunity to change which grade level they will instruct for the following

academic year which makes the significance of identifying the responders by grade level unnecessary. Therefore, for the purpose of presenting this research and for the sake of privacy and simplicity, the instructors will be referred to as teachers 1, 2, and 3. As the specific administrative staff that have provided feedback have unique titles, I will refer to them according to their appropriate title. The answers to their individual surveys will be made available as an appendix at the end of the content section.

To review, the survey asked for answers to questions regarding previous and existing challenges the school faces, whether or not the Green Classroom project addresses these concerns and what contribution they feel the project has made overall. In personal observations, I was able to identify a few fundamental needs and areas of concern. For example, operationally, there was a lack of desks and materials for classrooms. Due to a lack of financial resources, they couldn't pay for the music teacher who was there my first year but not the second or third and they have not had a Physical Education teacher in a couple of years. These positions, as far as MEP expectations, were not required. Interestingly though, committee leaders are expected to participate in national annual sports competitions and arts festivals. With regard to infrastructure, storage was limited and there was no designated safe zone for emergencies, and in an area of the world that experiences hundreds of earthquakes a year, this was problematic.

The responses have yielded similar opinions however each perspective adds a unique caveat to the project as a whole. The consensus from the surveys is consistent with my initial observations; the school most definitely faced a few challenges. One teacher responded that one challenge early on was a lack of projects that promote respect and appreciation for the environment. She mentions how the "implementation of trails and planting of trees has created a positive space for the students and how the tank saves a significant amount of water as well as a

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substantial amount of money for the school" (teacher 1). Because the majority of the labor was completed by mothers who were heads of households, the economic impact on the community was also a meaningful outcome this project has had. She has also seen an impact on the students' appreciation for agriculture, water and compost, and a commitment on behalf of the whole school to maintain this project and its benefits. This particular teacher is a leader of the environmental committee and is in the best position to make the best use of this project in future initiatives of which the group is responsible. That she values this project in its many qualities, shows the efforts put in to make this a realistic grass roots project were not in vein.

Other responses from the two other teachers echo a similar attitude and reflection of positive changes. Regarding the pre-existing needs of the school, one teacher said the there was a need to "make something of the space full of the underbrush and make it something nice and useful for students and teachers" (teacher 2). The other teacher said the needs of the school over the last three years have been financial, with a lack of funds to "develop a more creative and constructive projects for students, a lack of technological and didactic material, and a play area" (teacher 3). When asked to describe the Green Classroom project in their own words, the second teacher said it is a pleasant space with educational tools that help the students as much as the teachers and that this space has been converted into a beautiful and navigable space that will grow into a small forest over time. The third teacher says it provides a space to enrich learning for the student so that they can contextualize certain curriculum-based subject matter. For example, the land behind the school is a hill and from the top, one can see the central valley mountain/volcano range. This location is an ideal setting for a social sciences or geography lesson pertaining to the physical structures visible from the top.

Regarding the impact the project has in addressing previously discussed needs, teacher 2 believes this project will not only cultivate food the cafeteria may use, but can be a way teachers and students can enjoy time outdoors together. Teacher 3 says the primary objective of this outdoor classroom was to meet those specified needs and it allows for the student to construct their own knowledge. Since the implementation of the project, the changes they have witnessed include; teacher 2 seeing the area with life, a refuge for butterflies and birds, and the growth of the trees planted are improving the walkways aesthetically and by providing shade while teacher 3 believes it has been a motivation for learning in will continue to be in the long run.

The director of the school was also surveyed and from the interdisciplinary team, technically part of the administrative staff, the social worker and guidance counselor have provided responses as well. While the social worker was my main project partner in the Green Classroom project, the guidance counselor was also a valuable resource throughout the process of design and implementation, as well as personal motivation for me. All three responses have a unique understanding of the "big picture" operations of the school. The directors' response to the needs that existed in the school in years prior included similar needs the teachers pointed out in their responses; there was a serious need for technology in the educational work in the classrooms as well as a need for not only an accessible play area but recreational and innovative classes. The director also noted infrastructural needs to better ensure the safety and security of the students. When she was asked in the survey to describe the Green Classroom she says it has come to be a valuable resource for students and teachers in their learning. It is a place where teachers can use the space as part of their curriculum and students can learn in a new, more motivated and recreational manner while also working with values such as respect, protection, and love, for the environment. She adds that the students can have direct contact with nature

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while getting to know its wonders and developing objectives concurrent with MEP guidelines. One of the biggest benefits she sees with this in regard to addressing current needs is a in shift in the learning process the students are experiencing. As far as the impact she has noted since the inception of the project, the physical change of the land that belongs to the school has been a huge benefit, as well as a new space for teacher and students to create a different learning style and environment.

The social worker echoes previous responses, identifying the needs as financial, prohibiting investments in technology and obstructing students' opportunities for recreation, as well as infrastructural. As mentioned earlier, the only physical space the students had for recess were the concrete hallways and covered courtyard where they held assemblies. During the dry months the students were also able to use the small scale soccer field in the front of the school; however it became a mud pit during the rainy season. The guidance counselor adds that a lack of human resources was also present. There were few, if any staff members available to create and maintain new projects. The Green Classroom project, for both the social worker and guidance counselor, has been beneficial for the culture of the school, illuminating environmental issues and cultivating conservationist attitudes. They also agree that it has helped diversify teaching methods. Again, both believe the project was created to directly impact the present needs of the students and the school overall. For example, the rain water tank has not only directly impacted how the students and community view natural resource management. It has also directly aided in saving the school annually on their water bill, freeing up those funds to be put to other priority areas. In his response to describing the impact he has noticed, the social worker says the principal impact has been the beautification of the land but he has also seen this project impact how the teachers think as they participate with their students in their classroom gardens.

Overall, the responses show a general acknowledgement that before the Green Classroom project, there were substantial financial, human, and infrastructural resource deficits. While the Green Classroom is not a solve-all, it does seem to address long and short-term concerns. In the short term, it has beautified the school grounds, enhancing a sense of identity within the school community, something the students and parents and teachers can be proud of. In the long term, the teachers hope to use it as a permanent resource for teaching and influencing positive youth behaviors. Another long term benefit identified was the potential financial resources rain water collection system can save the school each year in their budget. The budget can then make room for facility improvements and educational resources for the students, such as books, workbooks, technology etc. These responses inspire confidence that the space will continue to be utilized as an outdoor educational space. Hopefully, it will prompt students and teachers alike to keep dreaming big to creatively approach the learning experience. In the final sections, major ideas of this thesis are drawn into conclusions and final reflections are presented.

Conclusions

There is growing body of compelling research that supports the idea that non-formal education models are effective in engaging youth in their own learning. The Green Classroom initiative is the product of an increasingly accepting education environment focusing on empowering youth as opposed to attending to deficits. Fundamental theorists such as Freire, Piaget and Kolb have long rejected traditional concepts of static learning. Their work has contributed to such models as Constructivism and Experiential Learning Theory, redefining what constitutes learning and education. They have provided the field of education with a theoretical reason to explore more dynamic approaches to teaching, such as incorporating field trips and hands-on workshops.

According to Erickson's third stage of development, school provides the perfect venue for youth to explore friendships, failures, accomplishments, building a sense of identify and purpose. Development of these skills contributes to a greater likelihood of engaging in healthy lifestyle choices. Educational experiences are then designed to reinforce weaker skills, attitudes and behaviors.

There were a number of key factors that allowed for a project like the Green Classroom to gain its momentum. Firstly, the administration of Los Jardines Elementary was open to its concept. It began as a beautification project and grew to inspire teachers to re-evaluate how they can not only teach important subject matter but positively impact the students. Secondly, the project leads, I and the school social worker, shared a commitment to the betterment of the community and felt a focus on youth development was the best approach. Thirdly, the 50 year partnership between MEP and Peace Corps opened a channel for funding to build the additional resource management elements for the Green Classroom. Fourthly, the school emphasizes teaching a core set of values, such as teamwork, communication and care for others and the environment. These values can be explored in greater depth by utilizing the Green Classroom for activities that focus on these same values. Additionally, the excitement expressed from the teachers when coming up with new ideas for other projects possible in the Green Classroom areas inspires hope for sustainability as they took on the project as their own.

The Green Classroom idea, while unique in addressing the needs of the school (i.e. space for play, engaging educational activities), was created to be replicable model. With the assistance of someone familiar with a grant system or fundraising, a similar project could be integrated at any academic institution with staff and teachers who truly believe in its potential. It was never a seamless process. It was essential, however, to know that everyone supported the mission to

empower youth and enable them to face the many challenges of life. In that way, no day was ever wasted.

Final Reflections

As one could infer from the given feedback, the school has faced a few significant challenges, however the Green Classroom project had always been a chance to make them opportunities. Results from my initial diagnostic and personal conversations revealed a missing sense of identity in the school and residents of Los Jardines. This project has since given the school a unique feature setting it apart from other schools and giving something the parents, teachers and students can say belongs to them and their community. My arrival paralleled the on-boarding of the aforementioned director of the school. Before her, the school had experienced high turn around rates of directors, changing leadership almost every year or two for the previous five years. From a management perspective, this by itself is tough to address. Despite managing a heavy workload, her unwavering support was invaluable. It allowed me to dream big enough to believe something on such a large scale was possible. The support the project and I both received from the staff was what let us know we were on a positive and useful endeavor.

One of the biggest lessons for me was when the teachers started to make decisions regarding their classroom projects without me, marking the official hand-off of the project. I later realized this was the ideal situation for this project and for me as a Peace Corps Volunteer. Getting the teachers on board with the project was essential. Since much of the idea was based on using lesson periods for time outdoors, if the teachers didn't believe in its possibilities the project wouldn't make it very far. The teachers who participate in the environmental stewardship committee would be assuming responsibility for the future use and maintenance of this area in an effort to keep the project sustainable.

There were many trial and error situations and projects that never came about. While I was fortunate enough to have very insightful and value driven project partners throughout my service, there was still a series of ideas that did not make the cut. There were a few projects that never made it to the planning phase. For example the training program for students as tour guides and a playground element for the pre-kindergarten and kindergarten classes made from recycled tires. While these projects never came to fruition in my tenure, they remain ideas of current community members and therefore remain possibilities for future projects. That being said, the Green Classroom will serve as a foundation for future ideas and creativity as it quite literally has laid ground work and metaphorically opened doors to the imagination.

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<div align="center">Graphs</div>

Developmental Assets: A Synthesis of the Scientific Research on Adolescent Development by

Peter C. Scales and Nancy Leffert. Copyright 1999, 2004 Search Institute

Appendix A: 40 Developmental Asset Check-list
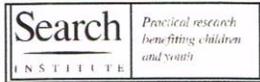
40 Developmental Assets®

Search Institute^SM has identified the following building blocks of healthy development that help young people grow up healthy, caring, and responsible.

HEALTHY COMMUNITIES · HEALTHY YOUTH ®

Category	Asset Name and Definition
External Assets	
Support	1. **Family Support**-Family life provides high levels of love and support. 2. **Positive Family Communication**-Young person and her or his parent(s) communicate positively, and young person is willing to seek advice and counsel from parents. 3. **Other Adult Relationships**-Young person receives support from three or more nonparent adults. 4. **Caring Neighborhood**-Young person experiences caring neighbors. 5. **Caring School Climate**-School provides a caring, encouraging environment. 6. **Parent Involvement in Schooling**-Parent(s) are actively involved in helping young person succeed in school.
Empowerment	7. **Community Values Youth**-Young person perceives that adults in the community value youth. 8. **Youth as Resources**-Young people are given useful roles in the community. 9. **Service to Others**-Young person serves in the community one hour or more per week. 10. **Safety**-Young person feels safe at home, school, and in the neighborhood.
Boundaries & Expectations	11. **Family Boundaries**-Family has clear rules and consequences and monitors the young person's whereabouts. 12. **School Boundaries**-School provides clear rules and consequences. 13. **Neighborhood Boundaries**-Neighbors take responsibility for monitoring young people's behavior. 14. **Adult Role Models**-Parent(s) and other adults model positive, responsible behavior. 15. **Positive Peer Influence**-Young person's best friends model responsible behavior. 16. **High Expectations**-Both parent(s) and teachers encourage the young person to do well.
Constructive Use of Time	17. **Creative Activities**-Young person spends three or more hours per week in lessons or practice in music, theater, or other arts. 18. **Youth Programs**-Young person spends three or more hours per week in sports, clubs, or organizations at school and/or in the community. 19. **Religious Community**-Young person spends one or more hours per week in activities in a religious institution. 20. **Time at Home**-Young person is out with friends "with nothing special to do" two or fewer nights per week.
Internal Assets	
Commitment to Learning	21. **Achievement Motivation**-Young person is motivated to do well in school. 22. **School Engagement**-Young person is actively engaged in learning. 23. **Homework**-Young person reports doing at least one hour of homework every school day. 24. **Bonding to School**-Young person cares about her or his school. 25. **Reading for Pleasure**-Young person reads for pleasure three or more hours per week.
Positive Values	26. **Caring**-Young person places high value on helping other people. 27. **Equality and Social Justice**-Young person places high value on promoting equality and reducing hunger and poverty. 28. **Integrity**-Young person acts on convictions and stands up for her or his beliefs. 29. **Honesty**-Young person "tells the truth even when it is not easy." 30. **Responsibility**-Young person accepts and takes personal responsibility. 31. **Restraint**-Young person believes it is important not to be sexually active or to use alcohol or other drugs.
Social Competencies	32. **Planning and Decision Making**-Young person knows how to plan ahead and make choices. 33. **Interpersonal Competence**-Young person has empathy, sensitivity, and friendship skills. 34. **Cultural Competence**-Young person has knowledge of and comfort with people of different cultural/racial/ethnic backgrounds. 35. **Resistance Skills**-Young person can resist negative peer pressure and dangerous situations. 36. **Peaceful Conflict Resolution**-Young person seeks to resolve conflict nonviolently.
Positive Identity	37. **Personal Power**-Young person feels he or she has control over "things that happen to me." 38. **Self-Esteem**-Young person reports having a high self-esteem. 39. **Sense of Purpose**-Young person reports that "my life has a purpose." 40. **Positive View of Personal Future**-Young person is optimistic about her or his personal future.

Appendix B: Organization Mission and objectives

Peace Corps

To promote world peace and friendship by fulfilling three goals:

- To help the people of interested countries in meeting their need for trained men and women.
- To help promote a better understanding of Americans on the part of the peoples served.
- To help promote a better understanding of other peoples on the part of Americans.

    http://www.peacecorps.gov/about

Ministerio de Educación Pública (Ministry of Public Education)

- **Humanista:** como base para la búsqueda de la plena realización del ser humano, de la persona dotada de dignidad y valor, capaz de procurar su perfección mediante la realización de los valores estipulados en la legislación educativa, tanto los de orden individual como los de carácter social.

- **Racionalista:** como el reconocimiento de que el ser humano está dotado de una capacidad racional, que puede captar objetivamente la realidad en todas sus formas, construir y perfeccionar de continuo los saberes y hacer posible el progreso humano y el entendimiento entre las personas.

- **Constructivista:** como el esfuerzo en el actuar, considerando que la educación debe partir desde la situación cognoscitiva del alumno, de su individualidad, de sus intereses e idiosincrasia, por lo que debe reconocer la cultura específica del alumno con sus respectivas estructuras de conocimiento ya formadas y emprender una acción formativa del alumno y del conocimiento que los transforma mutuamente (Política Educativa hacia el Siglo XXI, págs. 8-9).

    http://www.mep.go.cr/politica-educativa

Appendix C: Blank Survey

Cuestionario por la investigación de sostenibilidad del Aula Verde

1. Que necesidades existieron hace 3 años en la escuela (ej. con respeto a financiamiento, recursos, oportunidades por los estudiantes, tecnología…)

2. En sus proprias palabras, describe el proyecto del Aula Verde.

3. El proyecto de Aula verde fue algo creado para dirigirse a estos necesidades?

4. Que impacto o cuales cambios ha visto o ha experimentado en la escuela, con estudiantes, amiente, etc. después el proyecto fue implementado en la escuela, desde la primera presentación hasta ahora.

5. Por favor, escribe su nombre, role en la escuela y años ha estado con la Escuela Los Jardines

_____
_____

Appendix D: Survey Response (without identifiable information)

Cuestionario: Teacher 1

1. Que necesidades existieron hace 3 años en la escuela (ej. con respeto a financiamiento, recursos, oportunidades por los estudiantes, tecnología…)

Muchas necesidades. Por ejemplo, el hacer un buen uso de una buena parte del terreno de la escuela, para actividades recreativas y ambientales.
El embellecimiento de la planta física y sus alrededores.
La ejecución de proyectos con los estudiantes, donde se promueva el respeto y aprecio por el ambiente.
Dotar a la institución de recursos tecnológicos para lograr un aprendizaje más interesante y atractivo por parte de los estudiantes.

2. En sus proprias palabras, describe el proyecto del Aula Verde.

Aula verde consistió en un proyecto donde se tomó un terreno escolar, que estaba totalmente abandonado y sin ningún uso, para embellecerlo con plantas, siembra de árboles autóctonos, senderos, huertas y un área verde para la recreación de los niños y niñas.

También se realizaron otros proyectos ambientales, como la construcción de un compost y la habilitación de un tanque gigante para la recolección de las aguas pluviales, logrando el aprovechamiento de éstas en labores de limpieza, logrando así un impacto positivo en la reducción del gasto de agua potable, lo que significa también un ahorro de dinero.

Este proyecto sirvió para que otras instituciones se interesaran y apoyaran, logrando de esta manera emplear a madres de familia, la mayoría de ellas jefas de hogar, con recursos económicos muy limitados.

3. El proyecto de Aula verde fue algo creado para dirigirse a estos necesidades?

Considero que este proyecto suplió muchas necesidades existentes. Lo considero un gran logro y un gran beneficio para todos los que convivimos en este centro educativo, como para la comunidad en general, ya que se embelleció el lugar.

4. Que impacto o cuales cambios ha visto o ha experimentado en la escuela, con estudiantes, amiente, etc. después el proyecto fue implementado en la escuela, desde la primera presentación hasta ahora.

Se aprecia un mayor gusto, en los estudiantes, por aprender más sobre agricultura, compost, entre otros.
Sienten mucho interés y aprecio por caminar en un terreno, que por su belleza, invita a recrearse.
Compromiso, por parte de todos los actores de este centro educativo, por cuidar y mantener estos proyectos.
Se aprecia un ahorro en el consumo de agua potable.

Cuestionario: Teacher 2

1. Que necesidades existieron hace 3 años en la escuela (ej. con respeto a financiamiento, recursos, oportunidades por los estudiantes, tecnología...)

Necesidades de la escuela hace tres años: financiamiento económico para el desarrollo de proyectos que permitan un aprendizaje más creativo, constructivo en los estudiantes. También se carece de recursos tecnológicos y material didáctico, áreas de juegos entre otros.

2. En sus propias palabras, describe el proyecto del Aula Verde.

El proyecto de aula abierta viene a favorecer el aprendizaje de los estudiantes de tal manera que se contextualizan contenidos, en las diferentes áreas del acurriculum en especial estudios sociales.

3. El proyecto de Aula verde fue algo creado para dirigirse a estos necesidades?

Ese fue uno de los principales objetivos, permite que sea el mismo estudiante quien construya su propio conocimiento.

4. Que impacto o cuales cambios ha visto o ha experimentado en la escuela, con estudiantes, amiente, etc. después el proyecto fue implementado en la escuela, desde la primera presentación hasta ahora.

Motivación en el aprendizaje y un aprendizaje a largo plazo.

Cuestionario: Teacher 3

1. Que necesidades existieron hace 3 años en la escuela (ej. con respeto a financiamiento, recursos, oportunidades por los estudiantes, tecnología…)

Exsistia la necesidad de hacer de un espacio que estaba lleno de maleza algo agradable y útil a los estudiantes y maestras

2. En sus propias palabras, describe el proyecto del Aula Verde.

Como un espacio a gradable y con fines educativos que ayuela tanto a estudiantes como a las maestra a disfrutar de un aprendizaje más agradable y divertido. El lugar que estaba lleno de monte se convirtió en un lugar bonito y con el paso de los años se convertirá en un pequeño bosque.

3. El proyecto de Aula verde fue algo creado para dirigirse a estos necesidades?

Cultivar productos para el consumo en el comedor escolar ,área de estudio con los estudiantes, disfrute de tiempo libre con niños y niñas y maestras.

4. Que impacto o cuales cambios ha visto o ha experimentado en la escuela, con estudiantes, amiente, etc. después el proyecto fue implementado en la escuela, desde la primera presentación hasta ahora.

Se observa una área con vida es refugio de mariposa y aves los árboles estan creciendo mucho se observan bien los senderos.

Cuestionario- Social Worker

1. Que necesidades existieron hace 3 años en la escuela (ej. con respeto a financiamiento, recursos, oportunidades por los estudiantes, tecnología...)

La necesidades eran muchas y de todo tipo, en especial la de recursos económicos que no permitía realizar inversión en tecnología e impedían dar oportunidades a los estudiantes de recreación y mejor infraestructura. Tampoco se podía invertir en innovación.

2. En sus propias palabras, describe el proyecto del Aula Verde.

Es un proyecto innovador, de características conservacionistas — ecologistas, orientado a desarrollar conciencia en la población y los estudiantes sobre la necesidad de cuidar el medio ambiente, además va a permitir diversificar los métodos de enseñanza y facilitar el proceso de enseñanza aprendizaje.

3. El proyecto de Aula verde fue algo creado para dirigirse a estos necesidades?

Se creó para atender necesidades de recreación y esparcimiento, tanto de los estudiantes como de la población. También para atender las necesidades de innovación educativa.

4. Que impacto o cuales cambios ha visto o ha experimentado en la escuela, con estudiantes, amiente, etc. después el proyecto fue implementado en la escuela, desde la primera presentación hasta ahora.

El principal impacto se dio en el ambiente, en el aspecto escénico del área posterior de la escuela. Pero también impactó en el pensamiento del personal que asumió la tarea de trabajar en agricultura con sus estudiantes y que en este año (2016), está dando continuidad al trabajo. También se ve el impacto en la parte recreativa, pues se utiliza el área con ese propósito.

Cuestionario- School Director

1. Que necesidades existieron hace 3 años en la escuela (ej. con respeto a financiamiento, recursos, oportunidades por los estudiantes, tecnología…)

La institución hace tres años tenía mayor necesidad en tecnología para la labor pedagógica del aula.
Áreas de juego accesibles para los estudiantes
Clases lúdicas e innovadoras
Infraestructura con poca seguridad para la población estudiantil

2. En sus propias palabras, describe el proyecto del Aula Verde.

Aula verde viene a ser un recurso muy valioso para los docentes y estudiantes en su aprendizaje. Donde los docentes pueden trasverzalizar todo el curriculum haciendo uso del aula verde y los estudiantes aprenden de una manera diferente, motivadora, lúdica, a la vez se está trabajando el valor de respeto, protección y amor por el medio ambiente.

Los niños tienen contacto directo con seres de la naturaleza, conociendo las maravillas de estos y desarrollando de objetivos de acuerdo a los lineamientos del MEP.

3. El proyecto de Aula verde fue algo creado para dirigirse a estos necesidades?

Claro el proyecto de aula verde ayuda a minimizar las necesidades de los estudiantes principalmente en la parte de aprendizaje

4. Que impacto o cuales cambios ha visto o ha experimentado en la escuela, con estudiantes, amiente, etc. después el proyecto fue implementado en la escuela, desde la primera presentación hasta ahora.

Buena presentación del centro educativo al tener un espacio de aula verde que antes era un terreno abandonado y lleno de maleza.

Un espacio para que las docentes utilicen con su alumnos desarropando las clases diferentes.

Estudiantes más motivados al contar con ambiente diferente para su aprendizaje.