BUILDING TOWARD A CONSISTENT PROGRAM EVALUATION: A QUALITATIVE STUDY OF COMMUNITY REACTION TO DEVELOPMENT PROGRAMS IN LIMÓN, COSTA RICA

A Thesis

by

CALEB JONATHAN SHANE

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

August 2011

Major Subject: Agricultural Leadership, Education, and Communications

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Approved by:

Co-Chairs of Committee,	Glen Shinn
	Gary Briers
Committee Members,	Kim Dooley
	Edwin Price
Head of Department,	Jack Elliot

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ABSTRACT

Building Toward a Consistent Program Evaluation: A Qualitative Study of Community Reaction to Development Programs in Limón, Costa Rica. (August 2011)

Caleb Jonathan Shane, B.S., College of Agriculture and Life Sciences

Co-Chairs of Advisory Committee: Dr. Glen Shinn
Dr. Gary Briers

Environmental education has been a prominent approach to achieve sustainable development and counteract the megatrend of environmental degradation. In Costa Rica, environmental education has been adopted as an essential tool for protecting and improving the natural environment. The people of Costa Rica have emphasized an awareness of environmental issues and an ability to actively engage in environmental education and sustainable development programs. International development organizations have invested in development programs to establish or improve sustainable development. In order to understand whether international development organizations are achieving their stated mission and goals for implementing development programs, donors and funding agencies usually require that the sponsored programs be evaluated. Unfortunately, there is a growing concern that the current practice of development evaluation limits the reporting of impacts to be fundamentally inconsistent which has created incentives for evaluations to include positive bias instead of serving the purpose to improve organizational decision-making.

This research study proposed to evaluate the reaction of a community in Limón, Costa Rica to development programs using an operational framework of evaluation and logic models found in the review of literature. The researcher adopted a naturalistic case study approach intended to retain the natural context of the community setting and provide a holistic understanding of community perceptions. Qualitative methods based in rapid rural appraisal were used to collect data from a purposeful sample and a stratified purposeful sample within the population. Data analysis was conducted at both the research site during data collection and after all data was collected. The researcher incorporated the constant comparative method to determine consistencies, anomalies, patterns, and emerging themes during data analysis. Three overarching themes emerged as a result of the study: (a) *community development* with subcategories describing community improvement, collaboration with the international development organization, integration of individuals and groups within the community, and the sustainability of projects, (b) *education* with subcategories expanding on ideas and motivation, learning, and inspiration for the children, and (c) *culture* with subcategories that discussed community culture, the organizational culture of the international development organization, and relationships.

ACKNOWLEDGEMENTS

First of all, I would like to thank my co-chairs, Dr. Glen Shinn and Dr. Gary Briers, for all their guidance, hard work, and encouragement throughout the past two years. I owe a great deal of my achievements and understanding to your mentorship and dedication to my growth as a professional and a person. I would also like to thank my committee member Dr. Kim Dooley whose knowledge of qualitative research inspired me to challenge myself to view people and places through their own lens rather than my own. And I would also like to extend a special thanks to my committee member Dr. Ed Price whose personal testimony as a Peace Corps volunteer motivated me to discover a world beyond my own experience.

Although it may have seemed trivial to some of you at the time, I owe a debt of gratitude to all the graduate students who took the time to assist me in answering the endless amount of questions I posed throughout the years. I have always appreciated your patience with my curiosity and your willingness to allow me to build my experiences from lessons you all have learned in the past. I will never forget my friends in 131.

Most of all, I would like to thank my family for never ceasing to provide me with endless love and support. I have no doubt that I would never have been able to achieve what I have thus far had it not been for you all. Dad and Mom, thank you for raising me on a solid foundation of faith and commitment. I love you both so very much.

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CHAPTER I

INTRODUCTION

Globalization can be described as the dynamic, ongoing process of increasing integration throughout the world (Friedman, 2000). Within the model of globalization, countries, communities, individuals, and cultures are becoming more closely connected with one another. As globalization expands it acts to shrink the globe itself which creates more equal opportunities for people around the world and empowers individuals to act globally (Friedman, 2005). The forces driving this modern integration include technologies such as computerization, digital and satellite communications, fiber optics, and most notably, the Internet. However, it is important to recognize that globalization is not a modern trend. Friedman (2005) indicated that the current model of globalization historically represents the third era of globalization to impact the world. Furthermore, Friedman was not the first individual to initiate discussions about the changing nature of our planet and population and the dynamic forces impacting people and the natural environment. For example, almost half a century ago the world received a warning from biologist Paul Ehrlich that the increasing trend of global population growth would soon outpace the world's food production and result in mass starvation for the decades ahead (Goldstone, 2010). Around the same time that Dr. Ehrlich published his book *The Population Bomb* (1968), individuals such as Dr. Norman Borlaug had already begun to

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This thesis follows the style of the *Journal of International Agricultural Extension Education*.

devote their time and expertise to developing agricultural innovations to feed the world's increasing population. Although Ehrlich's grim prediction has not come to pass thanks to such efforts and innovations, the series of events sparked a growing awareness of global concerns and future trends whose impact could change the world.

The word "megatrend" was first coined by John Naisbitt and Paul Kennedy; it was used to describe large shifts in circumstances or changes in thinking which impact local, national, and global systems (Shinn, 2010). These megatrends include population growth, the impacts of technology, global economics and food security, increasing migration and immigration, global terrorism, and environmental degradation. In the year 2000, The United Nations (UN) adopted the Millennium Development Goals (MDG)—a set of eight goals to be used as benchmarks for overcoming extreme poverty around the world. More recently in 2002, the United Nations General Assembly declared the years 2005–2014 to be the UN Decade of Education for Sustainable Development, emphasizing that education is an essential element for reaching the goals of sustainable development (Blum, 2008). The UN declaration encourages integration of knowledge and values represented by sustainable development into all facets of learning and promotion of changes in behavior that will lead to more sustainable communities and environments. From this information we are able to understand that education is recognized as a tool to be applied to the concerns of global megatrends and to build toward the development of a more sustainable environment.

Statement of the Problem

This research study focused on the crossroads of environmental degradation, environmental education, international development programs, and development evaluation. Environmental degradation has been recognized as a megatrend throughout the world and environmental education has been used to mitigate further harm to the natural environment and to promote development of environmentally sustainable attitudes and behaviors (Blum, 2008; Locke, 2009; Shinn, 2010). With an increasing need for environmental education programs around the world, many environmental educators and international development organizations have focused their attention and efforts in developing countries (Blum, 2009; Hall, 1985; Ham & Castillo, 1990; Mueller & Bentley, 2009). Many international development organizations and their donors and funding agencies have invested in community-based initiatives, including environmental education programs, in developing countries with the hope that their investments will create positive impacts for the communities they serve (Dimopoulos, Paraskevopoulos, & Pantis, 2008; Fisman, 2005; Heimlich, 2010; Kaplan & Garrett, 2005; Kruse & Card, 2004; Leeming, Dwyer, Porter, & Cobern, 1993; Stern, Powell, & Ardoin, 2008; Volk & Cheak, 2003; W. K. Kellogg Foundation, 2001). Unfortunately, a growing concern has been exposed that the current practice of development evaluation limits the reporting of impacts to be fundamentally inconsistent; thus, processes and practices have created incentives for the evaluation to include positive bias (Bamberger, 2000; Carman, 2007; Clements, Chianca, & Sasaki, 2008; Fine, Thayer, & Coghlan, 2000; Hoefer, 2000; Mayoux & Chambers, 2005; Murray, 2005; Picciotto, 2003).

Conceptual Framework

The evaluation models, logic models, and conceptual constructs presented in this section of the manuscript are intended to be used as a conceptual framework for the researcher and this study. A conceptual framework can be described as a set of theories, ideas, models, or principles from all fields of inquiry related to a research study (Smyth, 2004). Conceptual frameworks can be useful for scaffolding the research study which is intended to provide the researcher with the initial stages of reflection on the study and to assist the researcher in developing a deeper and more meaningful understanding of the context surrounding the study. Conceptual frameworks are useful tools that function like a map to connect all aspects of inquiry and provide a more coherent understanding of the research study (Shields & Tajalli, 2006).

Evaluation Models

Clements, Chianca, and Sasaki (2008) proposed a model for program evaluation that combines the previous evaluation efforts of development organizations and helps to mitigate positive bias by consistently evaluating the program based on the following criteria: relevance, effectiveness, efficiency, impact, and sustainability. These five development evaluation criteria were originally produced by the Development Assistance Committee (DAC), but Clements et al. proposed to alter the criteria with a few additions and variations. Relevance refers to a program's goals being relatively consistent with the goals of the organization, donors and funding agencies, or other stakeholders. Effectiveness refers to a program's ability to achieve its outlined objectives

based on the process of a results-based monitoring and evaluation program. Efficiency is determined by either evaluating a program's cost effectiveness using analysis units such as economic rates of return (ERR) or by simply accomplishing program objectives efficiently. Impact measures the outcomes of a program through short, medium, and long term results. Sustainability refers to the ability of the program to be implemented consistently and practiced over time. Clements et al. suggested that because the third criterion of efficiency did not necessarily reflect cost-effectiveness, the criterion should either be replaced or measured with cost-effectiveness using ERR as a foundation for monitoring and effectiveness. Clements et al. argued that the updated approach would combine the basics of the DAC criterion of efficiency with "the rigor and consistency of monitoring and evaluation for cost effectiveness" (p. 210). Although these evaluation criteria are closely aligned with other suggested development evaluation models implemented by international organizations such as the World Bank, Clements et al. suggested that further studies be conducted to determine if the DAC evaluation criteria should be expanded or contracted to more accurately reflect a complete program evaluation. Figure 1.1 provides a visual model for the DAC evaluation criteria.

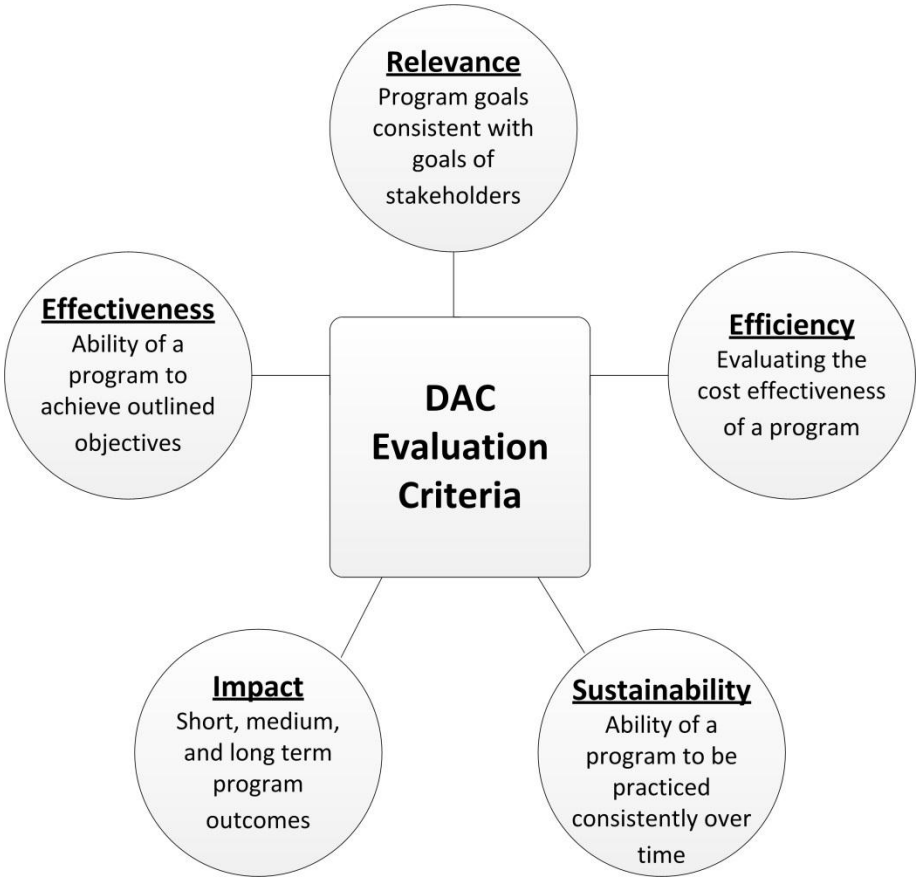

Figure 1.1. Development Assistance Committee evaluation criteria. Adapted from Clements, Chianca, & Sasaki, 2008.

For this research project, the study was framed around the DAC criterion of impact for the purpose of building toward an impact evaluation of an international organization's development programs in Limón, Costa Rica. Although this manuscript is intended to serve as a design and outline for conducting a complete and consistent program evaluation for an international development organization, this research study focused on the initial phase of an impact evaluation.

An additional evaluation model used in the study—specifically intended in this study for measuring impact—was Kirkpatrick's four levels of evaluation (Kirkpatrick & Kirkpatrick, 2006). The four levels—reaction, learning, behavior, and results—are designed to be used in combination with one another to form a complete impact evaluation. Reaction measures what participants thought and felt about the training or learning experience; a measure of satisfaction and opinions. Learning measures the increase in knowledge and skill of the participants both during and immediately after a training or development experience. Behavior measures the participants' ability to practice and make decisions based on what they have learned from the experience. Results measure the overall effect on the organization, community, or environment from the participants of the training or learning experience. Kirkpatrick's model can be summarized as evaluating outcomes and impact in learning and development events for participants and organizations (O'Toole, 2009). Figure 1.2 provides a visual model for Kirkpatrick's four levels of evaluation.

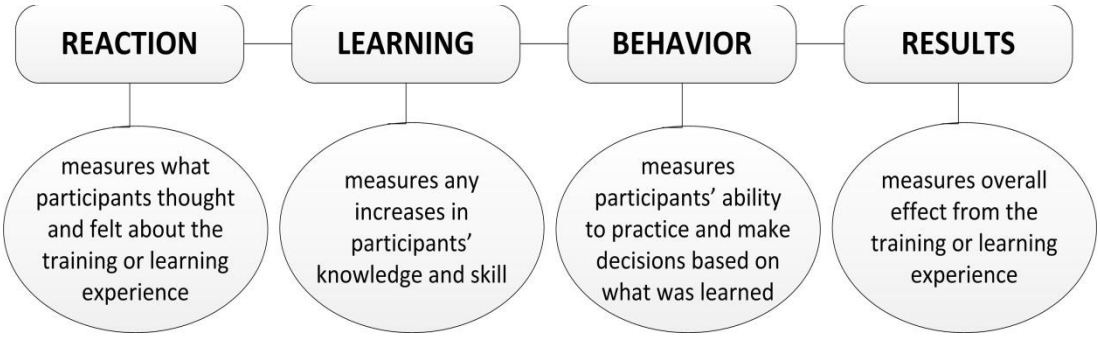

Figure 1.2. Kirkpatrick's four levels of evaluation. Adapted from Kirkpatrick & Kirkpatrick, 2006.

Logic Models

An essential first step in designing a program evaluation is the development of a logic model (Renger & Titcomb, 2002). Logic models have been used to serve as tools for program evaluation for the last several decades. Logic models are visual representations of the processes used throughout a program to help explain how the program will operate (Chen & Rossi, 1983; Kaplan & Garrett, 2005). A program evaluation logic model is able to establish associations between outcomes, program processes, and the theoretical principles of the program's foundation (W. K. Kellogg Foundation, 2001). By mapping out these associations, researchers interested in program evaluation can more easily identify constructs within a framework upon which to build an evaluation.

For enhancing program performance and evaluating outcomes or impact, the University of Wisconsin-Extension has developed a logic model with a proposed set of three outcomes constructs designed around short, medium, and long term impacts; learning, action, and conditions (Taylor-Powell, Steele, & Doughlah, 1996). A list of measures for evaluating the constructs has also been proposed to build a classification framework. Figure 1.3 provides a visual model for the University of Wisconsin-Extension logic model for impact evaluation.

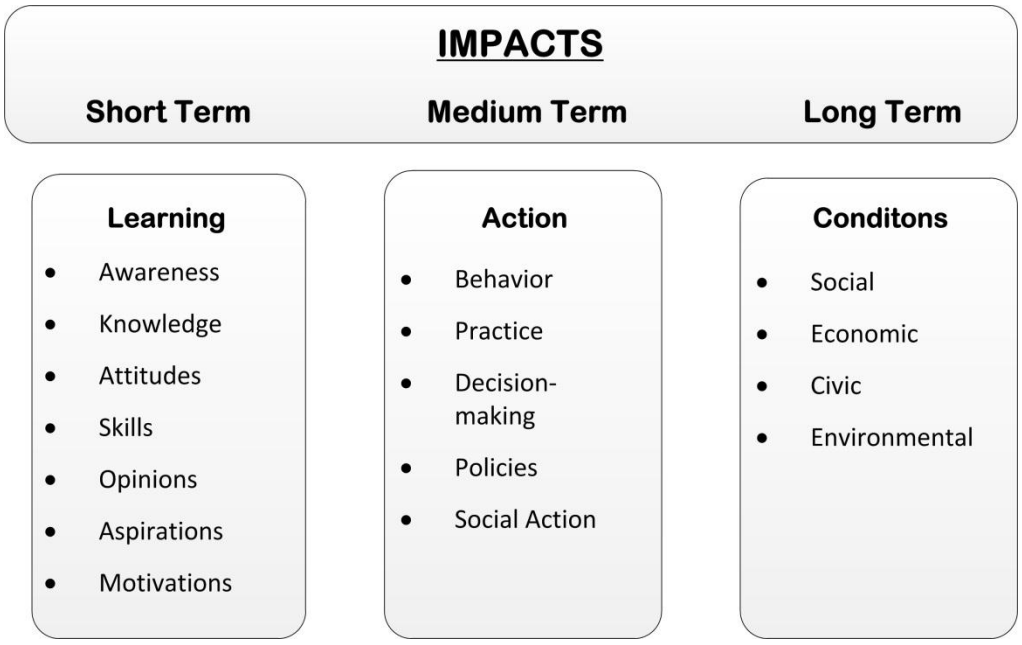

Figure 1.3. University of Wisconsin-Extension logic model for impact evaluation. Adapted from Taylor-Powell, Steele, & Doughlah, 1996.

In addition, Mayoux and Chambers (2005) have proposed a logic model for impact evaluation that is largely based on participatory evaluation. When accurately conducted, participatory evaluation methods are able to generate data similar to traditional quantitative methods. Although the term participatory evaluation could imply the use of only qualitative methods, this logic model also includes the use of traditional quantitative methods for impact evaluation. Mayoux and Chambers explained that qualitative participatory methods are able to complement traditional quantitative methods and vice versa.

Mayoux and Chambers also emphasized that their logic model does not deemphasize the rigor of quantitative impact evaluation, rather it is described as "a shift in focus of skills, time and resources, a shift in the focus of innovation and above all a shift in attitudes and ethics underlying the use of all forms of investigation" (p. 288). Although some evaluation practitioners have used participatory qualitative methods to replace quantitative methods such as surveys or questionnaires, this logic model emphasizes that participatory qualitative methods—when used in combination with quantitative methods—are able to provide increased validity and a more accurate interpretation of the results from evaluation research (Chambers, 1994c; Mayoux & Chambers, 2005). For example, quantitative questionnaire surveys would be used in combination with qualitative participatory data collection methods when the findings from qualitative data analysis are considered by the researcher to be incomplete or suspected to be inaccurate. The interpretations and findings from the qualitative techniques would then be provided with increased validity and more accurate interpretations with support from the quantitative techniques. Figure 1.4 provides a visual model for the Mayoux and Chambers logic model.

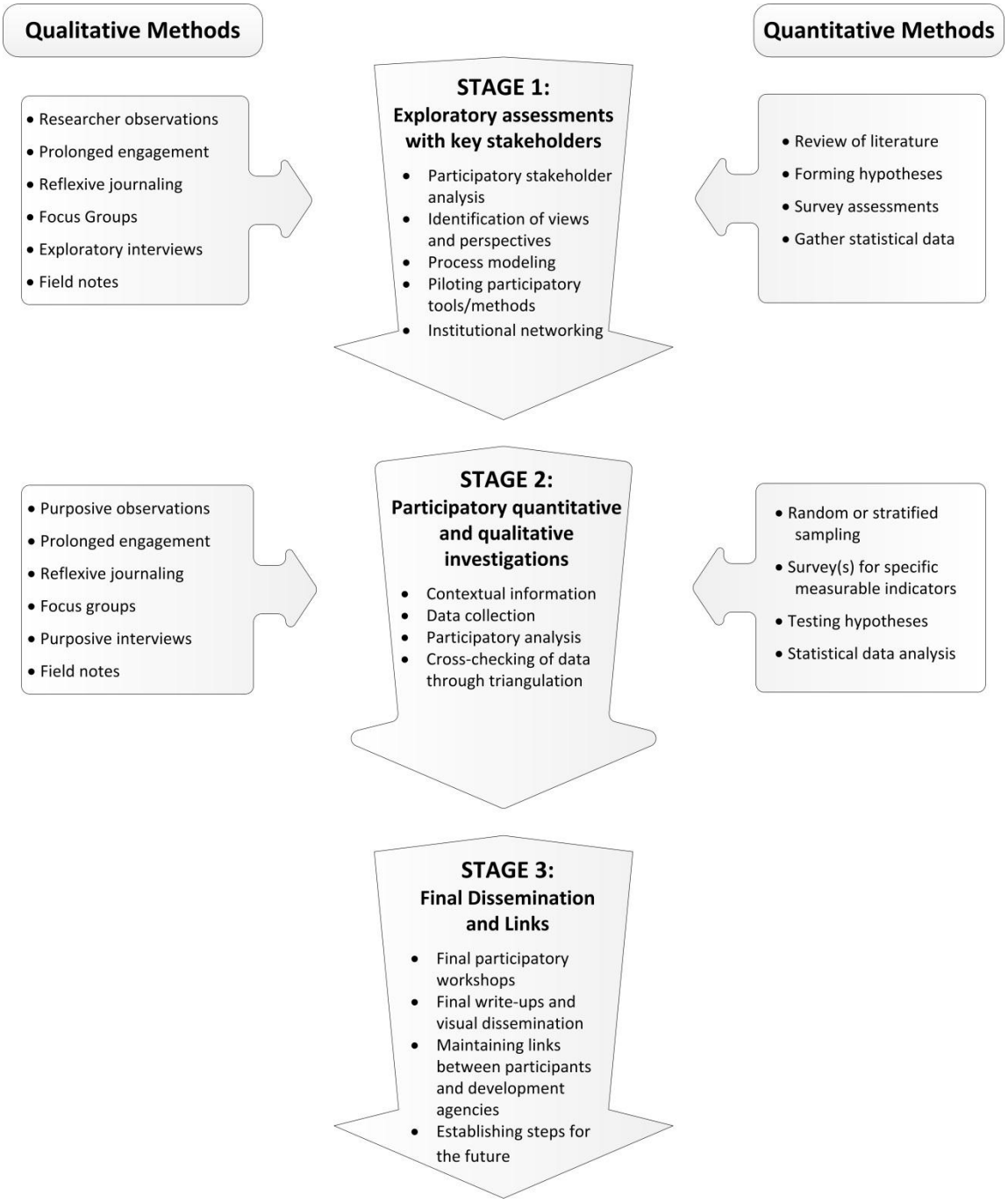

Figure 1.4. Mayoux and Chambers logic model for participatory evaluation. Adapted from Mayoux & Chambers, 2005.

Theory Building

Carlile and Christensen (2005) stated that valid and reliable theory is developed through a theory building process that collectively builds on the work of previous researchers. Carlile and Christensen proposed that the term "theory" is best understood as body of understanding that is cumulatively formed by researchers. The process of theory building occurs in two major stages—descriptive or inductive and normative or deductive—and theory builders proceed through three steps within each stage: observation, classification, and definition of relationships. In the first step of observation, researchers observe phenomena and carefully explain and assess what they have witnessed. Many times, researchers in this step find it useful to develop constructs which help to explain and better understand the phenomena. The step of observation is very crucial to providing the foundation for the next steps in the descriptive stage of theory building. Researchers in the second step of classification use the descriptions of the observed phenomena and then organize the phenomena into categories. Classification or categorization schemes—often referred to as frameworks—are typically designed around attributes of the phenomena. In the third and last step of the descriptive process of theory building, researchers investigate relationships between categorizing attributes and observed outcomes of the phenomena. Researchers intend to recognize and explain any correlations between attributes and outcomes. A regression analysis can be a useful tool for identifying these correlations. Researchers in the step of defining relationships often refer to the output of the correlation investigations as models.

Researchers who follow the three steps of the descriptive process—observation, classification or categorization, and definition of relationships or associations—have completed the inductive process of theory building research. Theory is then improved by cycling backward through the steps—the deductive process—and testing the formulated hypotheses. Researchers who wish to test the hypotheses that have been formulated through the inductive process do so by exploring whether the same correlations or associations exist in a new sample or data set. When researchers test these hypotheses, the results will sometimes find that the predicted outcomes do indeed share the same association with attributes of the phenomena in the new sample. If such results are yielded, researchers confirm that the theory is useful under the observed conditions. However, sometimes an anomaly is identified which cannot be explained by previous theories. When an anomaly has been discovered, the researcher has the opportunity to review and potentially edit or amend the foundation of previous theories in an attempt to more accurately define and measure the phenomena so that all associations and outcomes can be explained. It is at this crossroads that the researcher discovered an anomaly in the previously mentioned evaluation models. Each separate evaluation model included its own corresponding set of constructs but many of the constructs were the same or very similar for the different models. Therefore, the researcher proposed a new integrated model that combined the constructs from the previous models to more accurately define and measure the phenomena of an impact evaluation so that all associations and outcomes could be explained.

Operational Framework

For the operational framework of this study, the efforts of the DAC evaluation criteria (Clements, Chianca, & Sasaki, 2008), Kirkpatrick's four levels of evaluation (Kirkpatrick & Kirkpatrick, 2006), and the logic models provided by Mayoux and Chambers (2005) and the University of Wisconsin-Extension (Taylor-Powell, Steele, & Doughlah, 1996) were combined to produce a set of constructs and a framework for classification and categorization. Four levels of outcome constructs were produced—*reaction*, *learning*, *action*, and *conditions*—and each construct uses four individual measures to develop a classification framework for discovering any correlational relationships:

- *Reaction*: attitudes, satisfaction, opinions, motivations
- *Learning*: awareness, knowledge, skills, aspirations
- *Action*: behavior, practice, decision-making, social action
- *Conditions*: social, economic, civic, environmental

Figure 1.5 provides a visual model of the operational framework designed for this research study.

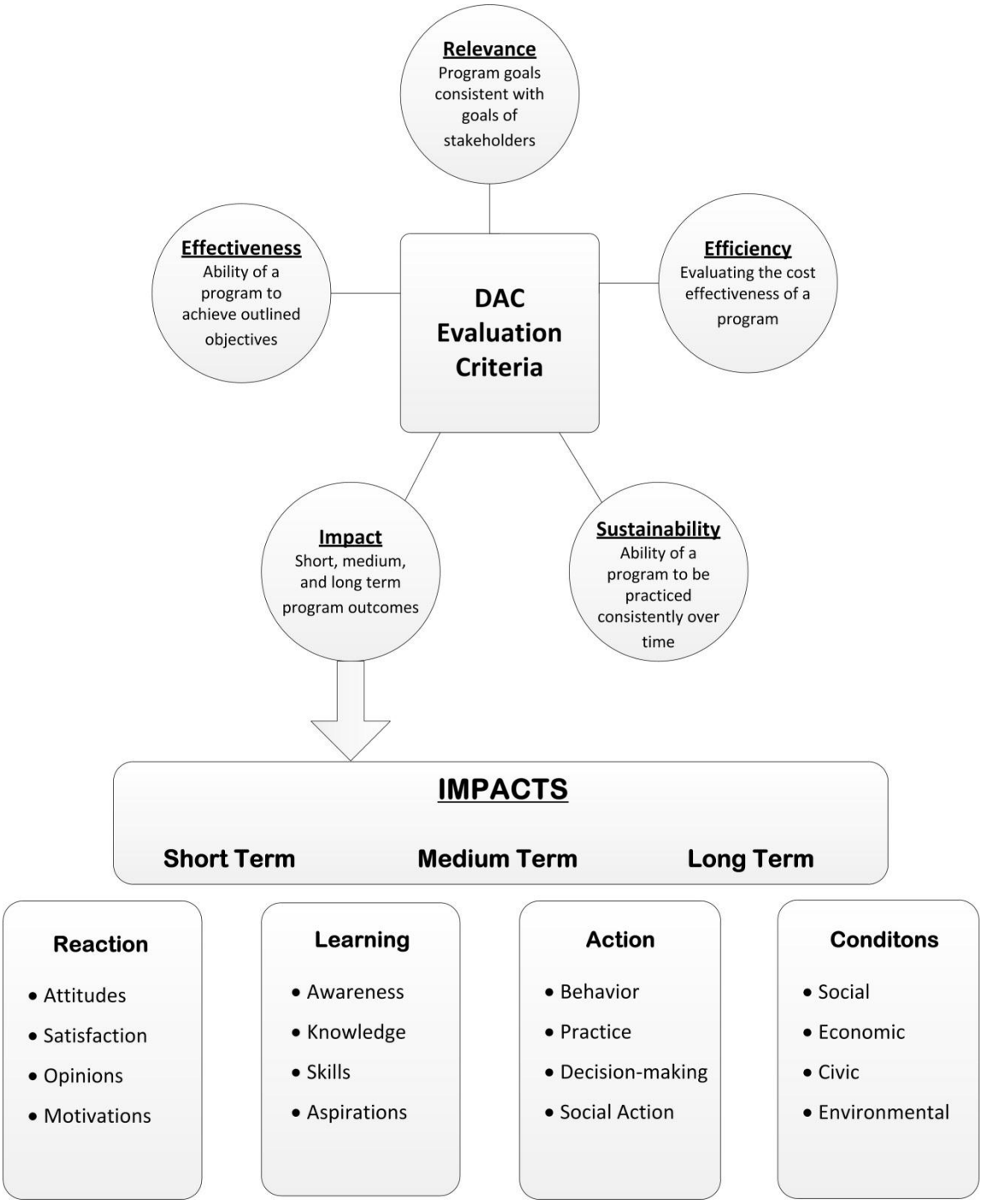

Figure 1.5. Operational framework designed for this research study.

Purpose of the Study

Few international development organizations have adopted a consistent framework for evaluation criteria that helps to eliminate positive bias toward the organization (Carman, 2007). However, multiple frameworks have been proposed for program evaluations that help to mitigate positive bias and by which a program is consistently measured and evaluated (Clements, Chianca, & Sasaki, 2008; Kirkpatrick & Kirkpatrick, 2006). Carlile and Christensen (2005) also wrote that valid and reliable theory is developed through a theory building process that collectively builds on the work of previous researchers. This research study proposed to build toward a consistent program evaluation by first evaluating the initial stages of an impact assessment. This study contributes to the fields of both evaluation and research by practicing the process of an evaluation framework proposed in the literature (Clements et al., 2008) and conducting the evaluation by following the inductive process of the descriptive stage in theory building (Carlile & Christensen, 2005).

The purpose of the study was to measure the *reaction* of a community located in Limón, Costa Rica to the development programs of an international development organization. This research project was a descriptive study that explored the *reaction* of one community—measured through attitudes, satisfaction, opinions, and motivations—to the environmental education program and community-based initiatives of an international development organization.

Research Question

This study focused on the first construct, *reaction*, from the operational framework of the impact assessment designed to build toward a consistent program evaluation for an international development organization. For the specific organization involved in this research study, an overall impact assessment would measure *reaction*, *learning*, *action*, and *conditions* from all of its development programs throughout all regions of the world. The following exploratory question guided this research study: What is the *reaction* of a community—measured through attitudes, satisfaction, opinions, and motivations—to the environmental education program and the community-based initiatives of an international development organization?

Figure 1.6 provides a visual model of the research question designed for this study.

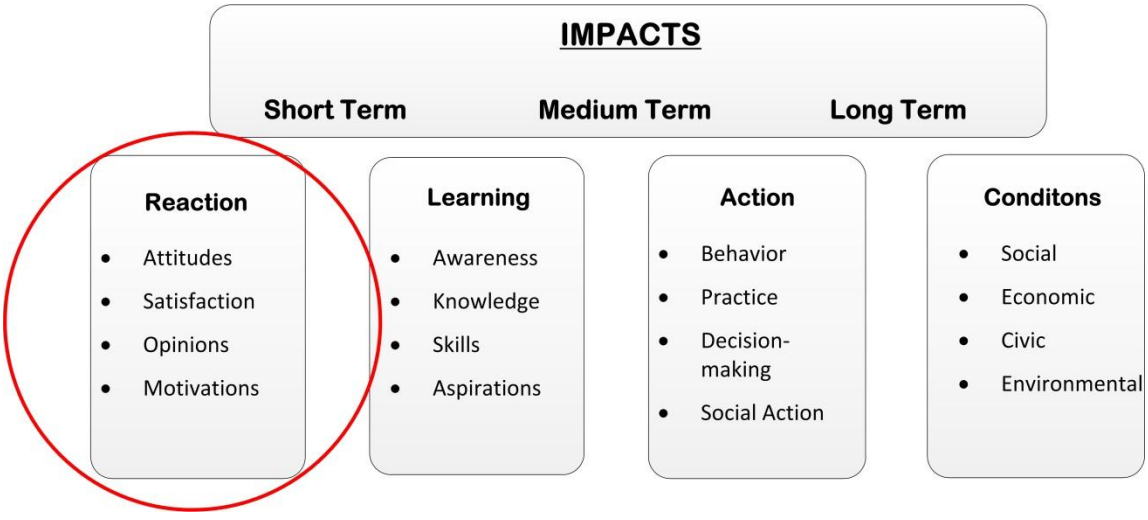

Figure 1.6. Research question designed for this study.

Significance of the Study

This study assisted an international development organization in beginning the initial stages of a consistent program evaluation process that helps to mitigate positive bias, contributed to the field of development evaluation by practicing and testing the process of an evaluation framework proposed in the literature, and promoted a theory building process that collectively built upon the knowledge of previous researchers. For the specific international development organization involved in this study—and other international development organizations which use educational interventions and/or community-based development projects—the answer to this research question can establish a starting point for providing valuable knowledge toward understanding how an organization can design its programs to make the most beneficial impact(s) in each community it chooses to serve.

Context of the Researcher's Experience

The following section provides background information of the researcher's experiences and qualifications that describe the researcher's ability to accurately interpret and provide meaning to the context of the study.

After completing a Bachelor of Science degree in Agricultural Development from Texas A&M University in May of 2006, the researcher was selected to serve as a Peace Corps volunteer for the Crop Extension program in Paraguay beginning in September of 2006. Although the ethnicity of the researcher is of mixed descent and the researcher had been familiar with cross-cultural experiences, the researcher's service as

a Peace Corps volunteer was the first time the researcher had lived outside of the United States of America and was completely immersed in a different language and culture. For the first three months of service, Peace Corps provided language, technical, cultural, and safety training taught by both host country nationals (HCN) and American citizens hired by the organization. During these first three months of training, the researcher lived with a Paraguayan host family. Once training was successfully completed, the researcher was officially sworn in as a Peace Corps volunteer and assigned to work with a rural farmer's committee to serve as an agricultural extension worker and change agent. During the first three months of service, the researcher lived with a host family to more accurately understand the working dynamic of families who lived in the community. The farmer's committee had previously identified soil conservation as its primary need. Years of poor soil management, erosion, and slash and burn practices contributed to a depletion of nutrient content in the soil and consequently decreased crop yields. In order to address this concern, the researcher worked with the farmers to incorporate green manures, a type of cover crop grown primarily to add nutrients and organic matter to the soil. Green manures usually perform multiple functions that work toward soil improvement and protection while also providing farmers with a low-cost alternative to chemical fertilizers. The researcher also worked with farmers to incorporate crop rotations along with the implementation of green manures to achieve a natural form of insect pest management (IPM) and improve crop health. In addition, the researcher assisted the farmers in the formation of farm plans and farm diagrams in order to plan future plantations and crop locations, identify spacing requirements and limits, and to set

overall goals for farm production. Furthermore, completion of service as a Peace Corps volunteer provided the researcher with experience in conducting a needs assessment using RRA and PRA, project implementation and management, and the initial stages of project monitoring and evaluation. The researcher used this acquired skill set during the formation and implementation of this research study.

After successful completion of 27-months of Peace Corps service, the researcher enrolled in the Master of Science program from the Department of Agricultural Leadership, Education, and Communications at Texas A&M University. The researcher elected this program to further study needs assessments, project implementation and management, and project monitoring and evaluation. During the first year of course work, the researcher made contact with the international development organization described in this study. The organization had partnered with Texas A&M University to provide students with an opportunity to participate in an international six-week service project during the summer of 2010. The project consisted of students implementing and facilitating an environmental education program with local children and youth and working alongside local community members in the formation and implementation of community-based initiatives. The international development organization explained to the researcher that their organization had not previously conducted any monitoring or evaluation studies from the perspective of the communities served by their programs. All current and past evaluations had focused on the experience and personal development of the volunteers. During the initial conference call between the researcher, a member of the thesis committee, and members of the administrative team from the international

development organization, the group concluded that the researcher's study would focus on beginning the initial stages of an impact evaluation with an emphasis on local community perspectives. In addition to serving as the principal evaluator for the evaluation research study, the researcher simultaneously participated as a volunteer for the international development organization. The experience of being a participant observer helped to provide the researcher with a valuable context to view the development programs from the perspective of a volunteer. A holistic perspective of the overall impacts was then provided by collecting data to represent the viewpoints of the community being served by the organization and its volunteers.

The programs of the international development organization consisted of an environmental education program and community-based initiatives. The environmental education program was adapted from the Junior Master Gardener (JMG) curriculum and was designed to increase the environmental knowledge and awareness of children and youth ages 5–15. Volunteers from Texas A&M University were trained in conducting eight different JMG lessons in Spanish before they began working with the international development organization. While the target audience for the environmental education program only included children and youth ages 5–15, the community-based initiatives targeted the participation of the entire community. Upon arrival in the community, volunteers were advised to conduct a needs assessment with local community members so that together they could begin to identify potential community-based initiatives. The researcher lived and worked in one community for five weeks which provided a valuable perspective of the community resulting from prolonged engagement. The researcher also

served with two other volunteers from the international development organization. Together, the three volunteers conducted JMG lessons and other educational activities five days a week for five weeks for an average of 30 children and youth. The three volunteers also collaborated daily with community members during the six-week program to identify and implement community-based initiatives.

Constitutive Definitions

Community-Based Initiative: The collaborative effort of an organization partnering with local community members who share the common goals of identifying, planning, and implementing community service projects according to the needs of the community (Amigos de las Americas, 2010; Partain, 1991; World Health Organization, 2010).

Culture: The set of shared attitudes, values, goals, and practices that characterizes an institution or an organization (Merriam-Webster Inc., 2003).

Development Evaluation: Evaluation activities, including program evaluations at the macro-level and project evaluations at the micro-level, conducted in developing countries for international development organizations (Bamberger, 2000; Lawrence, 1989; Picciotto, 2007; Snyder & Doan, 1995).

Environmental Degradation: The deterioration of the environment through the depletion of natural resources and the destruction of ecosystems (Donohoe, 2003).

Environmental Education: Organized efforts to teach people to learn to live in ways that promote the protection, conservation, and restoration of the natural environment and the natural resources upon which our lives depend (Zint & Higgs, 2008).

Evaluation: "The process of gathering information on the results of past activities for the purpose of making decisions about them" (Murray, 2005, p. 346).

International Development Organization: Any organization working in developing countries that implements social or economic programs and receives funding through bilateral or multilateral development institutions or by international non-government organizations (NGOs) (Bamberger, 2000).

Program Evaluation: "The systematic assessment of program results, and to the extent feasible, the systematic assessment of the extent to which the program caused those results" (Carman, 2007; Newcomer, Hatry, & Wholey, 2004, p. xxxiii).

Sustainable Development: "Meeting the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987, pp. Part I, para. 2).

CHAPTER II

REVIEW OF LITERATURE

Environmental Education

The contemporary field of environmental education has been influenced throughout the years by the nature study movements and conservation education (Zint & Higgs, 2008). Anna Botsford Comstock—a prominent figure in the American nature study movement—was a nature study professor at Cornell University who in 1911 published the famous *Handbook of Nature Study* (Comstock, 1939). The handbook has been translated into multiple languages and was ultimately used as a platform to implement nature study as part of the elementary curriculum in American schools (F. Knight & Stegemann, 2008). Aldo Leopold—an American forester, ecologist, and environmentalist—was an early leader of the American conservation movement whose book *A Sand County Almanac* (1949) has contributed to many disciplines and ideas that impact our current understanding of environmental conservation and education (R. L. Knight, 1998). It wasn't until 1969 that the term "environmental education" was first coined by William B. Stapp, a professor at the University of Michigan (Stapp, 1969). Stapp's definition explained that "environmental education is aimed at producing citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution" (p. 14). Although a complete history of environmental education is not necessary for the purpose of this research study, it is important to recognize that

the efforts of these individuals and numerous others have helped to create the field of environmental education we recognize today. Furthermore, due to the notion that many of the greatest impacts on human health result from environmental degradation, environmental education continues to maintain importance today, especially in regard to efforts toward counteracting this global megatrend (Donohoe, 2003; Lean, 2009).

The Tbilisi Conference in 1977—the world's first intergovernmental conference on environmental education—created specific goals for environmental education which helped to serve as a guideline for the future of the field. According to a set of goals developed in the early 1980s designed to provide direction for the field of environmental education, the superordinate goal of environmental education was to assist people in becoming environmentally knowledgeable and skilled individuals who are willing to work toward achieving and sustaining a "dynamic equilibrium between quality of life and quality of the environment" (Hungerford, 1990, p. 13). Educating people away from anthropocentrism—centers on the value of humans, their needs, and lifestyle—and toward biocentrism—giving value to non-human species, ecosystems, and natural processes in the environment—can help to increase the understanding that humans are also subject to the same laws of nature that govern other living things (Bunyan, 1996). Bunyan further explained that human survival is greatly dependent upon various other life species which together forms a complex web of life. While this awareness or knowledge of the complexities and natural processes of the environment described by Bunyan is critically important to environmental education, Hungerford also strongly suggested that students should be provided with an opportunity to form their own

individual sense of ownership. This added idea provides an opportunity for the students to become empowered so that they can become fully immersed in their sense of the environment and hopefully encouraged to become more responsible and active individuals. After the turn of the century environmental educators and researchers also began to focus on the origins of environmental issues and how environmental education could be used to counteract the growing problems of environmental degradation. "Environmental problems result from environmental practices, and environmental practices are cultural activities" (Saul, 2000, p. 5). Therefore, environmental educators need to deepen and strengthen our complete understandings of nature and culture through a comprehensive environmental education because environmental problems are rooted in our cultural attitudes and practices (Mueller & Bentley, 2009; Saul, 2000). Stewart (2008) further expanded on this idea and wrote that studying and combining the efforts of cultural and environmental history could provide new knowledge about how past events have shaped a landscape. Locke (2009) explained that environmental education offers people the opportunity to develop their own ecological perspective and the means to identify their individual and collective responsibilities within their environments. Many environmental educators believe that being involved with nature is a key ingredient to a well-developed and well-rounded education (Potter, 2010). Rose and Bridgewater (2003) also advocated education in the natural environment and explained that environmental education can be used as an effective tool for "understanding natural and social processes and phenomena and the interrelationship between them" (p. 265). Environmental education conducted in the natural environments

of the students or participants creates new knowledge of the immediate ecosystems and promotes an understanding toward environmental decision-making (Mueller & Bentley, 2009). Short (2010) summarized that the modern goal for environmental education is for people to take action. The types of actions desired by environmental educators include those which provide a diverse and abundant biological environment while preserving or improving the sustainability of ecosystems.

Over the last several decades environmental education has been a prominent approach used in the international efforts to achieve sustainable development (Marcinkowski, 2010). Potter (2010) explained that developing environmentally literate individuals will require large investments in environmental education and sustainable development every year from this point forward. In 2005, the United Nations General Assembly declared the next decade—2005 through 2014—to be the "UN Decade for Education in Sustainable Development" (Blum, 2008, p. 348). It is hoped that the declaration will encourage the integration of knowledge and values represented by sustainable development into all facets of learning, and to promote changes in people's behavior that will lead toward more sustainable communities and environments. Environmental education encourages a lifestyle that lives in harmony with the natural environment which promotes local sustainability. Rose and Bridgewater (2003) explained that environmental education is a lifelong teaching/learning approach to develop and increase people's capacity to address and understand the complexity of environmental issues and to develop knowledge, skills, attitudes, and values consistent with sustainable development. Environmental education should ultimately serve the

purpose of spreading and strengthening the public's understanding and action to provide lasting benefits to either an individual or community without generating any harm to the sustainability of the environment (Short, 2010).

Environmental Education in Costa Rica

For many years, Costa Rica has been regarded as a world leader in the field of environmental education (Locke, 2009). After experiencing one of the highest deforestation rates in the world, Costa Rica began to surface as a regional leader in environment conservation and education in the late 1980s (Blum, 2009). During those years, the importance and need for environmental education spread throughout the different development sectors of the country including education, health, agriculture, natural resources, and tourism (O. R. Hall, 1985). Since that time, the people of Costa Rica have considered environmental education to be essential for the protection and improvement of the environment (Rose, 1987). Costa Rica's educational system—which boasts a literacy rate of 94 percent—has attempted to develop individuals and communities who are well educated in sustainable development concepts and environmental policy (Martin, 2004). A survey conducted in 2009 suggested that "the general population in Costa Rica is keenly aware and informed about environmental issues within their own country and able to engage actively in debate about them" (Blum, 2009, p. 719). The nation's emphasis on environmental and sustainable efforts—which include but are not limited to environmental education, nature conservation, and eco-tourism—has earned it international recognition and a reputation as "the green

republic" (Blum, 2008, p. 349; Johnson & Clisby, 2009, p. 174; Vaughan, Gack, Solorazano, & Ray, 2003; Vivanco, 2006, p. 3).

Costa Ricans display a great pride in their nation's commitment to education, and they have become increasingly interested in providing more environmental education opportunities for the nation's children and youth (Blum, 2009). Beginning in 1983, the Education Ministry conducted extensive programs for updating and overhauling the education curriculum which provided the opportunity to include the environmental dimension as a priority in the new educational approach (O. R. Hall, 1985; Jones, 1992). Vaughn, Gack, Solorazano, and Ray (2003) wrote that in the late 1980s environmental education was considered government policy through the creation of the National Conservation Strategy for Sustainable Development. In present years, the country's environmental education programs—required to be taught in both urban and rural schools by the national state school curriculum—have accentuated the region's rich history of biodiversity, exotic species, and environmental learning (Blum, 2008; Locke, 2009; Vaughan et al., 2003). Short (2010) emphasized that children and youth should receive more opportunities to learn in a familiar context applicable to their individual needs or the issues of their community. The relationship between people and their surrounding environment has been stressed across the elementary, or primary, school curriculum and environmental education has been incorporated into more than 25 percent of the science and social studies textbooks used in Costa Rican elementary schools (Jones, 1992; Locke, 2009). Environmental educators have typically focused their attention on educating children rather than adults (Sutherland & Ham, 1992;

Vaughan et al., 2003). Advocates of increasing environmental education with children as the main target audience have argued that children are a more attentive and easily influenced audience while they also represent the future of conservation and environmental sustainability. However, although many environmental education efforts have been focused on the curriculum and learning of children and youth, parents in Costa Rica have been shown to absorb knowledge and understanding from their children (Vaughan et al., 2003). Some environmental educators also strongly believe that environmental education programs should target adult audiences because they are better equipped to bring about changes in environmental action more rapidly than children (Sutherland & Ham, 1992; Vaughan et al., 2003). In response to this growing interest for future adult leaders in environmental education and sustainability, many Costa Rican universities have begun to offer courses in environmental education and degrees in environmental science (Rose, 1987). In 1985, a partnership was formed between the W. K. Kellogg Foundation, the United States Agency for International Development (USAID), and the Costa Rican government to establish an international agricultural university (EARTH University Foundation, 2010). In 1986, EARTH (Escuela de Agricultura de la Región Tropical Húmeda) University—located in Guácimo, Limón, Costa Rica—was created as an international private, not-for-profit, university with graduates receiving a bachelor's degree in agronomy. The mission of EARTH University is to prepare future leaders in learning about and practicing sustainable solutions to current environmental problems with a focus that balances agricultural production and environmental sustainability (EARTH University Foundation, 2010;

Miller, Mariola, & Hansen, 2008). EARTH University offers extension programs to local communities where faculty and students work with farmers and their families to diffuse agricultural information and technologies. Students enrolled at EARTH University have been dedicated to helping local farmers in the Limón region find sustainable practices to the production of agriculture while considering the preservation and conservation of the natural environment.

Costa Rica has been praised for its environmental education initiatives and its promotion for the development of environmentally sustainable attitudes and behaviors (Blum, 2008). Costa Rica has received much attention from the international community for its development of "green policies" using a participatory approach with local communities. Government organizations throughout Costa Rica promote environmental education by organizing in-service training programs and extension courses (Rose, 1987). In addition to the local, provincial, and federal initiatives implemented by the Costa Rican government, the country also receives support for environmental education programs from numerous international and domestic development organizations and private businesses (Blum, 2008). Beginning in the early 1990s, Costa Rica emphasized the combined governmental and NGO efforts that supported a grassroots approach to increasing knowledge and awareness of environmental issues (Jones, 1992). The participative democracy of environmental education promotes responsibility and accountability within the local community through the empowerment and pride of its people (Locke, 2009; Martin, 2004). Costa Rica has attempted to implement the strategic environmental and sustainable policies encouraged and promoted through international

cooperation from the Earth Summits of Rio de Janeiro in 1992 and Johannesburg in 2002. In 1996, Costa Rica decided to address the issue of environmental degradation with the implementation of sustainable development policies including biodiversity, agriculture, and environmental education (Martin, 2004).

Sustainable Development

"Sustainable development is a term that everyone likes, but nobody is sure of what it means" (Daly, 1996, p. 1). This description of sustainable development explains that the term has been used throughout its history to mean different things to different people. First arriving in our vocabulary around the late 1970s and early 1980s, the 1980 World Conservation Strategy Report published by the International Union for Conservation of Nature and Natural Resources (IUCN)—in collaboration with the United Nations Environment Programme (UNEP), the World Wildlife Fund (WWF), the Food and Agriculture Organization of the United Nations (FAO), and the United Nations Educational, Scientific and Cultural Organization (UNESCO)—was one of the original documents in which world leaders discussed the concept of sustainable development at length. In combination with the 1987 Brundtland Commission Report—formally referred to as the World Commission on Environment and Development (WCED) and conducted by the United Nations (UN)—these two documents were the first instances in which the term "sustainable development" was provided with its modern definition (Martin, 2004). The Brundtland Commission Report provided arguably the most-often used definition of sustainable development which defined the term as "meeting the needs

of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987, pp. Part I, para. 2). Some researchers have further summarized that sustainable development encourages the distribution or redistribution of natural resources in such a way that promotes equity amongst generations both present and future (Martin, 2004). At the 1992 Earth Summit held in Rio de Janeiro, The United Nations Conference on Environment and Development further discussed this new concept and presented a challenge to the world to implement changes leading toward sustainable development (Rose & Bridgewater, 2003). The 1992 Earth Summit marked a momentous shift toward recognizing the need for the implementation of development programs and processes that would not risk the well-being or quality of life for future generations. Ten years later at the 2002 Earth Summit in Johannesburg—also referred to as the World Summit on Sustainable Development—sustainable development was recognized as a central component of the international agenda (Rose & Bridgewater, 2003). The main differences from the 2002 Earth Summit compared to the previous efforts at the 1992 Earth Summit were a focus to expand and strengthen the understanding of sustainable development and also to outline ways to implement sustainable programs and practices. This focus resulted in the Declaration on Sustainable Development and a Plan of Implementation. In order to achieve a more effective model for implementation, the participants in Johannesburg advocated more partnerships between governments, business, and society.

More recently in the year 2000, all 192 member states of the United Nations and various international organizations agreed to the Millennium Development Goals (MDG); eight international development goals set to be achieved by the year 2015 (United Nations, 2011b). Figure 2.1 provides a visual model for the MDGs. The seventh goal of the Millennium Development Goals (MDG7) is designed to ensure environmental sustainability (Donat Castelló, Gil-González, Alvarez-Dardet Diaz, & Hernández-Aguado, 2010; United Nations, 2011a). Three targets were originally attached to MDG7 to track the progress toward achievement of the goal:

(a) Integrate sustainable development principles into policies and programs; reverse the loss of environmental resources and biodiversity by 2010.

(b) Reduce by half the proportion of people without access to sustainable and safe drinking water and basic sanitation by 2015.

(c) Achieve significant improvement in the lives of at least 100 million slum dwellers by 2020.

Figure 2.1. The Millennium Development Goals. Adapted from United Nations, 2011b.

Costa Rica has been one of the pioneering countries around the world to begin promoting, adopting, and implementing sustainable development policies (Martin, 2004). For example, in 1996 Costa Rica adopted the vision of sustainable development as a solution to its growing concern of environmental degradation (Martin, 2004). Costa Rica promoted and sponsored national awareness and participation in the discussion for sustainable development policy so that diverse opinions and perspectives would be shared and assist toward building a consensus throughout the country (Martin, 2004). The nation-wide discussions encouraged the participation of all sectors of society

including indigenous populations who had historically been underrepresented in the formation of national policy. Martin explained that Costa Rica's participatory strategies are able to provide the world with a successful model for the adoption and implementation of sustainable development as a means to counteract the growing concern of environmental degradation.

Development Evaluation

"Evaluation is the process of gathering information on the results of past activities for the purpose of making decisions about them" (Murray, 2005, p. 346). International development organizations can use evaluation information for internal organizational reports, on grant applications to provide additional financial support for increasing positive impacts, to identify strengths and weaknesses of programs for future improvement, to discover if the target audience who participated in a program have benefited, in the creation of marketing materials to increase awareness of an organization's achievements for donors and funding agencies or other stakeholders, and also to simply inform the organization on how to make better decisions (Olujide, 2005; Roucan-Kane, 2008). Evaluation exceeds research by extending into decision-making and should therefore be viewed as a process rather than a product (Olujide, 2005). In many instances, evaluation information may be required to encompass an entire program. A program evaluation can therefore be described as "the systematic assessment of program results, and to the extent feasible, the systematic assessment of the extent to which the program caused those results" (Newcomer, Hatry, & Wholey, 2004, p. xxxiii).

Program evaluations may be useful when there is interest to improve or modify a program, a program contains various activities that can be measured to one another, meeting stakeholder expectations, or when opportunities are provided to improve the program through additional time, money, or resources (Roucan-Kane, 2008). International development organizations often require a program evaluation which has created the term development evaluation. For the purpose of this study, development evaluations are described as evaluation activities, including program evaluations at the macro-level and project evaluations at the micro-level, conducted in developing countries for international development organizations (Bamberger, 2000; Lawrence, 1989; Picciotto, 2007; Snyder & Doan, 1995). The donors and funding agencies of international development organizations usually require that their sponsored programs be evaluated (Bamberger, 2000; Carman, 2007; Murray, 2005; Snyder & Doan, 1995). The knowledge and understanding produced from development evaluations help to encourage improved designs and implementation procedures for development policies and programs within local, regional, national, and global systems (Picciotto, 2003).

However, Murray (2005) observed that evaluation in its current definition and understanding has the potential to occur formally and professionally, in the systematic approach suggested by Carman (2007) and Newcomer, Hatry, and Wholey (2004), or it can occur informally and to varying degrees. Furthermore, the term evaluation has been used to mean something different for various organizations working in the same field of international development (Bamberger, 2000; Carman, 2007; Lawrence, 1989). Some international development organizations use evaluation to cover the monitoring aspect of

project implementation to measure efficiency or effectiveness by assessing whether the inputs of a project or program are producing the desired outputs. Other international development organizations use evaluation to measure evaluation activities which assess the degree to which the projects or programs have successfully accomplished their outlined objectives or implemented a desired change. Still other international development organizations use the term to cover both monitoring and evaluation activities. Development evaluation therefore faces the challenge to reach a consensus to determine the systematic and operational definitions of evaluation.

An additional challenge facing development evaluation is that in many instances, the donors and funding agencies are the principal sponsors of evaluation (Bamberger, 2000; Carman, 2007; Murray, 2005; Snyder & Doan, 1995). Consequently, this relationship could potentially create a liability for the international development organization to feel bound by and adhere to the evaluation priorities of its donors and funding agencies rather than using evaluation as a tool to make better decisions (Bamberger, 2000). Murray summarized this relationship as the "accountability movement" (p. 347) which refers to the idea that organizations should be held more accountable to the donors and funding agencies that provide the funds to operate their development programs. Picciotto (2003) stated that objective evaluations are increasingly being demanded because donors and funding agencies are insisting on more transparency and accountability. Moreover, development organizations have shown that they often struggle to keep pace with the increasing demands of donors and funding agencies for consistent and thorough program evaluations (Carman & Fredericks, 2010;

Newcomer, 2004; Picciotto, 2003). In response to these increasing demands, Carman (2007) indicated a growing interest from evaluation researchers to discover ways to increase an organization's understanding of and ability to implement program evaluations through evaluation capacity building. Evaluation capacity building efforts—such as educational workshops, train-the-trainer models, technical assistance, and use of logic models—help to assist international development organizations in their efforts to maximize the usefulness of their evaluation information (Carman & Fredericks, 2010). Evaluation capacity building efforts could also assist in reframing the purpose and definition of an evaluation toward those of a managerial tool instead of just an accountability tool created simply to satisfy the interests of donors and funding agencies. Whether or not evaluation capacity building efforts are the answer to the increasing pressure for more accountability and transparency, improved approaches and procedures of performance measurement, monitoring, evaluation, and management will be increasingly demanded by donors, funding agencies, and development policy makers until development evaluators reach a consensus for how to address this growing need (Picciotto, 2003). In summary of the growing need for more transparency and accountability in international development organizations, Picciotto made an easily understandable comparison for NGO's when he stated that "independent and self-evaluation are to the public sector what accounting and auditing are to the private sector" (p. 233).

Another growing concern and interesting development within evaluation design has been discovering and implementing ways to provide a voice to the individuals and

groups who are affected by development programs (Bamberger, 2000; Chambers, 1994a; Lawrence, 1989; Toness, 2001). One of the leading principles of participatory methods—also referred to as tools, instruments, or techniques—explains that individuals and groups affected by development programs should become managers and agents of research and evaluation rather than objects to be studied and evaluated (Hart, 2008; Nelson & Wright, 1995; Pretty, 1995). Two such methods that have been used in recent years for implementing participatory evaluation and analysis include rapid rural appraisal (RRA)—developed in the late 1970s and 1980s—and participatory rural appraisal (PRA)—which evolved from RRA in the 1990s and has since been used in more than 130 countries (Bamberger, 2000; Chambers, 1994a, 1994b; Pretty, 1995; Toness, 2001). RRA and PRA each aim toward a partnership between evaluators and local participants resulting in the participants being more actively involved in the evaluation process and activities (Hart, 2008). The development of both RRA and PRA has been largely attributed to Robert Chambers who is sometimes referred to as the father of participatory rural appraisal (Hart, 2008).

However, it is also important to recognize that the development of Chambers' work has roots established from activist and adult education researcher Paulo Freire, most notably from his book *Pedagogy of the Oppressed* which was originally published in Portuguese in 1968 and later made available in English and Spanish in 1970 (Chambers, 1994a; Freire, 2000). Rapid rural appraisal can be summarized as a method that can "enable outsiders to gain information and insight from local people and about local conditions, and to do this in a more cost-effective and timely manner" (Chambers, 1994a, p. 957). Chambers (1994a) also provided a summary of PRA as "a family of approaches and methods to enable rural people to share, enhance, and analyze their knowledge of life and conditions, to plan and to act" (p. 953). Although RRA and PRA are similar in many ways, it is important to recognize that the evolution of PRA has placed more emphasis on ownership of information and the nature in which the techniques are implemented (Chambers, 1994b). Figure 2.2 provides a visual model for the comparison of RRA and PRA. The figure helps to explain differences in theory and practice between RRA and PRA.

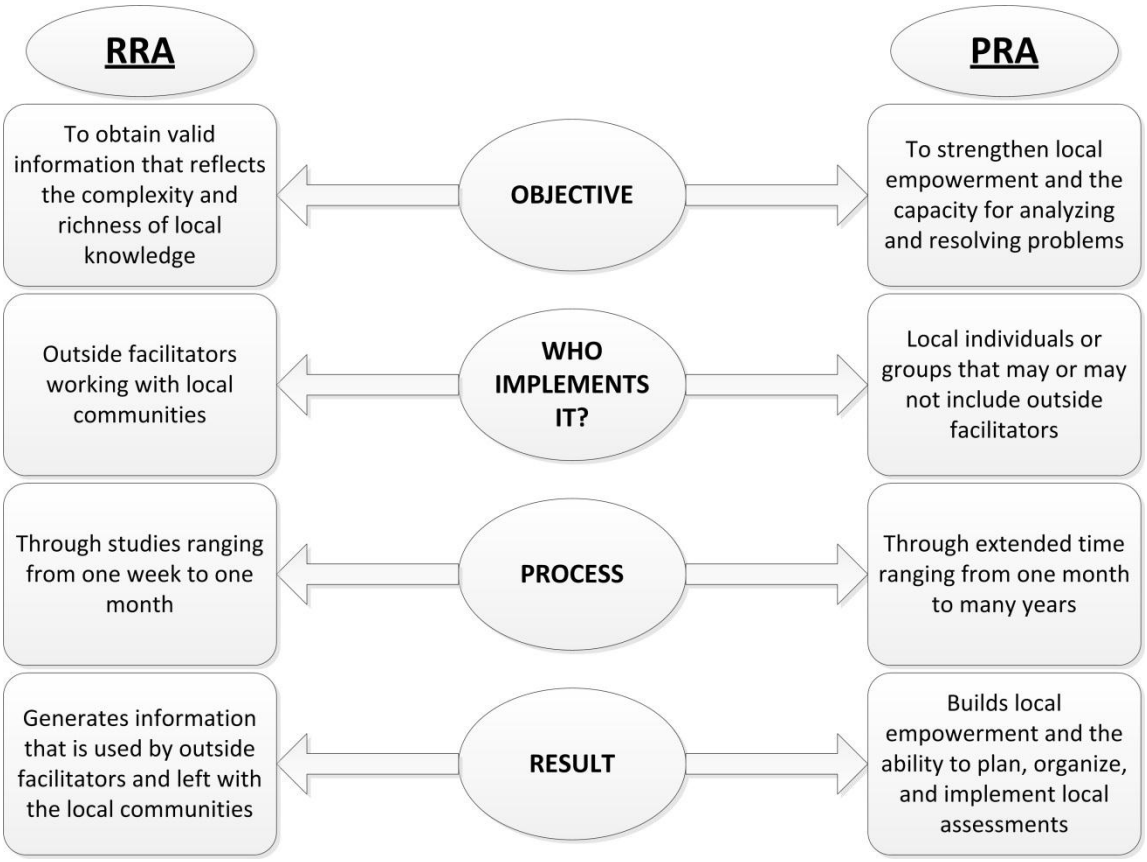

Figure 2.2. Comparison of RRA and PRA. Adapted from Toness, 2001.

Picciotto (2007) further suggested a need for locally-based and locally-owned project evaluations and processes because improving governance and decreasing poverty are primarily the responsibilities of local communities in developing countries. In the last few decades, workers and researchers in social planning have identified that community development requires community participation (de Ortecho, 1991). Furthermore, if research and evaluation are intended to serve development then researchers and evaluators must examine a community's problems from the community perspective (Ganpat, Isaac, Brathwaite, & Bekele, 2009). As mentioned within PRA,

participatory evaluation helps provide a community with ownership of the evaluation activities and assists outside researchers and evaluators in capturing the voice of the community. Significant advantages of using participatory techniques in evaluation include their cost-effectiveness, the depth and richness of the information and analysis, and the ability to quickly bring together the knowledge and information from a wide range of participants (Chambers, 1994c; Mayoux & Chambers, 2005). Hart (2008) further explained that participatory evaluations can help to increase the knowledge of participants toward understanding their current situations and thus provide a means for creating and implementing positive change for themselves and their community. Another example of participatory evaluation provided useful impact information resulting from processes that included exchanging ideas and expectations not normally discussed from day-to-day, increasing awareness of social and political relationships that affect the community, and reconsidering values of the community (de Ortecho, 1991). Picciotto summarized that in order to satisfy this growing interest for more participation from local individuals and communities, development evaluations in the future will need to be "more comprehensive, more participatory, and better adapted to the felt needs of society" (p. 520).

Summary of Review of Literature

In summary, environmental education describes any organized efforts to teach people to learn about and become aware of the environment and to adopt a way of life that promotes the protection, conservation, and restoration of the natural environment and natural resources (Zint & Higgs, 2008). Throughout the past several years, environmental education has been internationally adopted as an approach to counteract the effects of environmental degradation in the effort to achieve sustainable development throughout the world (Marcinkowski, 2010). The people of Cost Rica regard environmental education to be an essential component for learning about the protection and conservation of the environment (Rose, 1987). Costa Rica has also been increasingly interested in providing more opportunities for environmental education to the nation's children and youth (Blum, 2009). Through various conferences, commissions, and reports conducted at the international level, global leaders have identified sustainable development as a major theme for using natural resources in a way that promotes equity between present and future generations (Martin, 2004). However, development evaluations face many challenges in establishing a streamlined process for eliminating positive-bias and providing international development organizations with information to make decisions concerning its development programs (Carman, 2007; Murray, 2005; Picciotto, 2003, 2007). One challenge in particular describes a need for providing a voice to the individuals and communities impacted by development programs (Bamberger, 2000; Chambers, 1994a; Toness, 2001).

Costa Rica has adopted many "green policies" which encourage a grassroots participatory approach with local communities collaborating with international development organizations toward sustainable community development. From its recent efforts, Costa Rica has been globally acknowledged as a leader in environmental education and sustainable development earning the country a reputation as a "green republic" (Blum, 2008; Locke, 2009). From the information in this chapter, researchers are able to identify various reasons for conducting development evaluations concerning environmental education and community-based initiatives along with several suggested methods for implementing the evaluations. However, it is important to recognize that the evaluation methods to be implemented will depend on factors such as the desired type or amount of information, resources available to the evaluator(s), the budget allocated to conduct the evaluation, and the audience who will be evaluated (Roucan-Kane, 2008). Evaluation methods include but are not limited to questionnaires, interviews, focus groups, researcher observation, case studies, testimonials, knowledge and performance assessments such as pre and post-test, and self-evaluation.

CHAPTER III

METHODS

Design of the Study

For the purpose of this study, the researcher adopted a naturalistic qualitative case study approach in order "to retain the holistic and meaningful characteristics of real-life events" (Yin, 2009, p. 4). Naturalistic inquiry was chosen because this type of inquiry is always conducted in a natural setting and also because the context of the natural setting was so vitally important to measuring the reaction of the community (Lincoln & Guba, 1985). Lincoln and Guba explained that naturalistic inquiry is one of the most useful methods of inquiry if the researcher is attempting to explore human perceptions because it encourages and allows participants the opportunity to actively construct their own individual interpretations or perceptions of certain situations. Dooley (2007) agreed that naturalistic inquiry can provide the researcher with an understanding representative of the perceptions of the participants in a research study. Furthermore, a case study approach encompasses important data collection techniques for this study because a case study "relies on multiple sources of evidence, with data needing to converge in a triangulation fashion" (Yin, 2009, p. 18). The purpose of using multiple sources of data collection and triangulation are further described in the Data Collection section of this chapter. An emergent research design was used because the researcher hoped to understand the outcomes in context and pursue new methods of discovery as they emerged, making it impossible to fully determine research strategies until data

collection had started (Dooley, 2007; Hoepfl, 1997; Patton, 2002). The qualitative methods were used to generate a rich and thorough description of information to help further define and describe the *reaction* of the community measured through attitudes, satisfaction, opinions, and motivations (Geertz, 1973; Lincoln & Guba, 1985).

Sample

The population for the study was limited within the boundaries of the programs serving communities around the port city of Limón, Costa Rica. The international development organization conducting the environmental education and community-based initiative programs had previously identified communities where the programs would be administered before the research project reached the design process. The researcher did not have any influence on the geographic location of the programs or which communities were selected to participate. The researcher also did not have information regarding the criteria for how the locations and communities were selected.

From the participating communities in Limón, Costa Rica, the researcher used a purposive sample of community members from one community that was involved in the environmental education programs and the community-based initiatives. In a qualitative study using only a single case, a purposeful sample should be used because the researcher wants to mainly understand what occurs in this particular sample rather than what is generally true of various samples (Merriam, 2009). Purposeful sampling can be described as selecting information-rich samples from the entire population for in-depth analysis from which the researcher can learn about important themes related to the

purpose of the inquiry (Merriam, 2009; Patton, 2002). Dooley (2007) recommended that an operational criteria should be established to select individuals or groups for the purposeful sample. The operational criteria used for the general sample were that the community must have been participating in the environmental education and the community-based initiative development programs designed by the international development organization. Participants were also selected by using a stratified purposeful sample designed to facilitate comparisons and triangulation during data analysis. Stratified samples can be described as samples contained within a sample (Patton, 2002). The purpose for using a stratified purposeful sample was to capture variations of the original sample represented in different yet fairly homogeneous samples or tiers. The stratified groups included in this study were individuals who represented (a) community leaders [CL], (b) community members [CM], (c) host families for the volunteers of the international development organization [HF], (d) parents of children who participated in the educational programs [P], and (e) teachers in the schools [T]. Figure 3.1 provides a visual model representing each stratified group and the number of participants in each group. In all, 20 individuals were categorized into the stratified groups. However, it is important to note that some participants from the stratified purposeful sample served in more than one role in the community and were thus classified into two stratified groups.

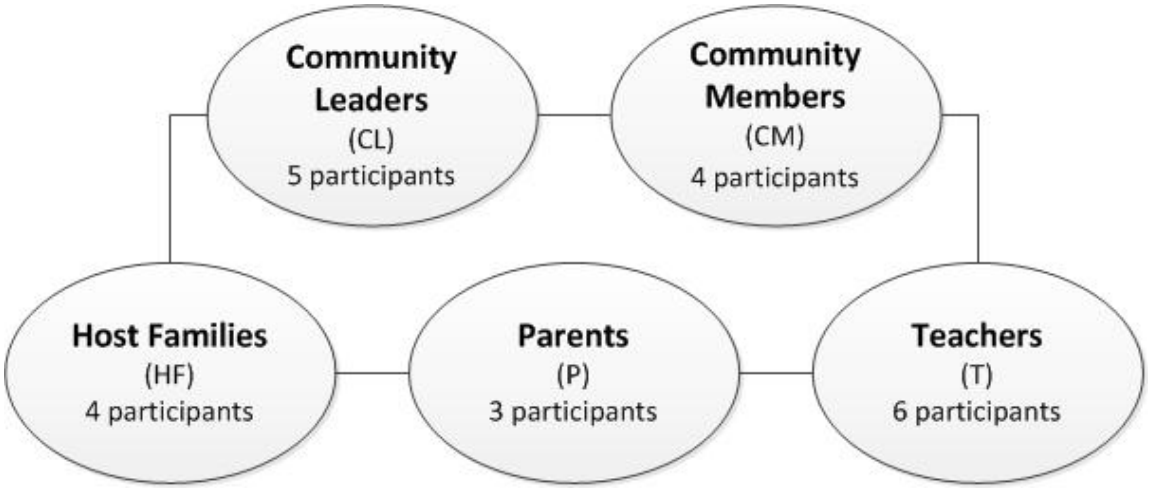

Figure 3.1. Stratified groups and number of participants for each group.

Operational Criteria for the Stratified Purposeful Sample

Each individual included in the stratified purposeful sample was specifically selected by the researcher to participate in semi-structured interviews. The operational criteria for the entire stratified purposeful sample were that each individual must have been 18 years of age or older, lived or worked in the local community, and have participated in the environmental education and/or the community-based initiative development programs designed by the international development organization. The operational criteria for each separate stratified group are explained in the sub-headings below.

Community Leaders

Each individual defined as a community leader (CL) must have presently been employed in a position of leadership within the local community. The community leadership positions found in this stratified group included a member of the local Board of Education, a local representative for a national political party, a member of the local Youth Committee, and two members from the local Sports Committee. Five individuals were selected in this stratified group and included four males and one female.

Community Members

Individuals defined as community members (CM) had to have been born and raised in the local community and could not have been employed in any formal position of leadership in the local community. All community members selected in this stratified group also lived and worked in the local community. Four individuals were selected in this stratified group, all females.

Host Families

Individuals defined as host families (HF) must have been an adult hosting a volunteer from the international development organization in his/her home during the entire duration of the six-week program. Three volunteers were placed in the local community and lived with three separate host families. Two of the host families had more than one adult in the household while one host family only included a single adult.

Four individuals were selected in this stratified group including one male and three females.

Parents

Each individual defined as parent (P) must have had a child that regularly attended and participated in the environmental education development program. On average, there were 15 children ranging from ages 3–15 that regularly attended the environmental education development program. Three individuals were selected in this stratified group including one male and two females.

Teachers

The operational criteria for individuals defined as teachers (T) were that each individual had to be employed as a paid instructor at the local primary school. Each individual had also worked at the local primary school for a minimum of three years with average employment equaling more than six years. Six individuals, all females, were selected in this stratified group. Two teachers lived in the local community and four lived in neighboring communities. Only females were employed as paid instructors at the local primary school.

Data Collection

All field data was collected by the researcher during a six-week period from June 28 to August 11, 2010, in a community located in the Limón province of Costa Rica. The community was previously identified by the international development organization. For the purpose and time frame of this study, the researcher chose to use qualitative methods that are often found in rapid rural appraisal (RRA) (Chambers, 1994a). A key advantage in using RRA methods is the ability of the researcher or evaluator to quickly bring together the knowledge and information from a wide range of participants (Mayoux & Chambers, 2005). Qualitative data was collected from community members who participated in the environmental education programs and community-based initiatives through researcher observations, prolonged engagement, field notes, and reflexive journaling (Lincoln & Guba, 1985). Researcher observations during data collection can help the researcher understand the context of the participants' perspectives and also assist the researcher in interpreting findings from other data collection methods (Dooley, 2007). Field notes can be used to help the researcher pay attention to and record what has been observed to better understand the context (Dooley, 2007; Patton, 2002). The researcher also collected data using the stratified purposeful sample to select individuals to participate in semi-structured interviews (Lincoln & Guba, 1985; Merriam, 2009). Semi-structured interviews have been suggested as "the core of good RRA" (Chambers, 1994a, p. 959; Grandstaff & Grandstaff, 1987). Altogether, 20 semi-structured interviews were conducted in Spanish by the researcher. All data from the semi-structured interviews were transcribed verbatim in Spanish and then translated to

English. The researcher used the assistance of a native speaker from Costa Rica when translating from Spanish to English to ensure that the language and context remained consistent and accurate.

An interview can be considered "a conversation with a purpose" (Lincoln & Guba, 1985, p. 268) in which the interviewer/researcher and the interviewee/respondent participate in a conversation focused on questions guided by the research study (deMarrais, 2004; Dexter, 1970; Merriam, 2009). Patton (2002) explained that interviews allow the researcher to receive information from individuals or groups of people that could not be determined unless they were asked. Furthermore, Merriam explained that interviews are a good data collection method to use when conducting a case study of a few selected individuals. The researcher determined that interviews would be a beneficial data collection technique because interviews would allow the researcher to obtain present constructions of respondents' attitudes, satisfaction, motivations, and opinions—the measures required to evaluate community *reaction*. In a structured interview the wording and order of the questions are determined by the interviewer and the answers come from the respondent (Lincoln & Guba, 1985; Merriam, 2009). Unstructured interviews require open-ended and flexible questions through which the interviewer attempts to direct the conversation and the respondent is able adapt the answers during the interview (Lincoln & Guba, 1985; Merriam, 2009). The researcher decided that a semi-structured interview would be best suited for this research study because the researcher/interviewer was aware of the evaluation criteria and measures found in the conceptual framework but required the participation of

respondents to assist in creating specific questions to be asked and then answer those questions in an attempt to evaluate community *reaction* (Lincoln & Guba, 1985; Merriam, 2009). Dooley (2007) also explained that qualitative researchers are often guided by predetermined questions but the actual questions used in the interviews may deviate in order to capture trends that emerged through data collection and analysis. The researcher used the assistance of community members to create questions for the interviews and to check that the correct language and context would be used for Spanish in Costa Rica. Before each individual interview, the researcher/interviewer also explained to each respondent that the responses collected from the interviews would be used to help improve future international development programs. Since the respondents actively participated in the search for improvement alongside the researcher/interviewer, the researcher is said to have conducted phenomenal interviews as stated by Lincoln and Guba. A copy of the guide for the semi-structured interview questions used in data collection can be found in Appendix A.

Instrumentation

The researcher elected to use the human instrument in data collection of the entire sample because, unlike a nonhuman instrument, the human instrument is able to adapt to and understand the various realities encountered during the study while also evaluating the meaning of the interactions (Lincoln & Guba, 1985). In a naturalistic inquiry Lincoln and Guba argued that "such a contextual inquiry *demands* a human instrument," one that is able to adapt to the unknown situation encountered while

conducting the study (p. 187). Dooley (2007) further supported that the use of the human instrument for data collection is a common characteristic used in the paradigm of qualitative research. The researcher also used a set of semi-structured interview questions to guide data collection from the stratified purposeful sample.

Ethical Consideration

Prospective participants received a recruitment speech in Spanish and consent forms in Spanish during the first week of the study and before any data were collected. The participants were reminded of their rights to voluntarily participate in the study immediately before the consent form was signed and data were collected. The confidentiality of respondents (names, community location, and affiliated organizations) was guaranteed by the researcher. The identity of the studied international development organization has also been omitted from all records.

Trustworthiness

Lincoln and Guba posed a basic question to address the term trustworthiness: "How can an inquirer persuade his or her audiences (including self) that the findings of an inquiry are worth paying attention to?" (1985, p. 290). Conventional research uses the terms internal validity, external validity, reliability, and objectivity to establish trustworthiness in a research study.

The criteria used to support these techniques include truth value as a result of internal validity (How accurately do the findings describe reality?), applicability as a result of external validity (Can the findings be generalized across different settings?), consistency as a result of reliability (Do measurements remain the same across multiple tests, over time, and/or during a given time period?), and neutrality as a result of objectivity (Are the statistical measures relatively value-free?). Although the criteria for building trustworthiness—truth value, applicability, consistency, and neutrality—are the same for conventional and naturalistic inquiry, naturalistic inquiry uses a different set of four terms. For naturalistic studies the researcher builds trustworthiness through providing truth value as a result of credibility, applicability as a result of transferability, consistency as a result of dependability, and neutrality as a result of confirmability (Erlandson, Harris, Skipper, & Allen, 1993; Lincoln & Guba, 1985; Merriam, 2009). Figure 3.2 provides a visual model for a comparison of conventional and naturalistic inquiry. The techniques used by the researcher to build trustworthiness included member checks, reflexive journaling, peer debriefing, prolonged engagement, triangulation, and an audit trail (Lincoln & Guba, 1985).

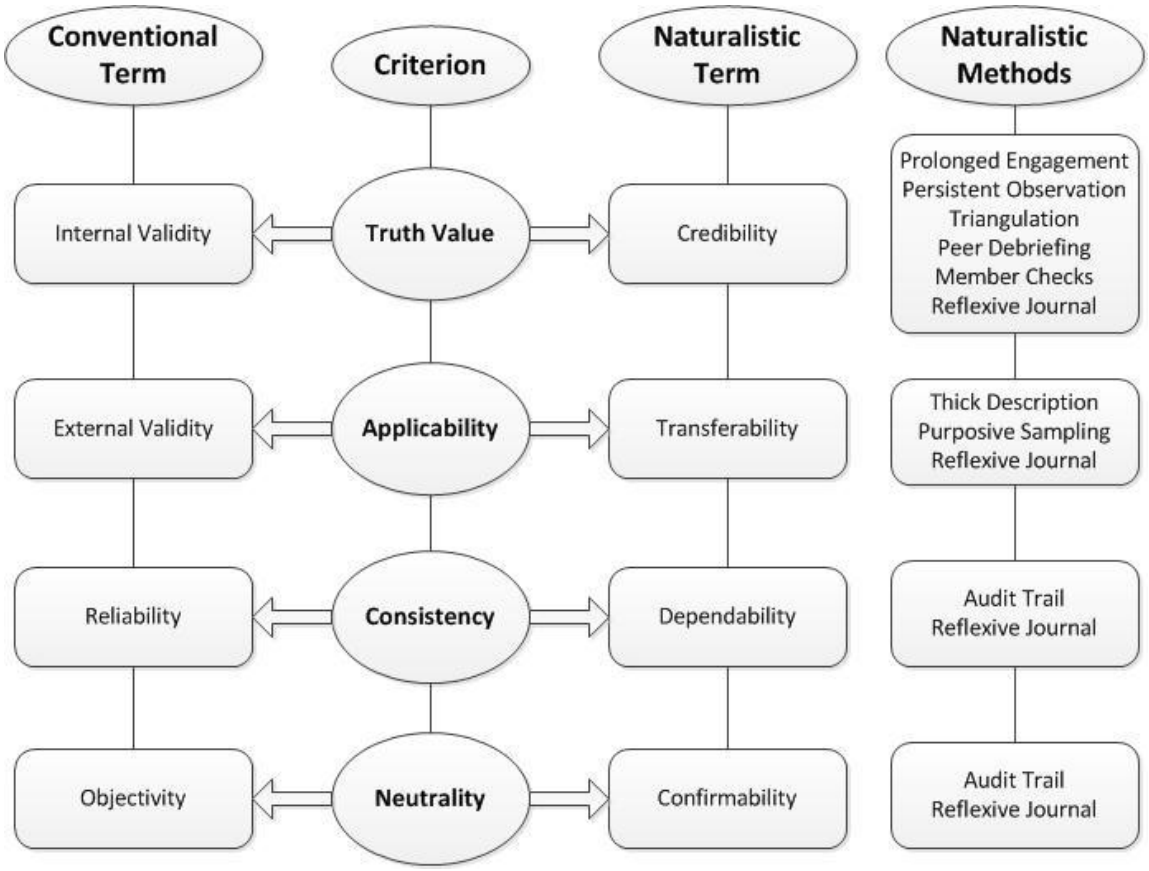

Figure 3.2. Comparison of conventional and naturalistic inquiry. Adapted from Erlandson, Harris, Skipper, & Allen, 1993.

The purpose of member checks is to obtain feedback and confirmation from the participants that the referring data and researcher interpretations have been recorded accurately and to establish credibility of the collected data (Lincoln & Guba, 1985; Merriam, 2009). During member checks, participants are provided with the opportunity to investigate discrepancies in the recorded data and to volunteer any additional information. Member checks occurred immediately following each individual interview with participants. The participants were asked to review the recorded researcher

interpretations from the semi-structured interview and confirm that the interpretations accurately reflected the participant's responses to the questions asked during the interview.

Reflexive journaling is a technique used to track the details of a study as it emerges. Reflexive journaling provides an introspective view inside the thought processes and decision-making processes of the researcher (Lincoln & Guba, 1985). To ensure consistency in the reflexive journaling process, the researcher recorded information in the reflexive journal no less than three times each week for the entire six weeks of data collection.

Peer debriefing sessions allow the researcher to systematically discuss research in terms of experiences, findings, and decisions with professional peers who were not involved in the research process (Lincoln & Guba, 1985; Merriam, 2009). Peer debriefing also serves the purpose of building credibility by enabling the research process to be challenged or considered legitimate by professional peers (Erlandson et al., 1993; Lincoln & Guba, 1985). After data had been collected, the researcher held informal peer debriefing sessions with three professional peers who had all had previous experience with international development organizations, program evaluation, or qualitative case studies.

Prolonged engagement describes the persistent and intense observation of the researcher while maintaining continuous and thorough contact with significant elements of the research study (Lincoln & Guba, 1985). The researcher was able to maintain continuous and thorough contact with all elements of the research study by living and

working alongside participants of the programs created by the international development organization for the entirety of the six weeks of data collection.

Triangulation refers to the cross-checking of collected data through various data sources and/or collection techniques (Lincoln & Guba, 1985)., The researcher is able to increase the accuracy of data analysis and credibility of any findings by including triangulation of data sources which encompasses the range of participants' realities and perspectives from which the collected data was analyzed (Patton, 2002). As stated in the data collection paragraph, data collection occurred through the use of semi-structured interviews, prolonged engagement, researcher observations, field notes, and reflexive journaling. Field notes were taken each day during the six weeks of data collection and combined in the process of reflexive journaling. Triangulation occurred during data analysis when the researcher used the constant-comparative method to compare data collected through the various data sources and collection techniques against one another to determine similarities and differences (Glaser & Strauss, 1967; Lincoln & Guba, 1985; Merriam, 2009). This process of the constant-comparative method will be further discussed in Data Analysis.

An audit trail is a collection of research study documentation whereby an external auditor is able to examine the inquiry to determine if the research process falls within the bounds of professional practice and that the products of the research process are consistent with the raw data (Lincoln & Guba, 1985; Merriam, 2009). An audit trail assists the qualitative researcher in minimizing biases and maximizing impartiality in reporting the collected data. The audit thus increases the rigor of work conducted in the

field and provides confirmability of the collected data (Patton, 2002). The researcher has included various documents located in Appendices to serve as an audit trail. The researcher specifically created a table located in Appendix B so that an external auditor could quickly and easily determine that the products of the research process were indeed consistent with the raw data.

Data Analysis

Data analysis that occurs in a qualitative study is a continual process that begins as soon as the researcher arrives in the natural setting of the study (Erlandson, Harris, Skipper, & Allen, 1993). Qualitative data analysis is a progression of collecting and analyzing data where the researcher hopes to more accurately interpret the meaning of the data by allowing themes to emerge (Erlandson et al., 1993; Merriam, 2009). The interactive relationship between data collection and analysis is one of the key principles that separates naturalistic research from traditional research (Erlandson et al., 1993). Data analysis of this description will likely follow a two-fold approach; data analysis that occurs at the research site, and data analysis that occurs following completion of data collection (Erlandson et al., 1993).

For data analysis that occurred at the research site during this study, the researcher was able to instantaneously begin data analysis during data collection because the researcher was considered a human instrument. A human instrument is able to immediately respond to collected data, form working hypotheses, and make adjustments to data collection strategies (Erlandson, Harris, Skipper, & Allen, 1993). New data

collected after these refinements helped to test the working hypotheses which resulted in further modifications to data collection strategies. For example, field notes and observations recorded at the beginning of the study helped guide the researcher to not only determine what questions should be asked in casual conversation with members of the community but also determine with which community members the researcher should attempt to engage in conversation. This ongoing process of data collection and analysis continued until the new data yielded little to no new information and the researcher determined that data saturation had been reached (Erlandson et al., 1993).

For data analysis that occurred after completion of data collection, the researcher first read through the data from the semi-structured interviews which had been transcribed verbatim in Spanish and later translated to English. After reading through the English translated interviews, the researcher then applied the constant comparative method of data analysis. The constant comparative method, originally proposed by Glaser and Strauss (1967), describes the comparison of one collection of data to another in order to determine consistencies, anomalies, patterns, and emerging themes (Erlandson et al., 1993; Lincoln & Guba, 1985; Merriam, 2009). For this study, the researcher used the transcribed responses from the semi-structured interviews and created coded categories based on similar themes that emerged from the responses. The first round of coding can be described as open coding where the researcher scrupulously reviews the collected data and provides a provisional code to any categories that emerge (Dooley, 2007). As the first set of categories emerge, researchers use axial coding for another round of intense review resulting in a more collective representation of the

emerging themes and subcategories (Dooley, 2007). Categories were created from the emerging themes and were often revised over time; new categories were created from previous categories while some categories were merged with others to create a more general designation. Goetz & LeCompte (1981) further stated that "the discovery of relationships, that is, hypothesis generation, begins with the analysis of initial observations, undergoes continuous refinement throughout the data collection and analysis process, and continuously feeds back into the process of category coding" (p. 58). After categories were created and coded using the semi-structured interviews, the constant comparative method was again used during the triangulation of data sources to further define and create categories. Yin (2009) stated that a case study is dependent on the researcher using multiple sources of data collection which requires the triangulation of these sources to occur in data analysis. Triangulation in data analysis describes the cross-checking of multiple data sources and data collection methods which can provide insight and understanding about a particular event or set of events while also increasing the trustworthiness of the study (Erlandson et al., 1993; Lincoln & Guba, 1985). For this study, the researcher used triangulation to compare the data from different data collection methods and sources—semi-structured interviews, researcher observations, field notes, reflexive journaling—which led to further refinement of coded categories. In the final stage of coding, the researcher uses selective coding to select the specific criteria to be used for creating the overarching themes and corresponding subcategories that emerged from the data (Dooley, 2007). When the researcher arrived at a consensus for the criteria to be used for creating the overarching themes and corresponding

subcategories from all data collection methods and sources, the researcher unitized the data by creating codes for each participant's responses to the separate questions asked during the semi-structured interviews. The codes for the participants were created using the acronyms for that individual's role in the community, a number identifying different participants, and a number that correlated to the questions from the semi-structured interview. For example, the code CL-4 #8 would be for a participant defined as community leader number four and his/her response to question eight from the semi-structured interview. The unitized codes for the responses to the semi-structured interview questions from each interview participant were recorded in the audit trail and can be found in Appendix B. The unitized codes for the responses from each separate stratified group can also be found at the end of each corresponding section in Chapter IV. It is also important to understand that in naturalistic inquiry the results from the study are bound by the context of the researcher defined population and sample within this study (Lincoln & Guba, 1985).

Summary of Methods

In summary, the researcher adopted a naturalistic case study approach intended to retain the natural context of the community setting and provide a holistic understanding of community perceptions (Dooley, 2007; Lincoln & Guba, 1985; Yin, 2009). Qualitative methods were used to assist the researcher in generating a rich description of community reaction to the development programs (Geertz, 1973; Lincoln & Guba, 1985). The population of the study was limited to the development programs of

one international development organization implemented around the province of Limón, Costa Rica. The researcher used a purposive sample of one community that was involved in the community-based initiatives and the environmental education program of the international development organization described in this study. Within the purposive sample, the researcher also selected a stratified purposeful sample designed to facilitate comparisons and triangulation during data analysis. The five stratified groups included community leaders (CL), community members (CM), host families (HF), parents (P), and teachers (T). All data was collected by the researcher during a six-week period from June 28 to August 11, 2010. For the purpose and time frame of the study, the researcher elected to use qualitative data collection methods associated with RRA (Chambers, 1994a). Data was collected through researcher observations, prolonged engagement, field notes, reflexive journaling, and semi-structured interviews. Trustworthiness of the study was established by member checks, reflexive journaling, peer debriefing, prolonged engagement, triangulation, and an audit trail. Data analysis followed a two-step approach where data was analyzed at the research site during data collection and also after all data had been collected (Erlandson, Harris, Skipper, & Allen, 1993). The researcher often incorporated the constant comparative method during data analysis to determine consistencies, anomalies, patterns, and emerging themes (Erlandson et al., 1993; Lincoln & Guba, 1985; Merriam, 2009). Finally, the researcher used a set of coding techniques to identify the emerging themes and corresponding subcategories and to establish consistency for the findings across all five stratified groups (Dooley, 2007).

CHAPTER IV

FINDINGS

Three overarching themes describing the reaction of the community to the development programs emerged as a result of the study: (a) *community development* with subcategories describing community improvement, collaboration with the international development organization, integration of individuals and groups within the community, and the sustainability of projects, (b) *education* with subcategories expanding on ideas and motivation, learning, and inspiration for the children, and (c) *culture* with subcategories that discussed community culture, the organizational culture of the international development organization, and relationships. Figure 4.1 provides a visual model for the overarching themes and subcategories that emerged.

Figure 4.1. Overarching themes and subcategories that emerged from data analysis.

Defining the Overarching Themes

The researcher defined the first overarching theme as community development because the term community development encompasses each of the four subcategories that emerged from community reaction and it also most accurately defines the community perception of impact as a result of participating in the development programs. The community perceptions included attitudes and opinions that described various ways in which the participants believed that their community had changed or developed. Education was determined to be the second overarching theme because although evaluating learning was not part of this study, many participants believed educational impacts had taken occurred and they attempted to describe what they perceived to have happened to their community after participating in the development programs. The community did not only explain that learning had taken place, but that additional impacts occurred that they believed would affect the education of the children in the community. The third overarching theme was labeled as culture because the term culture, as defined in this study, describes the set of shared attitudes, values, goals, and practices that characterizes a specific group. In this study, two separate groups united together to form a partnership of development in the community; the community itself and the international development organization. Although the community participants described that the two groups shared many cultural similarities, the community perspective also outlined a few areas of culture where the two groups conflicted. In order to identify patterns within the various stratified groups, the overarching themes and corresponding subcategories will be discussed in detail throughout the following

separate paragraphs for each different stratified group. It is important to understand that all overarching themes and subcategories emerged from all stratified groups but each stratified group weighted the impacts of the overarching themes and subcategories differently. A table of the audit trail for each stratified group has also been included at the end of each corresponding section.

Community Leaders

Community Development

The stratified group of community leaders expressed strong opinions and motivations concerning *community development*. The community leaders spoke very passionately about their involvement in the progress of their community and all community leaders agreed that *community development* was the single most important factor that contributed toward the working relationship between the community and the international development organization. For example, all community leaders felt motivated to participate with the international development organization because the community-based initiatives provided opportunities for community improvement. In response to what motivated them to participate with the international development organization and the community-based initiatives, community leaders shared comments such as “to show everyone the potential and the good of our community…to have the capacity to improve the community” (CL-2 #7), “I feel motivated to participate with the organization to improve development in my community” (CL-4 #7), “the development of my community...to see my community become pretty” (CL-1 #7, #13), and “to give

quality of life to the people here so that people feel better and more comfortable in their community…I like to support everything that will benefit my community" (CL-3 #8, #13). Community leaders were also supportive of the community-based initiatives because they believed the CBIs improved integration within the community amongst various individuals and groups throughout the community. "The people were involved to help and collaborate in the projects…I hope that we will see even more participation from the community in the future" (CL-5 #6), "the community integrates itself more in community projects" (CL-4 #15), "more people from the community integrated as new leaders" (CL-2 #11), and "I want to be a testimony for my children so that they can involve themselves in the community as well" (CL-3 #7) represent this belief. When asked to share their attitudes and opinions toward the organization, community leaders were very positive about the collaboration with the international development organization. Some of the community leaders opined that the collaboration between the community and the outside organization helped to activate the community's interest for community development. "It is important that outside people come to unite different strengths within the community… the projects were ones that the community has had but could not realize alone" (CL-2 #6, #14), the organization "offers very important support for the communities" (CL-4 #6), "the community is awakening all over again" (CL-3 #9), and the organization "helps to awaken the interest of some people to develop the community" (CL-1 #6) express these opinions. During discussions of how the community had rediscovered its interest in community development, the researcher also learned that most of the community leaders were active participants in the only other

previous collaborative effort of community development between the community and an international development organization. A large group of about 30 volunteers lived in the community and had arrived with the organizational mission to build a play area for the children and youth of the community. However, from casual conversations and researcher observations, the researcher determined that the projects had not been sustainable because improper materials had been used, the community did not directly participate in the development process, and ownership of the project rested on the organization instead of the community and its leaders. The community had simply lost interest in the projects and the process of community development as soon as the play area required regular maintenance and/or needed to be repaired. Sustainability of projects was a topic of debate for the community leaders. Most of the community leaders agreed that the community-based initiatives selected by the community were very necessary and created a positive impact in the community (CL-2 #14, CL-4 #14, CL-5 #14). However, other community leaders argued that the CBIs should have addressed higher priorities and needs of the community, needed more time to be completed, and/or should have been more ambitious (CL-1 #14, CL-3 #12). Another interesting aspect that contributed to sustainability was that the community had been empowered by the international development organization through the facilitation of its volunteers to identify and implement only the projects that the community elected. The comment that "the community had the opportunity to select the projects and the ideas came from the community…we did not have that opportunity with any organization in the past" (CL-3 #14) represents the experience of empowerment for the community. Overall, the

community leaders hoped that the community would take good care of the newly established development projects (CL-3 #15, CL-4 #15, CL-5 #15) and that the projects and the development process would remain sustainable (CL-1 #15, CL-2 #15, CL-4 #15).

Education

During this discussion of the impacts that the overarching theme of *education* had on the community from the perspective of the community leaders, it is important to understand that the community leaders did not have any direct experience or participation with the environmental education development program. There were instances where some community leaders did not feel as though they could answer questions about the environmental education program because they were not familiar enough with its content and/or impact on its target audience; children and youth ages 5–15 (CL-2 #19, CL-3 #19, CL-5 #16, #17, #18, #19, #20). In spite of this, there were occasions where the community leaders felt comfortable talking about the educational impacts of the organization and its environmental education program. For example, there were community leaders who believed that the international development organization, its volunteers, and its environmental education program provided new ideas and motivation to the community. Their comments explained how the community should "take advantage of the new ideas and motivation that people receive" (CL-1 #13), and how the organization "motivates the people" (CL-3 #9). Furthermore, one community leader stated that he would like to see the implementation of more community projects

that provide inspiration for the children (CL-1 #14). The majority of all community leaders were also able to identify learning that took place as a result of the environmental education program. Community leaders agreed that children learned about "a love for nature and the community…the recycling process…and how to be more responsible and perseverant" (CL-3 #17, #18, #20), "how to plant a seed, the types of soil, and the importance of plants" (CL-4 #19) how to "protect the environment…and take more care of their community" (CL-2 #17, #18), and "how to take care of the environment, help the community, share in groups, and develop community projects" (CL-1 #19). Although the community leaders did not directly participate in the environmental education program, they were still able to identify changes that were taking place in their community through the children and youth who had been involved in the environmental education development program.

Culture

From the perspective of the community leaders, the impact of *culture* on the community was identified in both positive outcomes and areas for improvement as a result of working with the international development organization. The community leaders mostly spoke about *culture* as it pertained to the organizational culture of the international development organization. All community leaders expressed positive opinions of the organization which included comments such as "very good" (CL-5 #6), "excellent" (CL-2 #6, CL-4 #6), "it is a program the town receives very well" (CL-1 #6), and "it seems good because it has specific objectives to help the communities" (CL-3

#6). However, there were also various areas that the community leaders hoped the organization would improve upon for future development programs. A few community leaders thought the program would be easily improved with a larger group of volunteers for each community (CL-1 #10, CL-4 #12) and more time for both the environmental education program and community-based initiatives (CL-3 #12, CL-4 #12). Community leaders also believed the communication was not always effective between the community and the international development organization. A few community leaders explained "the organization needs to improve its communication with the community leaders" (CL-2 #12) and "give more information to the volunteers about the community" (CL-5 #10). Moreover, community leaders thought the preparation of the organization needed to be significantly improved upon. Comments such as "improve the preparation…the supervisors arrived in the community only eight days before the volunteers arrived…the supervisors should arrive with more time to get to know the community" (CL-3 #6, #10), and "the organization should arrive one month before the volunteers arrive" (CL-2 #12) explain some concerns the community leaders had with the preparation of the international development organization. The supervisors were the initial representatives of the international development organization to the community and its leaders. The supervisors were responsible for establishing partnerships in communities, arranging host families for the volunteers, and visiting the communities on a weekly basis to evaluate the health, safety, and performance of the volunteers. One community leader also explained that "the first meetings should not be with the entire community. It would be better to have the meetings between the leaders of the

organization and the leaders of the community so that each side can explain how it operates" (CL-2 #10). Although the community leaders were mostly concerned with the culture of the international development organization, they also spoke briefly about their own community culture. One community leader appeared frustrated when he explained that "the community has low resources" (CL-1 #6). However, this same community leader later expressed that the community benefited from participating with the international development organization because "it leaves fulfilled projects and a more active community" (CL-1 #11), and was supported by another community leader who stated "I feel that the people now understand to support community projects" (CL-2 #11). Another positive cultural outcome from the perspective of the community leaders was the relationships that formed as a result of working with the international development organization. Most of the community leaders agreed that they enjoyed the cultural exchange that took place between the community and the volunteers of the organization (CL-1 #7, #11, CL-2 #7, CL-3 #9). One community leader also expressed that the international relations helped provide motivation for participating in the development programs (CL-1 #7).

However, some community leaders felt the volunteers needed "more free time to get to know other places in the country" (CL-1 #10), and "more opportunities to get to know the country and culture" (CL-3 #12). Overall, the community leaders expressed positive attitudes and opinions when speaking about the relationships with the volunteers from the international development organization. "The volunteers are quite friendly and from good customs…they give importance to the ways of the community" (CL-2 #9), "I like the support and interest that the volunteers give the community…the volunteers care a lot about the work and they have a lot of desire to complete their mission" (CL-4 #9, #10), "I like the volunteers and the work in the community" (CL-1 #9), and "the volunteers are very friendly and helpful…the volunteers are very good people" (CL-5 #9, #11) represent this view. While certain areas were identified for improvement, the community leaders communicated a general satisfaction with the cultural impacts from their participation in the development programs facilitated by the international development organization. Table 4.1 provides a visual model and audit trail for representing participant responses from the stratified group of community leaders.

Table 4.1

Audit Trail for the Stratified Group of Community Leaders

COMMUNITY CULTURE	CL-1 #6	CL-1 #11	CL-2 #11		
ORGANIZATIONAL CULTURE	CL-1 #6	CL-1 #9	CL-1 #10	CL-2 #6	CL-2 #9
	CL-2 #10	CL-2 #12	CL-3 #6	CL-3 #10	CL-3 #12
	CL-4 #6	CL-4 #10	CL-4 #12	CL-5 #6	CL-5 #10
RELATIONSHIPS	CL-1 #7	CL-1 #9	CL-1 #10	CL-1 #11	CL-2 #7
	CL-2 #9	CL-3 #9	CL-3 #10	CL-3 #11	CL-3 #12
	CL-4 #9	CL-4 #10	CL-5 #9	CL-5 #11	
COMMUNITY IMPROVEMENT	CL-1 #7	CL-1 #11	CL-1 #13	CL-2 #7	CL-2 #11
	CL-2 #13	CL-3 #7	CL-3 #8	CL-3 #11	CL-3 #13
	CL-4 #7	CL-4 #13	CL-5 #11	CL-5 #13	
INTEGRATION WITHIN COMMUNITY	CL-1 #6	CL-2 #11	CL-3 #7	CL-4 #15	CL-5 #6
	CL-5 #15				
COLLABORATION WITH ORGANIZATION	CL-1 #6	CL-1 #11	CL-1 #13	CL-2 #6	CL-2 #14
	CL-3 #9	CL-4 #6	CL-4 #9	CL-4 #13	CL-4 #15
	CL-5 #6	CL-5 #7			
SUSTAINABILITY OF PROJECTS	CL-1 #14	CL-1 #15	CL-2 #14	CL-2 #15	CL-3 #12
	CL-3 #14	CL-3 #15	CL-4 #12	CL-4 #14	CL-4 #15
	CL-5 #14	CL-5 #15			
ORG. PROVIDES IDEAS/MOTIVATION	CL-1 #13	CL-1 #18	CL-3 #9	CL-3 #16	
ORG. PROVIDES LEARNING	CL-1 #17	CL-1 #18	CL-1 #19	CL-2 #17	CL-2 #18
	CL-2 #20	CL-3 #17	CL-3 #18	CL-3 #20	CL-4 #11
	CL-4 #17	CL-4 #19	CL-4 #20		
INSPIRATION FOR THE CHILDREN	CL-1 #14				

Community Members

Community Development

The group of community members expressed attitudes and opinions that supported the positive impacts of *community development*. The community members agreed that community improvement was a central focus of the international development organization which provided incentive for people in the community to participate in the development programs. Comments such as "the objective of the organization is positive focus in the community" (CM-3 #6), and "the organization is very good because it looks for ways to improve the community" (CM-1 #6) represent this viewpoint. Many of the community members explained that they felt motivated to participate with the international development organization to "enrich the community" (CM-4 #7), "improve the infrastructure of the community" (CM-2 #7), and "do community projects" (CM-3 #7). Most community members also agreed that enriching the community and providing a prettier and more prosperous place to live added incentives to collaborating with the organization and its volunteers on community development projects (CM-1 #13, CM-2 #13, CM-4 #7, #13, #14). The group of community members continued to further explain how collaboration with the international development organization impacted their community. Their comments stated that "the organization interacted a lot with people from the community" (CM-4 #9), "the organization provides the community with different perspectives" (CM-2 #6), and "the organization comes to support the community and motivate it…the organization came to reactivate the community" (CM-3 #6, #9). The community members also

explained that integration within the community was a desired outcome of participating in development projects. One community member stated that "the only way to get to know people and how a community operates" is by participating in community projects (CM-3 #13). Another community member explained that "I see the children and youth very united…they all play together and I see more participation amongst them" (CM-1 #19). The same community member further expressed the hope that "the children and young people are able to learn to do more things together" as a result of their participation in the development activities (CM-1 #20). A few of the community members also hoped for additional integration to occur as a result of the development programs. Comments like "I hope that the community integrates more in community projects" (CM-4 #15), and "I hope that more people will integrate themselves in community work" (CM-3 #15) demonstrate the community members' desire for increased integration. As a whole, the group of community members did not express that it was very concerned with the sustainability of projects. The group mostly hoped that the projects would be taken care of by the community (CM-2 #15, CM-3 #15, CM-4 #15). However, a few of the community members agreed that the development projects were necessary and that it was the community's responsibility to implement and maintain community projects (CM-1 #14, #15, CM-3 #14).

Education

It is important to recognize that the community members—like the community leaders—were not direct participants in the environmental education program. However, unlike the group of community leaders, the community members did not feel uncomfortable describing their perspectives on educational impacts in their community. The information from the community members described a perspective that identified *education* in each of the two different development programs and was a result of various impacts they personally experienced, observed, or heard of through the community. Most of the community members agreed that the development programs provided the community with new ideas and motivation (CM-1 #6, #9, CM-2 #16, CM-3 #9). A comment from one community member stated that "the organization motivates the community…it motivates the people to work and to do good things" (CM-1 #6, #9). One community member also felt the development programs provided inspiration for the children and stated that "the children and young people had something different and positive to do during their school vacation" (CM-3 #18). All community members agreed that learning was the most significant educational impact for the community; specifically learning that took place for the children and youth who participated in the environmental education program. Community members said that children learned to "respect people and nature…to participate in groups…the value of community work" (CM-3 #17, #19), "more knowledge about the environment and recycling…how to plant trees and conserve water" (CM-2 #19, #20), "the types of soil…how to plant a seed…the importance of plants" (CM-4 #19), and to be "more responsible people…more educated

to clean and take care of their community" (CM-1 #17, #18). One community member also hoped that the children would develop the confidence "to be able to talk with others about the topics they learned" (CM-4 #20).

Culture

The impact of *culture* was at times difficult to understand and interpret from the perspective of the community members. For example, there was only one instance during the interviews when a community member identified changes in the community culture. The community member explained that the community would benefit from its participation with the international development organization because the people had learned the process of sustainable community development (CM-1 #11). On the other hand, there were various instances when the group of community members identified the importance of relationships and a few community members offered their advice to the international development organization for improving the impacts that result from these relationships. The community members explained that "we get to know the volunteers and have friendships to share" (CM-4 #11), "the volunteers are good and humble people…persons that want to collaborate with the community" (CM-2 #9), "the volunteers take the time to play with the children and young people" (CM-1 #9), and "the relationships between the community and the volunteers are very friendly" (CM-3 #9). Almost all of the community members agreed that the cultural exchange was a great motivation for collaborating with the international development organization (CM-2 #7, #11, #17, #18, CM-3 #7, #11, CM-4 #11). Comments such as "I like to get to know

people from other places and cultures" (CM-2 #7), and "I feel I have personally benefited by learning more about the culture of the United States" (CM-3 #11) describe these motivations. However, most of the community members believed that the international development organization did not provide its volunteers with the proper opportunities to develop an understanding of the Costa Rican culture. Community members emphasized that "I like that the volunteers come to learn about the culture but they do not have permission to leave the community…therefore, I do not think they are able to complete their objective to really get to know our culture" (CM-2 #10), "the organization should allow more liberty to leave the community to get to know more about the country and to share in more experiences" (CM-4 #10), and "within the work there should be more opportunities for the volunteers to get to know the country and all its culture" (CM-3 #10). There were also occasions when the community members offered advice for improving the organizational culture of the international development organization so that it would align more closely with the established culture of the community. One community member suggested that the organization should send volunteers "with a little more understanding of the language so that they can have better participation in the community" (CM-2 #12). Other community members perceived that that organization needed to improve its preparation and provide more information to its volunteers and the communities it will serve before the development programs begin. Community members stated that "there needs to be more preparation from the organization before the volunteers arrive…get to know more leaders in the community…explain the commitment and responsibilities of the organization and those

of the community" (CM-3 #10, #12), and "the supervisors need to have a meeting with community members before the volunteers arrive to explain more information about the organization, the work, and the volunteers that are going to work in the community" (CM-1 #10). Although the community members were critical of some areas of their experience with the international development organization, all community members were pleased to share their praises about the organization. Comments such as "the organization is a foundation that is interested in the needs of the community and beneficial for the province" (CM-4 #6), "it brings another positive image to the community" (CM-2 #6), "I very much like that the organization helped us organize the first meeting amongst the entire community" (CM-1 #7), and "I like the collaboration with the community to look for resources for the community projects" (CM-3 #9) express the community members' positive opinion of the international development organization. Table 4.2 provides a visual model and audit trail for representing participant responses from the stratified group of community members.

Table 4.2

Audit Trail for the Stratified Group of Community Members

COMMUNITY CULTURE	CM- 1 #11				
ORGANIZATIONAL CULTURE	CM-1 #7	CM-1 #10	CM-1 #12	CM-2 #12	CM-3 #6
	CM-3 #9	CM-3 #10	CM-3 #12	CM-4 #6	CM-4 #9
	CM-4 #12				
RELATIONSHIPS	CM-1 #9	CM-2 #7	CM-2 #9	CM-2 #10	CM-2 #11
	CM-2 #17	CM-2 #18	CM-3 #7	CM-3 #9	CM-3 #10
	CM-3 #11	CM-4 #10	CM-4 #11		
COMMUNITY IMPROVEMENT	CM-1 #6	CM-1 #13	CM-2 #7	CM-2 #13	CM-3 #6
	CM-3 #7	CM-4 #7	CM-4 #13	CM-4 #14	
INTEGRATION WITHIN COMMUNITY	CM-1 #14	CM-1 #19	CM-1 #20	CM-3 #13	CM-3 #15
	CM-4 #15				
COLLABORATION WITH ORGANIZATION	CM-2 #6	CM-3 #6	CM-3 #9	CM-4 #9	
SUSTAINABILITY OF PROJECTS	CM-1 #14	CM-1 #15	CM-2 #14	CM-2 #15	CM-3 #14
	CM-3 #15	CM-4 #15			
ORG. PROVIDES IDEAS/MOTIVATION	CM-1 #6	CM-1 #9	CM-2 #16	CM-3 #9	
ORG. PROVIDES LEARNING	CM-1 #17	CM-1 #18	CM-2 #17	CM-2 #18	CM-2 #19
	CM-2 #20	CM-3 #17	CM-3 #19	CM-3 #20	CM-4 #17
	CM-4 #18	CM-4 #19	CM-4 #20		
INSPIRATION FOR THE CHILDREN	CM-1 #19	CM-3 #18			

Host Families

Community Development

The overarching theme of community development emerged as a strong motivation for the stratified group of host families. All the host families felt motivated by community improvement and shared opinions about their involvement to help make their community a better place to live. The comments "I feel motivated to help the community so it grows and we have a prettier community to live in" (HF-1 #13), "I want the best for my community" (HF-4 #7), "I feel motivated to see a prettier and more organized community" (HF-2 #13), and "the community projects are a way to present something pretty for everyone who visits the community" (HF-3 #14) represent these opinions and motivations. One individual even shared that the process of development programs helped provide more opportunities for people in the community to have the liberty to express their personal opinions (HF-2 #15). Most of the individuals in the group of host families believed that hosting volunteers in their homes was a way to improve their personal integration within the community. "I feel that hosting a volunteer is a form in which I am working and collaborating with the community" (HF-2 #8), "my desires are to always collaborate with international organizations because it is important to serve the community" (HF-3 #8), and "I decided to host a volunteer to collaborate with the community…to be a part of helping and organizing my community" (HF-1 #8, #11). The host families also felt a similar motivation because of the development programs and shared comments such as "I like the work and the opportunity to collaborate with my town" (HF-3 #7), and "I feel I have benefited from my participation

because I shared in the work with my community" (HF-2 #11). One individual from the group of host families also believed that the children had formed new friendships amongst themselves as a result of their participation in the environmental education program (HF-1 #18). A few of the host families believed that the collaboration with the international development organization was an invaluable asset that contributed to the success of the community-based initiatives. The comment "the international development organization provides the opportunity to work as an organized group…without its help we would not have been able to complete the community projects" (HF-2 #7, #14) supports this view of the importance of collaboration. The same individual also believed that the experience of collaborating with the international development organization would cause the community to be "more determined to work and more motivated to collaborate with the next organization that arrives in the community" (HF-2 #15). Another host family believed that working with the international development organization provided motivation to reactivate the interest of community improvement (HF-4 #9). The most interesting aspect of the sustainability of projects identified by the host families was the idea of community empowerment. Most of the host families agreed that community empowerment was a new experience for them and that the responsibility to take care of the community projects and to continue the process of community development ultimately rested on the community (HF-1 #15, HF-2 #6, HF-3 #10, #15, HF-4 #14, #15). Comments such as "I believe that providing support for community projects is the responsibility of the community" (HF-3 #10), and "I'm happy that organizations like this exist to give people the opportunity to be able to

develop their own community" (HF-2 #6) provide a good description of the host families' attitudes and opinions toward community empowerment.

Education

Although the stratified group of host families did not have direct participation or experience during the implementation of the environmental education program, the volunteers they hosted often used the host families' houses to prepare their daily lessons and activities. There were also occasions where the volunteers solicited the help of the host families during the planning stages of the environmental education program. The host families also worked closely with the volunteers during the planning and implementation process of the community-based initiatives. From their perspective, the host families identified *education* as an overarching theme for both development programs. Most of the host families expressed a sense of satisfaction that the international development organization provided new ideas and motivation for the community to participate and learn. Host families stated that "I like that the community is motivated and has motivation to work…it gives the community a push" (HF-3 #9), and "the organization offers the idea of unity…the volunteers motivate the children and emotionally encourage the community work" (HF-2 #6, #9). The host families also believed that the international development organization and its volunteers provided inspiration for the children. Comments such as "the volunteers provide a new example for the young people…a lot of love and caring" (HF-3 #17), and "the volunteers provide inspiration for creativity" (HF-1 #20) support this belief. The group of host families also

identified learning that took place as a result of both development programs. One individual stated that "the organization teaches people how to work in the community…people re-educate themselves what it is to work in community" (HF-2 #6, #11). Each host family also described the knowledge and awareness they witnessed the children obtain through their participation in the environmental education program. The host families explained that the children had learned "how to share…to enjoy themselves in a healthy way" (HF-1 #17), "respect, cooperation, and to take the initiative" (HF-4 #17), "to not throw trash on the ground…to change the culture of pollution" (HF-3 #20), and "how to take care of the environment and the recycling process…how to take care of their community" (HF-2 #17, #18). One individual also explained that as a result of their participation in the environmental education program the children and youth were able "to educate their parents how to conserve the environment" (HF-2 #19).

Culture

The host families identified *culture* as the most impactful overarching theme that emerged from their experience with the international development organization. However, the host families were not very expressive of their own community culture. A few of the host families described their community as being poor, having low resources, and having a culture of pollution and dirtiness (HF-1 #9, HF-2 #6, HF-3 #20). The researcher also observed that the community as a whole was not organized but that there was an organizational structure found in many of the groups and associations in the community. The groups and associations were united amongst themselves but there were

not many experiences of the different groups working together on projects. One community member even explained how "before the volunteers arrived, this town had never had a meeting where everyone in the community was invited to participate" (HF-2 #7). The host families reacted very differently when they discussed the organizational culture of the international development organization. The host families willingly expressed lots of praise and also offered ideas for improvement. The host families said that the international development organization "offers support and assistance for community projects and that has a program of activities with the children" (HF-3 #6), "it has good objectives…it helps the communities…it is very organized, serious, and credible" (HF-1 #6, #9), and "it has a willingness to help the community" (HF-2 #9). Some host families also said that the international development organization "offers more than economic assistance" (HF-1 #14, HF-2 #9). Most of the ideas for improving the experience discussed how the international development organization needed to improve its preparation and dissemination of information to the community. Comments such as "the people did not know much about the organization…I feel that the supervisors should give more information to the community and especially to the families who are going to take care of the volunteers…the families need a lot more information before the volunteers arrive" (HF-2 #10, #12), and "more preparation to get to know the organization before the volunteers arrive…the organization should organize a meeting with people from the community before the volunteers arrive…I believe that many people are not going to participate because they did not know very much about the organization nor the volunteers" (HF-1 #12) represent this perspective. The host families

explained that the supervisors of the international development program had arrived only eight days before the volunteers and that the community needed more time to prepare for the development projects and hosting the volunteers. One member of the host family group recommended that during their first visit to the community, the supervisors should provide people with a brochure to read through describing the organization's mission and goals. Another individual in the host family group was very critical of the supervisors for the international development organization. This individual expressed that "the supervisors should be more honest when recommending the volunteers and their customs… the supervisors should involve themselves in the community like the volunteers" (HF-4 #6, #10). A few of the host families were upset and frustrated because the supervisors had assured the host families that every volunteer would not have any issues with the food provided by the host families. However, when the volunteers arrived in the community, two of the three volunteers were vegetarians who had specific dietary requirements that were unfamiliar to the host families. The host families expressed that they were very nervous about what to cook for the vegetarians and felt embarrassed that they were not prepared to provide for their needs. The same person who had been most critical from the group of host families was also discouraged that the organization and its supervisors did not invest as much time and effort into the community as they did the volunteers. The comments "the organization needs to give itself a heart and feelings…I believe that it only thinks about the work and the security of the volunteers…it needs to see the other side of the coin" (HF-4 #10) provide a very explicit description of this individual's attitude toward improving the international development organization. The

group of host families also identified that relationships provided motivation for and satisfaction from their participation. One of the individuals explained that "the volunteers serve like a guide to begin the process of community projects…they are young people that look to help communities" (HF-1 #9, #14). The host families were also supportive of the new friendships that formed with the volunteers (HF-1 #18, HF-2 #8, HF-3 #17). The comment "I am very content to see the relationships that my children are able to have with new people and the friendships that form" (HF-4 #11) expresses the impact of relationships from the overall experience. Another individual stated that there was motivation "to share in the experience of having people from another culture in my house" (HF-1 #11). Almost all of the host families agreed that the cultural exchange was a positive impact that influenced their decisions to host a volunteer and participate with in the development programs (HF-1 #7, #8, HF-3 #17, HF-4 #9). Table 4.3 provides a visual model and audit trail for representing participant responses from the stratified group of host families.

Table 4.3

Audit Trail for the Stratified Group of Host Families

COMMUNITY CULTURE	HF-1 #9	HF-2 #6	HF-2 #7	HF-3 #20	
ORGANIZATIONAL CULTURE	HF-1 #6	HF-1 #9	HF-1 #10	HF-1 #12	HF-1 #14
	HF-2 #9	HF-2 #10	HF-2 #12	HF-3 #6	HF-4 #6
	HF-4 #10	HF-4 #12			
RELATIONSHIPS	HF-1 #7	HF-1 #8	HF-1 #9	HF-1 #11	HF-1 #14
	HF-1 #18	HF-3 #17	HF-4 #9	HF-4 #10	HF-4 #11
	HF-4 #12				
COMMUNITY IMPROVEMENT	HF-1 #13	HF-2 #13	HF-2 #15	HF-3 #13	HF-3 #14
	HF-4 #7	HF-4 #8	HF-4 #11	HF-4 #13	
INTEGRATION WITHIN COMMUNITY	HF-1 #8	HF-1 #11	HF-1 #18	HF-2 #7	HF-2 #8
	HF-2 #9	HF-2 #11	HF-2 #13	HF-3 #7	HF-3 #8
	HF-4 #7				
COLLABORATION WITH ORGANIZATION	HF-2 #6	HF-2 #7	HF-2 #14	HF-2 #15	HF-3 #8
	HF-4 #9				
SUSTAINABILITY OF PROJECTS	HF-1 #14	HF-1 #15	HF-2 #6	HF-3 #10	HF-3 #15
	HF-4 #12	HF-4 #14	HF-4 #15		
ORG. PROVIDES IDEAS/MOTIVATION	HF-2 #6	HF-2 #9	HF-3 #9	HF-4 #9	HF-4 #16
ORG. PROVIDES LEARNING	HF-1 #17	HF-2 #6	HF-2 #11	HF-2 #17	HF-2 #18
	HF-2 #19	HF-2 #20	HF-3 #20	HF-4 #17	HF-4 #18
	HF-4 #20				
INSPIRATION FOR THE CHILDREN	HF-1 #20	HF-3 #18			

Parents

Community Development

The stratified group of parents was able to provide another valuable perspective describing how the international development organization and its programs impacted *community development*. Although it was not an operational criterion for selecting individuals to participate in the semi-structured interviews for the stratified group of parents, each of the three individuals who represent this group was born in the community and had lived his/her entire life in the community. The background of the parents played an important role in their motivation to participate in the development programs because the programs provided a process for community improvement. The parents said that "as someone born here I like to see the growth of my town" (P-2 #13), "the town benefits from a better environment and infrastructure" (P-3 #11), and "I love my town…I like to enrich community work because it gives value to the community to build them" (P-1 #13). Having lived their entire lives in the community, the parents also believed that integration within the community was another driving force behind their participation and that of the community as a whole. Comments such as "the town has the opportunity to involve itself…I like to serve and give what I have" (P-2 #7, #14), and "I am part of the community…whatever helps the community also helps my family and me" (P-3 #13) support this belief. One parent also stated that many people from the community had been integrated as new leaders in the community as a result of their leadership and participation in the development programs (P-1 #11).

When the parents discussed the community's collaboration with the international development organization, they spoke about how the assistance and facilitation from the organization helped the community accomplish things it had not been able to do on its own. Until the international development arrived in the community "the community had not found a way to reunite the people to see the need for the community projects" (P-2 #11), and the community-based initiatives were projects the community had wanted but "could not realize alone" (P-1 #14). One parent also thought it was important to collaborate with international development organizations to combine the different strengths from the organization and the community (P-1 #6). All of the parents agreed that the sustainability of projects was an important aspect of the development projects. The parents believed that the projects were necessary and important (P-1 #14, P-2 #11, #14), and they expected that it was the responsibility of the community to maintain the projects and continue the development process in the future (P-1 #15, P-2 #15, P-3 #15).

Education

The parents provided an interesting and unique perspective for the overarching theme of *education* because they had daily contact with active participants in the environmental education program; their children. However, it is still important to understand that these individuals did not directly participate in the environmental education program. One parent was satisfied that the children were given the opportunity to learn from new ideas and motivation because "the volunteers call attention to new ways of learning" (P-2 #18).

All of the parents agreed that the children and youth did not have much previous experience learning about environmental education (P-1 #16, P-2 #16, P-3 #16) and one parent stated that "it is always necessary to give the children new and different knowledge and more practice" (P-2 #16). Another interesting perspective provided by the parents was, unlike the other stratified groups, the parents felt that inspiration for the children should mostly come from the children's parents. One parent specifically stated that "I want to provide an example for my children" (P-2 #13). By no means did the parents believe that the organization should not inspire their children. On the contrary, they appreciated the educational inspiration the international development organization and its volunteers provided for their children but they wanted to relate that the parents should mostly be responsible for providing their children with a positive example and role model. Overall, the parents believed that the most important educational impact of the development programs was the learning that occurred from their children's participation in the environmental education program. The parents discussed that their children had learned "how to protect and take care of the land, water, and the environment" (P-2 #19), "to participate in recycling" (P-3 #19), and "to share, be tolerant…to be more responsible with the environment and the community…to respect their superiors, and to love their town" (P-1 #17, #18, #20). One parent stated that participation with the organization was important because "it is a good education for my son" (P-3 #7).

The parents also expected that as a result of their participation in the environmental education program, the children should "be able to transmit all the positive knowledge that they have acquired from the lessons" (P-2 #20), and "teach themselves and to teach their parents" (P-3 #18). The parents' perspective of the importance and permanent effect of the children's education can be expressed with the statement "the knowledge they have acquired, no one can take away from them" (P-3 #20).

Culture

The stratified group of parents did not provide a very detailed perspective of the impact of *culture* in their community, but there were occasions when this group shared interesting ideas and opinions for how to improve the cultural alignment between the international development organization and the community. As mentioned with other stratified groups, the description of community culture was difficult to identify from the responses and perspectives of the parents. There was only one instance when one of the parents had described the community as having low resources (P-2 #9). However, one parent explained that the environmental education program "changes the culture of the community because the volunteers teach the children how to take care of their town" (P-3 #14). Another parent supported the idea that their culture had changed from participating with the international development organization because many people were exposed to and had learned about the process of sustainable community development (P-1 #11).

Although the group of parents did not provide a very detailed perspective of how relationships impacted the community, most of the group agreed that the cultural exchange was a motivating factor in their participation with the international development organization (P-1 #7, P-3 #7, #9). One parent said that working with the volunteers was "an important opportunity to get to know another culture and to have a new experience" (P-3 #7). Besides the learning that took place from participating in the development programs, the organizational culture of the international development organization was the most discussed theme that emerged from the group of parents. Similar to the other stratified groups, the parents shared positive opinions about and satisfaction with the international development organization but also offered their advice for ways to improve the organization and its development programs. The parents praised the international development organization with comments such as "the work and labor that the organization does are excellent…it is willing to serve the communities that need assistance and support" (P-2 #6, #9), "I like that the organization tries to understand the culture of the people" (P-1 #9), and "to me the projects seem very interesting and they help the community…there are not many organizations that look for work like this" (P-3 #6). However, one individual from the group of parents offered multiple ideas for improving the impacts of the international development organization in the community. This parent believed that the organization should work directly with the community and its leaders instead of through a third party (P-1 #10).

The international development organization had used the assistance of EARTH University to help locate potential communities who would be interested in participating in the development programs and who were able to host volunteers. This individual suggested that the supervisors of the international development organization should partner with "a local board of education or association integrated through the community" (P-1 #10). This parent also suggested a new way to search for host families that would improve the integration of the volunteers into the community. The parent stated that "the supervisors only looked for houses but they need to look for leaders of the community who are able to work and offer their support and resources for the community projects" (P-1 #10). Another parent expressed a few ways to improve the development programs by having a larger group of volunteers to share in the facilitation of projects and by the volunteers staying for a longer period of time (P-2 #10, #12). One parent also advised the supervisors "to look for more information and participation from the community" (P-3 #12) when selecting communities to participate in the development programs. Table 4.4 provides a visual model and audit trail for representing participant responses from the stratified group of parents.

Table 4.4

Audit Trail for the Stratified Group of Parents

COMMUNITY CULTURE	P-1 #11	P-1 #14	P-2 #9	P-3 #14	
ORGANIZATIONAL CULTURE	P-1 #6	P-1 #9	P-1 #10	P-1 #12	P-2 #6
	P-2 #9	P-2 #10	P-2 #12	P-3 #6	P-3 #9
	P-3 #12				
RELATIONSHIPS	P-1 #7	P-1 #9	P-3 #7	P-3 #9	
COMMUNITY IMPROVEMENT	P-1 #7	P-1 #11	P-1 #13	P-2 #13	P-3 #11
INTEGRATION WITHIN COMMUNITY	P-1 #11	P-2 #7	P-2 #14	P-3 #13	
COLLABORATION WITH ORGANIZATION	P-1 #6	P-1 #14	P-2 #11		
SUSTAINABILITY OF PROJECTS	P-1 #14	P-1 #15	P-2 #11	P-2 #14	P-2 #15
	P-3 #15				
ORG. PROVIDES IDEAS/MOTIVATION	P-2 #16	P-2 #18			
ORG. PROVIDES LEARNING	P-1 #17	P-1 #18	P-1 #20	P-2 #17	P-2 #19
	P-2 #20	P-3 #7	P-3 #17	P-3 #18	P-3 #19
	P-3 #20				
INSPIRATION FOR THE CHILDREN	P-2 #13				

Teachers

Community Development

The stratified group of teachers provided an interesting perspective for the overarching theme of *community development*. Four of the six teachers in the group worked at the primary school in the community, but lived in other towns located near the community. None of these four teachers actively participated in the community-based initiatives and felt uncomfortable answering questions pertaining to that subject. However, the teachers were still able to provide a rich description of their perspectives describing how the community had been impacted by *community development*. Many of the teachers felt motivated to participate with the international development organization because the development projects contributed to community improvement. Comments such as "to see that the community is clean and to work in a pretty and organized place…it calls good attention to the community" (T-3 #7), "seeing the progress of the community" (T-6 #7), and "the projects improve the community…it is a benefit to the community" (T-4 #7, #14) describe the teachers' motivation. The stratified group of teachers also felt motivated because the development projects provided opportunities for increased integration within the community. A few of the teachers explained that "it is very important to help the community" (T-3 #6), "I like to collaborate with the community and participate in an experience of helping people" (T-5 #13), and "it seems good to me because the organization works with the children and the parents integrated" (T-2 #6). One teacher was especially pleased with the ability of the international development organization and its volunteers to increase and encourage integration. This

teacher shared that "the organization wants the people from the community to participate and become involved in the projects…to support the organization is to support my classes, my students, the school, and my community…the people that live here are able to have the opportunity to become more involved in the community" (T-4 #6, #7, #13, #14). This teacher also hoped that the children would be able to spread the impact of their new knowledge by teaching their parents and family members the lessons they had learned from the environmental education program (T-4 #20). Collaboration with the international development organization was another encouraging factor that elicited positive comments from the group of teachers. Many of the teachers stated they liked "the exchange of work from both sides" (T-6 #6), "the information and support that the organization offers to the community" (T-3 #9), "the volunteer work that serves as an example so that the community values the work and their participation in the community projects" (T-4 #9), and "that it sends volunteers to give presentations and to teach the children…I want the children to take advantage of this opportunity" (T-1 #9). Some of the teachers were also somewhat disappointed that there had not been more collaboration from the side of the community. These teachers wanted the community to take advantage of the opportunity to work alongside the international development organization and learn how to design and implement sustainable development projects. The teachers explained that "sometimes the people do not participate…if everyone participates we could improve more and realize results faster" (T-5 #12), and "there should be more collaboration from the community…they should be more interested in the assistance that the organization brings" (T-6 #6). Not all of the teachers expressed

concern about the sustainability of projects because most of the teachers did not live in the community. Four of the teachers did not feel it was their place to comment on the community-based initiatives because they had not been directly involved and would not necessarily benefit from the projects. However, those who did comment agreed that the development projects had been good for the community and that the community would benefit from their implementation (T-4 #15, T-5 #14). These teachers also expressed a desire for the community to continue the development process and for the community to maintain the projects after they had been implemented. Comments such as "I want the community to understand and continue the process of community development" (T-4 #12), and "the organization and the volunteers come to teach us and to assist us but it is our responsibility to take care of them" (T-5 #15) describe their expectations for the sustainability of community projects.

Education

The group of teachers was also able to provide a unique perspective concerning the overarching theme of *education* because the teachers were present during many of the lessons and activities for the environmental education program. When the volunteers first arrived in the community, the school was closed for two weeks for a summer break from classes and the volunteers had to arrange for the environmental education program to be held at the local community center. After the summer break was over, the children and youth returned to their daily schedule of classes at the local primary school. The volunteers received permission from the school principal to teach the environmental

education program at the primary school and the teachers invited the volunteers to teach in their classrooms during school hours. Although the teachers were not direct participants in the environmental education program, they were aware of the content of the curriculum and also had direct interaction with the participants on a regular basis. The teachers explained that they enjoyed participating with the international development organization because its programs provided the community with new ideas and motivation. The comments "I like the exchange of ideas" (T-2 #9), "the volunteers motivate the children" (T-1 #16), and "the volunteers provide new ideas that the town never thought about for developing their community" (T-6 #9) represent this viewpoint. Some teachers were also motivated by receiving new ideas for teaching environmental education and becoming better examples of environmental stewards (T-1 #7, T-4 #11). Another teacher received personal motivation to participate in the development programs because the volunteers provided inspiration for the children. This teacher stated that "I feel motivated because of seeing the volunteers working with and inspiring the children…the children become more creative… and express their personalities in many ways" (T-5 #7, #11, #20). Of all the overarching themes and subcategories, the group of teachers agreed that learning was the most important impact that resulted from the development programs. The teachers expressed that the students who participated in the environmental education program learned about "recycling and how to care for the environment…respect for nature" (T-4 #17, #19), "the process of recycling…separating and classifying the trash" (T-3 #19, #20), and "how to maintain and establish a more prosperous environment and a cleaner community" (T-6 #18). Some of the teachers also

expected that the children would practice and implement the knowledge and skills they had acquired (T-1 #20, T-4 #20, T-5 #19, T-6 #20). The teachers also believed the children learned significant values from their participation in the environmental education program. The comments "sharing with their peers" (T-2 #18), "respect, cooperation, camaraderie" (T-5 #17), "tolerance, sincerity, honesty" (T-1 #17), "confidence, responsibility" (T-3 #17), and "collaboration, cooperation, and team work" (T-4 #17) represent many of the observations the teachers shared about the values the children had gained. Many of the teachers expressed that they also personally benefited from participating with the international development organization because they obtained valuable knowledge and an improved understanding about environmental education. Comments such as "learning more about recycling" (T-4 #11), "to have a better understanding of the recycling process" (T-3 #11), and "to learn more knowledge about the environment" (T-1 #11) express the benefits the teachers believed that had received.

Culture

The perspective of the stratified group of teachers included positive opinions about the impact of *culture* in the community but the teachers also offered suggestions for improving the cultural alignment between the community and the international development organization. However, the teachers were not very expressive about the community culture. As mentioned before, most of the teachers did not live in the community and this may have impacted their ability to comment about and accurately

describe the culture of the community. There was only one instance when a teacher specifically described the community as having low resources (T-5 #13). However, the researcher also observed that the teachers were very invested in the education of their students. One teacher even mentioned that the education of the children in the community was very important (T-2 #7). When the teachers discussed the organizational culture of the international development organization, the group indicated some positive attitudes and opinions but also provided some recommendations for improvement. A few of the teachers described the international development organization and its programs as "good" (T-2 #6) and "very good" (T-4 #6, T-5 #6). Some of the teachers further expanded on their opinions and shared what they specifically liked about the international development organization and what motivated them to participate in the development programs. Comments such as "the organization cares about the children and I believe their education is very important" (T-2 #7), and "I am thankful for the interest that the organization shows" (T-6 #9), describe why the teachers enjoyed working with the international development organization. However, the teachers also provided suggestions for improving the way the international development organization works in the community. Many of the teachers agreed that the volunteers should spend more time in the community working to facilitate the development programs (T-1 #10, T-2 #10, #12, T-5 #10). One teacher also suggested that the international development organization should organize meetings between the school principal, the teachers, and the supervisors and volunteers from the organization to discuss the work plan and schedule daily lessons and activities (T-2 #12). The teacher believed that the meetings

could help to increase the involvement and participation of the teachers in the environmental education program. Two teachers also agreed that the supervisors needed to organize a meeting with the community to describe in detail the opportunities and benefits of working with the international development organization (T-3 #12, T-6 #10). Another teacher recommended that the supervisors and volunteers should "look for more support and more collaborators from the community…and involve the families of the children so that everyone is able to participate" (T-3 #10, #12). One teacher also expressed that the international development organization needed to "build personal relationships with people in the community so that they integrate themselves in the development programs and are able to see and observe the benefits that the programs bring to the community" (T-6 #12). Building relationships with the volunteers was considered one of the aspects the teachers enjoyed as a result of working with the international development organization. Comments such as "I like the relationships that the volunteers bring" (T-6 #9), "the volunteers integrated themselves into the community very easily" (T-2 #9), and "it is nice that the volunteers come to work in the school" (T-1 #6), represent the satisfaction the teachers received from their participation with the international development organization. Table 4.5 provides a visual model and audit trail for representing participant responses from the stratified group of teachers.

Table 4.5

Audit Trail for the Stratified Group of Teachers

COMMUNITY CULTURE	T-2 #7	T-5 #13			
ORGANIZATIONAL CULTURE	T-1 #10	T-2 #6	T-2 #7	T-2 #10	T-2 #12
	T-3 #10	T-3 #12	T-4 #6	T-5 #6	T-5 #10
	T-6 #9	T-6 #10	T-6 #12		
RELATIONSHIPS	T-1 #6	T-2 #9	T-6 #9		
COMMUNITY IMPROVEMENT	T-3 #7	T-3 #11	T-4 #7	T-4 #14	T-6 #7
INTEGRATION WITHIN COMMUNITY	T-2 #6	T-3 #6	T-4 #6	T-4 #7	T-4 #13
	T-4 #14	T-4 #20	T-5 #12	T-5 #13	
COLLABORATION WITH ORGANIZATION	T-1 #9	T-3 #9	T-4 #9	T-5 #6	T-6 #6
SUSTAINABILITY OF PROJECTS	T-4 #12	T-4 #15	T-5 #14	T-5 #15	
ORG. PROVIDES IDEAS/MOTIVATION	T-1 #7	T-1 #16	T-2 #9	T-2 #11	T-4 #11
	T-5 #7	T-6 #9	T-6 #19		
ORG. PROVIDES LEARNING	T-1 #11	T-1 #17	T-1 #18	T-1 #19	T-1 #20
	T-2 #18	T-2 #19	T-2 #20	T-3 #11	T-3 #19
	T-3 #20	T-4 #11	T-4 #17	T-4 #18	T-4 #19
	T-4 #20	T-5 #11	T-5 #17	T-5 #19	T-6 #17
	T-6 #18	T-6 #20			
INSPIRATION FOR THE CHILDREN	T-5 #7	T-5 #11	T-5 #20		

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The primary purpose of this research study was to evaluate the reaction of a community located in Limón, Costa Rica to the development programs of an international development organization. The research and evaluation project was a descriptive study in which the researcher explored the reaction of a community with intentions to understand and interpret how a community perceived that it was impacted as a result of participating in development programs. To achieve the purpose of the study, the researcher established one primary research question to be answered: What is the *reaction* of a community—measured through attitudes, satisfaction, opinions, and motivations—to the environmental education program and the community-based initiatives of an international development organization?

Conclusions Based on the Findings

The collected data assisted the researcher in viewing the impacts of the development programs through the perspective of the community. Through data analysis the researcher identified five groups in the community that together represented a holistic perspective of how the community had been impacted as a result of collaborating with an international development organization and participating in development programs. Three overarching themes emerged from the data: (a) *community development* with subcategories describing community improvement, collaboration with the

international development organization, integration of individuals and groups within the community, and the sustainability of projects, (b) *education* with subcategories expanding on ideas and motivation, learning, and inspiration for the children, and (c) *culture* with subcategories that discussed community culture, the organizational culture of the international development organization, and relationships. In an attempt to more easily identify patterns of impact, the themes and corresponding subcategories are discussed in separate paragraphs.

Community Development

Within the overarching theme of *community development*, four subcategories emerged. Community improvement suggested ways in which the development programs increased the potential of the community by obtaining the ability to develop their own community, improved the aesthetics of the community by making the community a cleaner and prettier place to live, and encouraged the organization of the community by introducing new opportunities for everyone in the community to participate and share their ideas and opinions. The community perceived community improvement to be a positive impact that motivated the people to participate in the development programs and provided satisfaction from witnessing various ways in which the community improved. There were multiple instances where the people from the community explained that they support anything and everything that benefits their community. Collaboration with the international development organization identified how the community was motivated by uniting the different strengths and perspectives of the outside organization and the

community, why the community felt the support of the organization and facilitation of the volunteers was vital to implementing the development programs, and how the people felt their community came alive and rediscovered an interest in community development as a result of their participation. Once again, this subcategory elicited only positive perceptions of how the community had been impacted by collaborating with an outside organization. Integration within the community described how the community believed in the importance of serving the community and appreciated the opportunity for people in the community to emerge as new leaders. The community perspective explained how participating in the development programs provided a way for people in the community to increase and improve their interaction with one another which resulted in another positive impact. The subcategory sustainability of projects mostly explained that the community perceived that maintaining and continuing to improve the development projects was the responsibility of the community. This perception cannot be described as a positive or negative impact although it is important to recognize that the community acknowledged this responsibility. However, one of the most significant positive impacts from the overarching theme of community development was the ability of the international development organization and its volunteers to effectively facilitate and encourage a process of sustainable development that strengthened community empowerment.

Education

The researcher identified three subcategories that emerged from the overarching theme of *education*, all of which identified only positive impacts. From the perspective of the community, inspiration for the children was believed to be a positive impact that resulted from participating in the development programs. The community expressed that the volunteers provided the children with new role models for environmental education and community development while also encouraging the creative expression of children's unique personalities. The subcategory of the international development organization providing new ideas and motivation also resulted in positive impacts from the perspective of the community. The community mostly felt motivated to take advantage of the opportunity for collaboration and also mentioned that the volunteers provided new methods for teaching and learning about environmental education and sustainable development. The opportunity for learning elicited the most comments from any of the subcategories across all overarching themes. Interestingly enough, the comments shared by the community included only praise, appreciation, and acknowledgement for the learning that occurred throughout the community. Overall, the overarching theme of *education* did not identify any negative impacts or areas for improvement. The community was very satisfied with the educational benefits it received from participating in the development programs and working alongside the international development organization.

Culture

The overarching theme of *culture* provided the most discussion concerning negative impacts and ways the international development organization could improve the implementation of its development programs in the community. In addition, the community also identified positive impacts that resulted from their participation in the development programs. Three subcategories emerged from this overarching theme. The community culture was discussed significantly less than most subcategories across all emergent themes. The researcher believed this occurred because culture was not identified as an emerging theme until after data collection had been completed. Had the researcher identified the emerging theme of culture before data collection had ended, the researcher could have added additional questions to the semi-structured interviews specifically designed to measure all subcategories of culture including community culture. However, the community perspective identified positive impacts to the community culture because the people became more active in community projects and they obtained a more experienced understanding of conducting the sustainable development process on their own and in their own community. The community also stated how the organizational culture positively impacted the community because the international development organization had good objectives, showed interest in working alongside community members, assisted in identifying and utilizing local resources, and provided much needed support and assistance for completing community-based initiatives. However, the community also discussed how the organizational culture did not align with the expectations of the community which resulted in negative impacts

from the community perspective. The community desired more preparation, information, and communication from the supervisors of the international development organization before the volunteers arrived in the community and the development projects began. Individuals complained that the organization cared more for the well-being of the volunteers than that of the community it was serving. The community also identified a need for more volunteers to be placed in the community and/or more time for the development programs so that the volunteers could more efficiently reach and effectively encourage the participation of the entire community. The relationships that formed also identified both positive and negative impacts. The community was very satisfied with the opportunity to participate in a cultural exchange and build personal relationships with the volunteers. The community identified the positive impact of how learning about a different culture expanded the understanding of its own culture. On the other hand, the community desired more opportunities for the volunteers to experience the culture of Costa Rica and not just the culture of the community. The community understood that learning about Costa Rican culture was an objective of the volunteers and the international development organization but that the objective had not been fully accomplished. The community felt somewhat responsible for the volunteers not accomplishing their goal but understood that the decision belonged to the international development organization. Although the community identified various negative impacts within the overarching theme of culture, the community strongly believed that the overall experience of cultural exchange and building relationships were impacts that positively affected the community.

Conclusions Based on the Study

As a result of emerging themes, new literature is introduced in this chapter in an effort to establish theoretical triangulation. This new literature was not used by the researcher to frame the study; rather, the researcher required new literature to be introduced to more accurately explain and support conclusions based on the research study.

The understanding of how communities perceive they have been impacted by participating in development programs is imperative when attempting to conduct an impact evaluation that builds toward a complete and consistent program evaluation for international development organizations. From the operational framework used in this study, researchers can follow the complete process of an impact evaluation from reaction to learning to actions and finally to conditions. Each separate step in the complete process leads into and consequently affects the subsequent step. Therefore, the reaction of a community to development programs will impact the learning that takes place as a result of the development programs. Kirkpatrick and Kirkpatrick (2006) explained that reaction can be compared to measuring customer satisfaction. In this sense, obtaining a positive reaction to development programs is vitally important to the success or failure of the international development organization implementing the programs. For example, if communities are not motivated to participate in the development programs, there is likely to be a lack of participation. Likewise, if communities do not hold positive opinions or attitudes toward the development programs or the international development organization, then it is likely the community will not collaborate with the organization or

participate in the development programs. As well, if communities are not satisfied with the development programs they will not be likely to participate in similar programs in the future. Therefore, it is important for international development organizations to not only obtain a reaction but a positive reaction to their development programs. “Positive reaction may not ensure learning, but negative reaction almost certainly reduces the possibility of its occurring” (Kirkpatrick & Kirkpatrick, 2006, p. 22).

Furthermore, a holistic understanding of community reaction describing how it was positively and negatively impacted as a result of participating in development programs can assist international development organizations in making decisions concerning the implementation of its development programs. Evaluation has been stated as “the process of gathering information on the results of past activities for the purpose of making decisions about them” (Murray, 2005, p. 346). Therefore, evaluating community reaction provides information that can be used to make decisions concerning development programs. For example, if certain overarching themes and subcategories elicited positive reaction from the community, then the international development program could look for more opportunities to highlight those benefits to communities in future development programs. Likewise, if negative reactions occurred in certain areas, the international development organization could recognize the need to reassess those areas and make improvements in an effort to gain more positive reactions.

The findings of this research study also support the perspective from the community that in development programs, valuing the impact to the community is just as, if not more, important than the impact to the organization and its volunteers. The

researcher observed instances where the community perceived itself to be less important than the volunteers and believed the organization overlooked or was not as concerned with impacts to the community. Based on researcher observations and responses to the semi-structured interviews, the researcher concluded that the roots of the problem were established in a conflict of interest; the international development organization believed its volunteers to be the highest priority when the highest priority from the community perspective was considered to be community impact. This conflict of interest was mostly observed by the researcher when the supervisors came to visit the volunteers to evaluate their health and safety as well as the progress of the development programs. The community was aware that a supervisor was visiting the community one day each week and spending the majority of the visit in face-to-face evaluations with each volunteer separately and observing the progress of the community-based initiatives and the environmental education program. However, the supervisor would also stay overnight with one of the volunteers in a host family's house and eat meals with them as well. The researcher observed that the host families graciously accepted the supervisor in their homes but often times wondered why the supervisor did not show much interest in their experience of hosting a volunteer. The host families mostly desired an opportunity to discuss their experience and how they had been impacted just as the volunteers had the opportunity to express any issues during their face-to-face evaluations with the supervisor. These descriptions of conflicting interest provide support that the international development organization described in the study had different priorities than those of the community they intended to serve.

Furthermore, international development organizations should become more aware of potential cultural impacts and conflicts that may arise through development programs implemented in cross cultural settings. Hall and Hall (1990) explained that in many instances, cultures are divided based on how they view time. Although there may be various time systems around the world, only two play an important role in most forms of international business and relations. Hall and Hall (1990) identified these two systems as monochronic and polychronic time. Monochronic time describes cultures where time is viewed and experienced in a linear way. Time is divided into segments and compartmentalized so that people can concentrate and focus on one task at a time. In monochronic cultures, a schedule or task is often viewed to be of higher importance than people or relationships. Polychronic time can be easily understood as the extreme opposite of monochronic time. Instead of separating time into convenient blocks, polychronic cultures are comfortable when many things are occurring at the same time. They can be easily distracted and may change plans often. However, polychronic cultures are best described by their involvement with people and their commitment to human relationships. These two cultural time systems are important to understand in the context of this study. The international development organization and its volunteers viewed time as monochronic and jobs often became more important than people and relationships. This conclusion was supported by researcher observations, especially when the supervisors visited the community for weekly volunteer evaluations as described in the above paragraph. On the other hand, the researcher observed that the community described in the study viewed time as polychronic and the relationships with

people were considered to be a higher priority than completing a job. For example, a few community meetings were organized and facilitated by the volunteers of the international development organization. Although a specific time was scheduled for the meetings to begin and end, the schedule was never adhered to by the community. In summary, this cultural conflict can be best described by the comments of one of the participants in the group of host families:

> The supervisors didn't build relationships with the families or the community. They came, ate, and left. Neither the feelings nor the experiences of the host families mattered to them. They need to involve themselves in the community like the volunteers. The organization needs to give itself a heart and feelings. I believe that it only thinks about the work and the security of the volunteers. It needs to see the other side of the coin. (HF-4 #10)

This example supports the idea that international development organizations need to become more aware of cultural impacts and conflicts that can occur in cross cultural settings. International development organizations should identify cultural norms within their own culture as well as cultural norms within the countries and communities where development programs are to be implemented before the two sides ever begin working together. The identification of cultural norms can assist international development organizations in recognizing and resolving cultural conflicts before they occur. The minimization of cultural conflicts should therefore provide more opportunities for collaboration and increases in positive community reaction and overall satisfaction.

Lastly, the researcher concludes that qualitative data should be combined with quantitative data in impact evaluations to discover any consistencies, anomalies, or patterns that emerge from analysis of the two different data sets. When qualitative data is combined with quantitative data, the two data sets are able to provide increased validity and a more accurate representation of evaluation results (Chambers, 1994c; Mayoux & Chambers, 2005). For example, quantitative questionnaire surveys should be used in combination with qualitative participatory data collection methods to determine if participants respond equally to the different data collection methods. Furthermore, differences in areas such as education and culture amongst the researchers/evaluators and the community members have the potential to form a barrier between the two groups. Researchers/evaluators often need to adapt the methods in which data will be collected to provide the participants with an opportunity to share information in ways most common to their everyday life. For instance, if an evaluator desires to collect quantitative data from a community that has never participated in or possibly even seen a survey questionnaire, the evaluator could simply administer the questionnaire orally, and present the questions and answer possibilities to the community as a guideline to a conversation. When researchers and evaluators are able to compare the analysis of questionnaire responses with the analysis of open-ended questions, they are able to form a deeper and more accurate understanding of what they intend to evaluate.

Implications

The findings and conclusions of this study have identified that the perspective of communities is imperative to understanding and evaluating the impact of development programs. It is therefore implied that researchers and evaluators should be encouraged to adopt methods of research and evaluation that support community participation through community empowerment. Community empowerment is described as a result of participatory research methods that encourages participants to be managers and agents of change rather than subjects to be studied (Hart, 2008; Nelson & Wright, 1995; Pretty, 1995). Community empowerment is also a concept that has been discussed in environmental education as a method to increase the responsibility of participants and encourage them to take action (Hungerford, 1990; Locke, 2009; Martin, 2004). Furthermore, participatory rural appraisal evolved from rapid rural appraisal as a method to strengthen local community empowerment through the ability of the community to analyze and solve its own problems (Chambers, 1994a; Toness, 2001). Therefore, the concept of community empowerment encourages communities to take control of project ownership and in the case of an impact evaluation, may provide communities with the incentive to accurately represent their own perspective.

The findings also imply that international development organizations can use the community perspective in combination with additional results of an impact evaluation from an organizational standpoint to determine consistencies and anomalies of the overall impact. This method of identifying and comparing the different perspectives of impact can assist international development organizations in eliminating any positive

bias found in the results of an impact evaluation because the organization can claim to have represented all groups impacted by its development programs. However, even though an international development organization may provide opportunities for all perspectives to be shared, it must still be held responsible for reporting each perspective even though the perceptions of impact may reflect negatively on the performance of the organization or the successfulness of its development programs. It is therefore implied to be the responsibility of donors and funding agencies to demand that all perspectives be identified and included in impact evaluations. For example, if an organization represented only the perspective of its administrators or volunteers then the donors and funding agencies should easily recognize that the evaluation is more than likely positively biased.

This study further implies that if children and youth are the main target audience for any development programs, their perspective should be included in any impact evaluation concerning those programs. In the example of this study, children and youth ages 5–15 were the target audience for the environmental education program. However, the researcher did not attempt to evaluate the perspective of children and youth by collecting data directly from the active participants because of ethical issues concerning a first-time researcher collecting research data from minors in a cross-cultural setting. While these concerns may have merit, a review of literature concerning children and youth participation in evaluation can provide support for the inclusion of children and youth perspectives in impact evaluation. Involving children and youth in the planning and implementations stages of evaluation provides them with an opportunity to learn

social research skills and build social capital (Ashton, Arnold, & Wells, 2010; Sabo Flores, 2008). When children and youth participate in community evaluation research, it can help integrate their responsibilities and roles in the community as well as raise their consciousness and spirit for supporting their community (Checkoway & Richards-Schuster, 2003). However, it is important to recognize that evaluators must often find creative ways of measuring reaction in children and youth and search for methods that are culturally and developmentally appropriate and valid (Evans & Reilly, 1996). Some researchers have proposed drawing as an appropriate method for evaluating children and youth perspective for impact evaluations (Evans & Reilly, 1996; Koppitz, 1983). "During the elementary school years, boys and girls can express their thoughts and feelings often better in visual images than in words" (Koppitz, 1983, p. 2). Previous researchers have identified frameworks for interpreting children's drawings which have demonstrated that the drawings can reflect self-awareness, attitudes, desires, and concerns (Burns & Kaufman, 1970; Evans & Reilly, 1996; Golomb, 1992; Klepsch & Logie, 1982; Knoff & Prout, 1985). Participating in community evaluation can be empowering for children and youth and their perspective also enhances the quality of the research or evaluation study (Walker, 2007). Researchers and evaluators should therefore aim to build the capacity of children and youth participation in evaluation to strengthen overall impact evaluation through the addition of children and youth perspectives (Gong & Wright, 2007).

Recommendations

Based on the conclusions and implications of this research study, the researcher provides the following recommendations:

(a) Additional research studies should be conducted to test the applicability and consistency of the operational framework for impact evaluation. The operational framework of this study was based upon existing evaluation and logic models found in the literature. However, the researcher had identified anomalies that existed between the various models and theories and attempted to form a consensus framework. This newly developed operational framework should therefore be tested in future efforts to improve theory building.

(b) Additional research studies should be conducted that include both organizational and community perspectives in impact evaluation to determine consistencies, anomalies, patterns, and emerging themes. Including all perspectives of impact can assist evaluators in eliminating positive bias from evaluation reports.

(c) Evaluators attempting to capture and describe community perspectives should be encouraged to adopt methods that support community participation through community empowerment and project ownership. Community perspective is most accurately described by people in the community. Therefore, evaluators attempting to evaluate community perspective should search for training and capacity building methods to

educate communities in planning and implementing community evaluations.

(d) The perspectives of children and youth should be included in any impact evaluation where children and youth are the target audience. Previous researchers have identified methods for including children and youth participation in evaluation and developed frameworks for interpreting the collected data from children and youth participants.

(e) International development organizations should conduct comprehensive needs assessments before development programs begin to determine the cultural context of communities. Cross cultural settings can introduce the potential for cultural misunderstandings and conflict which could impact community reaction and satisfaction to development programs. Understanding and identifying the potential areas of cultural conflict can assist international development organizations in mitigating any negative impacts from working in cross cultural settings.

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APPENDIX A

GUIDE FOR THE SEMI-STRUCTURED INTERVIEW QUESTIONS

Interview Questions

1. How old are you?

2. How long have you lived in this community?

3. How many people live in your house?

4. How many of your children participated in the development activities and how old are they?

5. Before the volunteers arrived, did you know anything about the international development organization?

6. What is your opinion of the international development organization?

7. What motivates you to participate with the international development organization?

8. Why did you decide to receive a volunteer in your house?

9. What things do you like about the international development organization?

10. If you could change one thing about the international development organization, what would it be?

11. What are the benefits that you have received or believe that you will receive from your participation with the international development organization?

12. What things about the international development organization can the organization change in your community to make it better?

13. What motivates you to participate in community projects?

14. What is your opinion of the community projects in which the international development organization is participating?

15. What do you hope for from these projects?

16. Before the volunteers arrived, how would you describe the children's knowledge of environmental education?

17. What values have the children learned from their participation in the development activities?

18. What benefits are the children going to receive from their participation in the development activities?

19. What knowledge have the children gained from their participation in the development activities?

20. What abilities do you hope the children will develop as a result of their participation in the development activities?

21. What other educational topics would you like the children to receive in this community?

APPENDIX B

AUDIT TRAIL

COMMUNITY CULTURE	CL-1 #6	CL-1 #11	CL-2 #11	CM- 1 #11	HF-1 #9	HF-2 #6	HF-2 #7	HF-3 #20	P-1 #11	P-1 #14
	P-2 #9	P-3 #14	T-2 #7	T-5 #13						
ORGANIZATIONAL CULTURE	CL-1 #6	CL-1 #9	CL-1 #10	CL-2 #6	CL-2 #9	CL-2 #10	CL-2 #12	CL-3 #6	CL-3 #10	CL-3 #12
	CL-4 #6	CL-4 #10	CL-4 #12	CL-5 #6	CL-5 #10	CM-1 #7	CM-1 #10	CM-1 #12	CM-2 #12	CM-3 #6
	CM-3 #9	CM-3 #10	CM-3 #12	CM-4 #6	CM-4 #9	CM-4 #12	HF-1 #6	HF-1 #9	HF-1 #10	HF-1 #12
	HF-1 #14	HF-2 #9	HF-2 #10	HF-2 #12	HF-3 #6	HF-4 #6	HF-4 #10	HF-4 #12	P-1 #6	P-1 #9
	P-1 #10	P-1 #12	P-2 #6	P-2 #9	P-2 #10	P-2 #12	P-3 #6	P-3 #9	P-3 #12	T-1 #10
	T-2 #6	T-2 #7	T-2 #10	T-2 #12	T-3 #10	T-3 #12	T-4 #6	T-5 #6	T-5 #10	T-6 #9
	T-6 #10	T-6 #12								
RELATIONSHIPS	CL-1 #7	CL-1 #9	CL-1 #10	CL-1 #11	CL-2 #7	CL-2 #9	CL-3 #9	CL-3 #10	CL-3 #11	CL-3 #12
	CL-4 #9	CL-4 #10	CL-5 #9	CL-5 #11	CM-1 #9	CM-2 #7	CM-2 #9	CM-2 #10	CM-2 #11	CM-2 #17
	CM-2 #18	CM-3 #7	CM-3 #9	CM-3 #10	CM-3 #11	CM-4 #10	CM-4 #11	HF-1 #7	HF-1 #8	HF-1 #9
	HF-1 #11	HF-1 #14	HF-1 #18	HF-3 #17	HF-4 #9	HF-4 #10	HF-4 #11	HF-4 #12	P-1 #7	P-1 #9
	P-3 #7	P-3 #9	T-1 #6	T-2 #9	T-6 #9					
COMMUNITY IMPROVEMENT	CL-1 #7	CL-1 #11	CL-1 #13	CL-2 #7	CL-2 #11	CL-2 #13	CL-3 #7	CL-3 #8	CL-3 #11	CL-3 #13
	CL-4 #7	CL-4 #13	CL-5 #11	CL-5 #13	CM-1 #6	CM-1 #13	CM-2 #7	CM-2 #13	CM-3 #6	CM-3 #7
	CM-4 #7	CM-4 #13	CM-4 #14	HF-1 #13	HF-2 #13	HF-2 #15	HF-3 #13	HF-3 #14	HF-4 #7	HF-4 #8
	HF-4 #11	HF-4 #13	P-1 #7	P-1 #11	P-1 #13	P-2 #13	P-3 #11	T-3 #7	T-3 #11	T-4 #7
	T-4 #14	T-6 #7								
INTEGRATION WITHIN COMMUNITY	CL-1 #6	CL-2 #11	CL-3 #7	CL-4 #15	CL-5 #6	CL-5 #15	CM-1 #14	CM-1 #19	CM-1 #20	CM-3 #13
	CM-3 #15	CM-4 #15	HF-1 #8	HF-1 #11	HF-1 #18	HF-2 #7	HF-2 #8	HF-2 #9	HF-2 #11	HF-2 #13
	HF-3 #7	HF-3 #8	HF-4 #7	P-1 #11	P-2 #7	P-2 #14	P-3 #13	T-2 #6	T-3 #6	T-4 #6
	T-4 #7	T-4 #13	T-4 #14	T-4 #20	T-5 #12	T-5 #13				

COLLABORATION WITH ORGANIZATION	CL-1 #6	CL-1 #11	CL-1 #13	CL-2 #6	CL-2 #14	CL-3 #9	CL-4 #6	CL-4 #9	CL-4 #13	CL-4 #15
	CL-5 #6	CL-5 #7	CM-2 #6	CM-3 #6	CM-3 #9	CM-4 #9	HF-2 #6	HF-2 #7	HF-2 #14	HF-2 #15
	HF-3 #8	HF-4 #9	P-1 #6	P-1 #14	P-2 #11	T-1 #9	T-3 #9	T-4 #9	T-5 #6	T-6 #6
SUSTAINABILITY OF PROJECTS	CL-1 #14	CL-1 #15	CL-2 #14	CL-2 #15	CL-3 #12	CL-3 #14	CL-3 #15	CL-4 #12	CL-4 #14	CL-4 #15
	CL-5 #14	CL-5 #15	CM-1 #14	CM-1 #15	CM-2 #14	CM-2 #15	CM-3 #14	CM-3 #15	CM-4 #15	HF-1 #14
	HF-1 #15	HF-2 #6	HF-3 #10	HF-3 #15	HF-4 #12	HF-4 #14	HF-4 #15	P-1 #14	P-1 #15	P-2 #11
	P-2 #14	P-2 #15	P-3 #15	T-4 #12	T-4 #15	T-5 #14	T-5 #15			
ORG. PROVIDES IDEAS/MOTIVATION	CL-1 #13	CL-1 #18	CL-3 #9	CL-3 #16	CM-1 #6	CM-1 #9	CM-2 #16	CM-3 #9	HF-2 #6	HF-2 #9
	HF-3 #9	HF-4 #9	HF-4 #16	P-2 #16	P-2 #18	T-1 #7	T-1 #16	T-2 #9	T-2 #11	T-4 #11
	T-5 #7	T-6 #9	T-6 #19							
ORG. PROVIDES LEARNING	CL-1 #17	CL-1 #18	CL-1 #19	CL-2 #17	CL-2 #18	CL-2 #20	CL-3 #17	CL-3 #18	CL-3 #20	CL-4 #11
	CL-4 #17	CL-4 #19	CL-4 #20	CM-1 #17	CM-1 #18	CM-2 #17	CM-2 #18	CM-2 #19	CM-2 #20	CM-3 #17
	CM-3 #19	CM-3 #20	CM-4 #17	CM-4 #18	CM-4 #19	CM-4 #20	HF-1 #17	HF-2 #6	HF-2 #11	HF-2 #17
	HF-2 #18	HF-2 #19	HF-2 #20	HF-3 #20	HF-4 #17	HF-4 #18	HF-4 #20	P-1 #17	P-1 #18	P-1 #20
	P-2 #17	P-2 #19	P-2 #20	P-3 #7	P-3 #17	P-3 #18	P-3 #19	P-3 #20	T-1 #11	T-1 #17
	T-1 #18	T-1 #19	T-1 #20	T-2 #18	T-2 #19	T-2 #20	T-3 #11	T-3 #19	T-3 #20	T-4 #11
	T-4 #17	T-4 #18	T-4 #19	T-4 #20	T-5 #11	T-5 #17	T-5 #19	T-6 #17	T-6 #18	T-6 #20
INSPIRATION FOR THE CHILDREN	CL-1 #14	CM-1 #19	CM-3 #18	HF-1 #20	HF-3 #18	P-2 #13	T-5 #7	T-5 #11	T-5 #20	

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