EMPOWERMETRICS
EVALUATING METRICS FOR WOMEN’S EMPOWERMENT
AND EXPLORING NEW ALTERNATIVES

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By

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The research and writing of this thesis is dedicated to the support of my family, friends, and the women of ASTRADOMES, from whom I learned what it means to be an empowered woman.

Many thanks,
Francesca Tripodi
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Introduction

It is Sunday morning and Manuela\(^1\), a domestic employee in Costa Rica, is on her way to class. For the past 12 weeks, from 9:00 am until 12:00 pm every Sunday (and some Saturdays), Manuela has been learning valuable computer skills, from setting up an e-mail account to routing wireless Internet connections. She arrives early at the Association for Domestic Employees (ASTRADOMES) so she can chat with her family before class begins. Inside, Manuela turns on a computer and logs into her Skype account. Soon she is able to communicate, for free, with her son in Nicaragua.

Only a few months ago, Manuela was so frightened to touch the computer that when she was at work, she would clean around the foreign object. For weeks, the only communication she had was with her employers, who tried to avoid contact with the hired help. Now she sees friends every week during class. Her perception of the computer has changed since she started communicating regularly with her classmates and family over the Internet. The class improved her computer skills and increased her sense of self-worth. Manuela feels empowered because she is less isolated and no longer ashamed of herself. Her new confidence helped her create a better working relationship with her bosses, who now regularly come to her for computer help. Soon, Manuela will graduate with a certificate in IT Essentials. If Manuela does not find a new job after she graduates, the investment in her education will be considered a failure.

\(^1\) In order to protect the anonymity of the women associated with ASTRADOMES, the example of Manuela is not meant to showcase a single individual but rather the combination of many stories.
That perceived failure is due to the limitations of current *empowermetrics*. Right now *empowermetrics* consists of simple indicators like graduation rates, job placement and salary levels, providing a sterile and detached evaluation of what empowerment means for women like Manuela. These metrics do not honor the significant personal changes that Manuela has experienced, or the impact Manuela’s education can have on the role of women in her society. Part of *empowermetrics* inefficiencies stems from the fact that although development strategy has changed over the last seventy years, the overall goals and measurements for success have remained static. To better recognize the benefits that Manuela has achieved, a reevaluation of *empowermetrics* is essential.

Since the early 1940s, the involvement of the United States in international development was, and continues to be, rebuilding and creating sustainable economies that will foster democratic ideals and help thwart perceived threats to US society (Rai, 2002). A guiding principle in American foreign policy is the notion that economic stability will placate security threats that our nation faces (Melkote, 2003). While these threats have shifted from more organized governmental structures, such as communism, to the rogue, guerilla tactics of terrorism, the theory still remains that a prosperous nation is a safer one.

Lessons learned from previous development strategy lead to policy improvements. Theories of how to approach foreign aid change, but the way to measure the success of new initiatives remains stagnant. Today, empowerment theory is at the forefront of international development strategy and continues to combat the larger global
problems that exist and democratic instability (Mansuri and Rao, 2004; Uphoff, 1996; Khwaja, 2005). The theory of empowerment is inspiring, but the metrics used to identify successes of empowerment initiatives have not been created with the same fervor.

My study takes a two-prong approach to understanding why empowerment theory is being hailed as the model for development today, and how the current system of *empowermetrics* is flawed. Then, using data collected from an ethnographic study in Costa Rica, my study offers suggestions for alternative methods of measuring the success of empowerment initiatives in the future.

Chapter 1 will provide background on United States involvement in international diplomacy. By peeling back the origins of foreign aid and international development strategy, one can see why current foreign aid uses participatory strategy, and how empowerment theory was created from initial critiques. Even though international development strategy is continuously being refined and modified, Chapter 2 demonstrates how measurements for defining programmatic success (or failure) are not modified to match policy changes. Outlining how *empowermetrics* are being used in numerous assessments will demonstrate that indicators remain the same. Specifically, the use of *ceteris paribus* (all other things being equal) suggests that indicators can predict broader impacts such as economic stability, national security or the spread of democracy. Chapter 2 explains how this causal connection between present indicators and future outcomes is ineffective because cultural conditions (outlined by Malhotra et. al, 2003) may override the possibility of predictive outcomes.
Chapter 3 is a real-world example that demonstrates why current *empowermetrics* are inadequate. In this chapter, I analyze two assessment reports. The first report investigates how program goals and objectives can set a program up for failure because success becomes dependent upon *ceteris paribus*. The second report deconstructs a specific program’s outcomes, showing first-hand how cultural conditions impede programmatic success. My findings show that limited indicators linked to broader societal impacts are easily refuted. Weak assertions about cause and effect allow critics to question the validity of empowerment theory, compromising future funding.

Chapter 4 provides a case-study of a program in Costa Rica working to empower women through access to information communication technology (ICT) education. I performed this ethnographic study with the goal of creating a new paradigm for *empowermetrics*. Using a series of interviews and surveys, my findings show that alternative indicators are feasible. For example, discussion of shame and isolation emerged directly from my interviews indicating that an increase in social interactions and self-worth was important for the women who participated in ASTRADOMES classes. Extrapolating from this idea of shame and isolation, the study suggests potential indicators that could be used in future empowerment programs to showcase program results. Indicators developed in this study also provide a way to more accurately track long-term programmatic impacts.

More broadly, my study argues that unless the suggested improvements to *empowermetrics* are implemented, the concept of empowerment may disappear. Program
outcomes focused only on future indicators fail to take account of tangible examples of current successes. Furthermore, future outcomes are dependent upon inferred success and are vulnerable to cultural conditions (Malhotra et al., 2003). If success is not accurately measured in a way that can provide supportable findings attributed to empowerment programs, funding organizations may stop investing in such programs. The educational opportunities for women may be cut back as a result. Global society suffers if women continue to be undereducated. After all, women make up more than half the population. Diminishing interest and investment in women’s directly threaten the possibilities of women. The abilities of an empowered woman are limitless. Now is the time to develop new metrics to showcase that empowerment.

**Chapter 1 – Revising International Development Strategy: Learning Lessons from the Past**

A better understanding of how empowerment theory became the current method for providing developmental aid is necessary before one can fully understand why current empowermetrics are inadequate for evaluating development programs. This chapter will illustrate the development strategies implemented directly following the end of the Second World War as part of the reconstruction of Europe. It will then demonstrate how critiques of these strategies and the lessons learned from failed policies helped lay the foundation of a more participatory approach to achieving developmental goals. Ideological and feminist critiques of these participatory models were further refined to
create a “women’s empowerment focus.” This chapter highlights the transition from economic investment to women’s empowerment.

**Foreign Aid as a Policy Tool**

Since the end of World War II, the goal of US development strategy has been to foster economic security in less-stable nations (Rai, 2002; McDowell, 2003). Distribution of foreign aid to enhance economic stability helps the United States achieve a number of national goals including national security, economic development, and the spread of democracy. The rationale behind these policies was that promoting humanitarian and economic interest would not only spur growth in a country’s economy but also thwart perceived threats to US security (US Congress, Office of Technological Assessment, 1995). The theory maintains that as a country advances economically, political democracy will follow (Guillermo O’Donnell quoted by Prezeworski & Limongi, 1997). Ensuing democracy was presumed to ensure the safety of the United States and also create new partners with whom the United States could pursue commercial exchange (US Congress, Office of Technological Assessment, 1995).

One of the first developmental strategies following the end of World War II was the Marshall Plan, designed to help war-torn European countries redevelop their markets. The cornerstone of the Marshal Plan was the Bretton Woods Agreement of 1944. Bretton Institutions, now the World Bank and the International Monetary Fund (IMF), were created to provide loans that would allow European countries to invest in the development of their nations (US Congress, Office of Technological Assessment, 1995).
While the documents establishing the World Bank and the IMF did not directly mention “development,” the first draft of the proposal written in 1942 noted that the Bretton Institutions would “supply the huge volume of capital…that will be needed for reconstruction, relief, and for economic recovery,” (Kapur et al., 1997, p. 57). These loans were tied to “economic liberalization policies\(^2\), which have been implemented by most developing countries since the early 1970s” (Onyejekwe, 2004, p. 28).

The combination of the Marshall Plan and loans provided by the World Bank and the IMF “were highly successful in fostering postwar economic reconstruction” (US Congress, Office of Technological Assessment, 1995, p. 46). Not only European countries benefited from the reconstruction process, but the United States also benefited as the value of world trade nearly tripled and US exports totaled five percent of its total gross national product (US Congress, Office of Technological Assessment, 1995). In the end, the foreign assistance programs in Europe were a win-win: the countries which received aid now had thriving economies and the United States could sleep easier with the threat of communism at bay. In the wake of the Marshall Plan success, and the end of the Cold War, the fight against communism shifted from a real threat to an ideological one. This new ideological focus moved foreign aid to Asian countries.

The success of supplying economic aid for foreign development was short-lived, however. Critics soon realized that the goals of the Marshall Plan were not replicable outside of Europe. Instead of creating sustainable economies that could pay back their

\(^2\) Neoliberalism is a set of economic policies that seek to “liberate” or free the economies to increase trade. An example would include the North American Free Trade Agreement (NAFTA) which increased freedom of movement for goods and services between the Americas (Onyejekwe, 2004).
loans and begin trading with the US, Asian countries receiving foreign assistance became further dependent on governmental aid (US Congress, Office of Technological Assessment, 1995).

Disappointed in the results of alternative aid policies, Congress began to cut back its investment of foreign aid. Congress was disillusioned that international development policy had failed to accomplish was it was designed to do (US Congress, Office of Technological Assessment, 1995). As the United States began to face economic trials of its own, making it more difficult to lend to emerging markets, President Nixon encouraged private institutions to loan money to fill the financial gap (US Congress, Office of Technological Assessment, 1995).

US banks were quick to lend to developing nations, seeing it as a good investment opportunity. While “many developing countries have used industrialization for sustained growth” (Serra et al, 2008, p. 8), an equal number of countries borrowed beyond their economic means. The extended borrowing in foreign currency made both the lending and receiving countries vulnerable should an economic crisis occur (Williamson, 2004). And this is precisely what happened when, in the early eighties, countries unable to pay off their initial deficits, continued to borrow at higher and higher interest rates (US Congress, Office of Technological Assessment, 1995).

Facing insurmountable debt and mediocre results, international development strategists realized that economic aid was not resulting in the economic security they desired (US Congress, Office of Technological Assessment, 1995). Based on these
critiques, the United States refined the original strategies for development to create a more participatory approach. Instead of giving developing countries loans tied to economic reform (a top-down method), new strategies gave power to people to participate in the modernization process:

“Foreign aid was henceforth no longer viewed as the key to economic growth. Much more critical was the role that developing countries could themselves play in restructuring their economy in accordance with market principles,” (US Congress, Office of Technological Assessment, 1995, p. 59).

The Rise of Participatory Development

Since the 1980s, the watchwords of foreign aid have been “participatory” or “community-led” development (Mansuri & Rao, 2004; Uphoff, 1996). Rather than imposing a developmental standard, this revised theory maintains that societies should take part in solving their own economic crises. This community participation empowers people to be part of the change they want to see in their country.

The late Robert Nisbet3 explained the need to empower people through progress noting that progress is inextricably linked to power, and that power is the “purpose of progress” (p. 237). As he contended, international development strategies that want to empower citizens through a participatory process must provide a plan for progressive change in which the citizens of the country participate.

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One example of such a participatory model was modernization. According to modernization theory, technological progress could give citizens the power to combat “problems of economic development, political stability, and social and cultural change in these societies” (Tipps, 1973, p. 200). An example of one such modernization strategy was the implementation of new technology within agriculture (Kapur et al, 1997). The hope was that technological advancements would increase the production of crops on a farm, which would then increase trade. Profit from the sale of crops would finance the investment in the technology and provide a sustainable method for improving a country’s economy.

Essential to the participatory process was the community’s desire to adopt the new technology. One way to encourage adoption is to incorporate key decision makers and early adopters in the community during the project planning stage rather than later, at the time of implementation. Everett M. Rogers’ theory of diffusion provides a model of how technology can most easily be incorporated into society. The “innovation-development process consists of all the decisions, activities, and their impacts that occur from the recognition of a need or a problem, through research, development, and commercialization of an innovation, through diffusion and adoption of the innovation by users, to its consequences” (Rogers, p.137).

Part of the “innovation-development process” entails identifying and involving key decision makers in a society. In a patriarchal society, the key decision makers are men, who then assume the role of technology implementation. In this way, the
modernization process reinforces patriarchal societal structures and perpetuates reliance on men for money and food (Wajcman, 1991). Although modernization theory is an improvement over previous theories of economic development in that it actively involves the community, it marginalized women. Moreover, given its emphasis on male members of society, the metrics for success focused only on male achievements (Scott, 1995). Hence, women were excluded from the opportunities to participate in progress and, by extension, acquisition of power.

**Is Participatory Strategy Participatory if Women are not Involved?**

Feminist critics of modernization theory recognized this gender discrepancy, noting that modernization hurt women by diminishing their place within society. Evolving modernization approaches to implement skills training or fund technological advancements focused only on men, “contributing to their own definitions of appropriate roles for women, reinforcing the process of female marginalization by training men only, and by structuring access to credit and other resources to the male as ‘head of the household’” (Jaquette, p. 270).

Male decision makers controlled the loans and the technology associated with modernization projects. Giving men the sole power of providing for the family redistributed the roles of women, putting them into a “modern” setting: out of the fields and into the home. Unlike field jobs, these modern household “jobs” were unpaid (Jaquette, 1982). The industrialization of agriculture took away woman’s role as an equal provider for the family, and placed her in an inferior role, dependent upon her husband’s
income (which mimicked a male head-of-household model – Jaquette & Staudt, 2007).

The division of responsibilities created a shift in value in which paid work was separate from homemaker responsibilities (Wajcman, 1991). Because men received the loans, it put them in charge of all of the farming responsibilities. As a result, women no longer contributed to a valuable part of the household as defined by neoclassical economic theory.

This “modern” role of women’s as homemakers was also modernized. Instead of looking at the shift in women’s roles as the product of modernization, new development strategies and policy began to discuss the possibility of modernizing “wives and mothers” as though they had always been in this role. For example, the 1994 World Bank report emphasized the need to implement time-saving devices to “relax some of the constraints on women in their household nurturing capacity” (report quoted by Scott, 1995). “Nurturing capacity,” however, was defined by development policy. According to scholars, the “traditional role” of women was much different.

Esther Boserup, a Danish economist, spent years studying “traditional roles” of women in Africa. Studying the role of women in indigenous tribes, Boserup found that “women, in nearly all of the cases recorded, were found to do more than half of the agricultural work” (Boserup, 1970, p. 10). Boserup also wrote about other regions outside of Africa, including Latin America, India and parts of Asia, where women did most if not all of the farming. She also noted that in subsistence farming, men were in charge of the “cash crops,” a limited quantity of the food produced for household consumption that was sold at markets.
In addition to reframing the roles of men and women, the participatory approach of modernizing agriculture also shifted the role of the farm from familial subsistence to large-scale trade production. When women controlled the farms, the crops were primarily grown for household consumption and a small portion of the crops, termed “cash crops”, were sold at the market by men to pay for other household necessities. Under modernization, the term “cash crop” was reinvented to mean crops that had high resale value (coffee, sugar, etc). To pay back loans used to modernize agricultural production, “cash crops” now dominate most of the harvest.

This restructured the purpose of the farm. Families no longer consumed food from the farm; instead men would sell all of their crops and use the money to purchase food. As men appropriated the role of “provider” away from the women, women were demoted to the role of “wives and mothers” (Jaquette & Staudt, p. 24). This label confined women’s roles to household chores, so their contributions were no longer vital for the survival of their family (Jaquette & Staudt, 2007). Women from developing countries voiced their frustrations about modernization during the 1974 Conference on Women in Mexico City, arguing that foreign aid, not patriarchy, was the cause of women’s oppression (Jaquette & Staudt, 2007).

Responding to these concerns, the United States Agency for International Development (USAID) created a division entitled Women in Development (WID). The goal of WID was to refocus development strategies to assure that women were involved in the development project planning process, paying special attention to the Western idea
of “family wage.” “Armed with Boserup’s thesis, WID advocates argued that programs that directed resources to women, including training and agricultural inputs, would improve food production, family welfare, and women’s equity – without violating cultural norms” (Jaquette & Staudt, 2007, p. 24). Nonetheless, even though these modifications led to greater funding for women’s initiatives, the focus of these effects continued to take on a Westernized tone; their aim was to find the modern woman a job.

As women were “increasingly pushed into the work force” (Jaquette & Staudt, 2007, p. 27) their other responsibilities were ignored. Because women’s work was part-time or marginal, these new jobs often paid less than those of men and were without benefits. WID ignored this triple-burden of “reproductive, productive, and community work” (theory of Carolyn Moser quoted in Jaquette & Staudt, 2007). The extra wages, moreover, were inadequate to compensate for the increased costs of living, and the increase of daytime work force women into working what was virtually three jobs – one in a factory (which paid very little), one at home (which paid nothing), and one with the community (which also paid nothing).

Moving forward – Restructuring Participatory Approaches with a Gendered Focus

Learning lessons from the failed participatory strategy, a new model “Gender and Development (GAD)” was developed “confront the gender power relations holding women back” (Jaquette & Staudt, 2007, p. 28). The goal was to expand and improve WID ideas by creating specific gender development initiatives. For example, GAD advocates called for “mainstreaming” to integrate gender into all development projects
and programs (Jaquette & Staudt, 2007, p. 31). More recently, the idea of gendered mainstreaming has focused specifically on women’s “empowerment” (Khwaja, 2005). Thus, the World Bank’s millennial World Development Report on poverty introduced “the concept of empowerment as one of the central pillars of poverty-focused development” (Rao & Woolcock, 2005, p. 19).

Women’s empowerment focuses on educational initiatives that allow women to participate in the economic generating activity of their choosing (Kristof & WuDunn, 2009). According to its advocates, “empowerment […] affirms the multiple realities of women, particularly their situated, localized character” (Pongsapich, 2007, p. 221). They believe that using education to empower women can lower poverty. An educated woman can obtain the skills she needs to find a job, which allow her to earn money and provide economically for her family and community.

Health care professionals were among the first to suggest that empowering individuals through education leads to progressive community health prevention (Swift and Levin, 1987). Yet they were also among the first to challenge the ability to measure the success of such empowerment efforts (Zimmerman, 1995). It seems that while development strategy for best-practices to foreign aid was continuously evolving in the face of past accomplishments and mistakes, the ways to measure the outcomes of participatory approaches remained unchanged.

Lessons not Learned
One of the major critiques of modernization was that of Dean C. Tipps (1973), an economist who studied the pitfalls of modernization theory. Tipps believed that modernization was only good in theory because it was not well defined. As Tipps noted, the “critical variable” for success was never established:

“In the sense that they [those who conceptualized modernization theory] equate modernization with a single type of social change,” modernization was not “simply a process of change, but one which is defined in terms of the goals toward which it is moving” (Tipps, p. 204).

Because modernization was a continuously moving process, Tipps believed that it was impossible to attribute success to modernization programs. Tipps termed his perspective a “metatheoretical critique” noting that modernization tried to attribute the success of every social progressive change to modernization theory (Tipps, 1973).

Zehra Arat was another scholar who questioned the validity of modernization theory, noting that “its evolutionary thesis of democracy needs to be verified with improved data and measurement” (Arat, 1988, p. 23). Part of his emphasis on measurement was related to the fact that even though strategy was continuously modified to try and meet the national goals of development policy, metrics to match those successes were never created. Successful outcomes are still measured in terms of economic successes characterized by the GDP (Melkote, 2003; Krugman, 2008).

The potential of a policy tool to lead to a successful outcome is not a simple matter of cause and effect. Success depends on a number of factors including the global economic market, the context within which a program is created, the possibility of
sustainability and the quality of execution (US Congress, Office of Technological Assessment Report, 1995). A successful outcome is dependent upon economic environment and context, but proving the outcome occurred depends on indicators and metrics. Even though current empowerment theory was created in response to critiques of other development strategies, the actual measurement of the outcomes of empowerment theory has not been approached with the same rigor. As Asim Khwaja (2005), a representative from the World Bank, noted about the importance of such research: “Before empowerment can be integrated into development policy, it must be clearly conceptualized, and reliable measures must be developed. This is particularly important given that such measures of empowerment are likely to become project goals for development agencies” (p. 268).

Throughout the years, US strategy for distributing foreign aid has continuously evolved. A key part of this evolution stemmed from lessons of the past, and trying to replicate successes and modify failures. An important contribution was participatory strategy, one aim of which was to provide accountability for the money given as loans to other countries. At first, this “empowerment” was only directed at the poor, not taking into account how social structures within a patriarchal community would marginalize the women from advancing. Learning that woman were excluded from participation, this approach to international development was revised to include “women’s empowerment.” Today, women’s empowerment is at the forefront of international development strategy. It remains to be seen which empowerment strategies will be continued. Much will depend on our success in generating appropriate measures that take into account the complex
nature of development. In the following chapter, the thesis looks more closely at these indicators.

**Chapter 2 – Understanding Current Empowermetrics**

Since the earliest problems of development were “technologically deterministic and centered on quantifiable indicators such as the GDP” (Melkote, 2003, p. 137), the developmental goals for empowerment theory remain grounded in economic reform. As such, there is a continued focus on economic indicators for empowerment theory and their ability to contribute large-scale societal changes: “Modest programs of aid to the poor, measured as a share of the GDP, can have large impacts on the quality of life for the poor” (Krugman, 2008, p. 39 – italics mine). This metrics are representative of the national goals that the foreign aid program has been trying to achieve since it began in the 1940s. Despite the efforts of development experts, determining the impact of a foreign assistance program on overall economic growth, national security, or the spread of democracy is incredibly difficult (US Congress, Office of Technological Assessment, 1995).

Since the overarching goal of international development strategy has been to foster economic security and stability, programmatic success continued to be measured using tangible economic indicators. This approach is problematic because economic indicators only measure a very specific type of success. As international development strategy has been modified to have a more participatory and gendered focus, fostering the
empowerment of women to provide the seeds of change, a more eloquent and exclusive type of metric must be created.

Not only do economic factors limit the capacity of what can be measured, these indicators are then used to project long-term success; such as, an impact on economic growth, national security, or the spread of democracy. This depends on ceteris paribus (all other things being equal), an assumption that requires that too many outlying factors align for predictions to be true. A number of studies show that societies react differently to women’s empowerment depending on cultural norms and values. As a result, there is no way to insure that all other things will be equal. By exploring the status of current empowermetrics, and how “cultural conditions” can impede programmatic success, this chapter will outline the outstanding issues in empowermetrics. Efforts to refine analysis are the key to moving the measurement agenda forward (Malhotra et al, 2002).

How do you Measure Empowerment?

It is possible that women who are able to obtain a job because of their education will be able to contribute productively to the local and global economy. The empowerment they feel after completing a course, however, may not be represented by current indicators, and causal assumptions are dependent upon ceteris paribus for accuracy: “While the benefits of educating girls and women for societies, in general, and their families, more specifically, are well-understood, the case for education serving as a catalyst in reducing gender inequality, or benefiting women themselves, is less clearly established” (Malhotra et al, 2003). Many scholars are currently working on metrics,
using universal and empirical methods to analyze whether or not empowerment has happened and, if so, how it is working (Mason, 2005; Patton, 2005; Uphoff, 2005; Ghuman, Lee & Smith, 2004). Current indicators, however, have yet to gain legitimacy as to how they showcase empowerment, and how those indicators can predict a change in other societal problems.

Surprisingly, no data exists to explain how indicators were developed, or why indicators such as a woman’s control over income, ability to make large household purchases, or her economic decision making will lead to poverty reduction, health promotion, and a stable democracy (Malhotra et. al, 2002). These findings suggest that current indicators do not capture the full benefits that empowerment projects can have on both individual and community empowerment.

The World Bank has made considerable strides in publishing material to focus on what empowerment is, how can it be evaluated (Petesh, Smultovitz, and Walton, 2005) and the various quantitative and qualitative approaches to measurement (Mason, 2005). Yet little research has been done to explain why current indicators of empowerment are used, and how they were initially created.

Anju Malhotra, Sidney Schuler, and Carol Boender give an overview of 45 different scholarly reports on measuring empowerment in their background paper prepared for the World Bank Workshop on Poverty and Gender in 2002. They are the first to acknowledge that more work needs to be done on the creation of empowerment indicators: “The equation of specific indicators – either individually, in some
combination, or through construction of indices – with gender inequality, and occasionally empowerment, is often *based on arbitrary choices* rather than on conceptual frameworks,” (p. 31 – italics mine). Continuing, the report notes: “most studies *document* rather than *analyze* the processes involved,” and that if empowerment is a goal, better measurement for capturing the process at this level needs to be developed (p. 32 – italics mine). They also note that the vast majority of the studies evaluated failed to measure empowerment effectively enough to determine if empowerment strategy results in economic or democratic goals.

The Malhotra et al (2002) whitepaper notes the limitations current indicators in connecting women’s empowerment to the larger changes desired by funding organizations. Perhaps it is because of the focus on future societal changes, which extend beyond the abilities of women that “empowerment [has] not had the radicalizing effects its advocates had hoped for” (Jaquette and Staudt, 2007, p. 38). When measurements of program success are rooted in future achievements, the accomplishments of today can be overlooked or entirely ignored. Overlooking achievements and limiting indicators can have a profound impact on the future of empowerment programs. If donors such as the World Bank cannot determine real outcomes because of faulty indictors, the whole concept of empowerment may diminish, thereby undermining the resources for women’s educational initiatives.

A closer look at the studies analyzed by Malhotra et al (2002) shows that all 45 cases use financial or economic indicators to prove that empowerment happened. These
indicators are then used in the findings to prove or disprove the longevity of the large scale program goals.

**Indicators of Empowerment Used***

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<td>Resource allocation</td>
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<td>Profitability of the loan-funded activity</td>
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<td>Control over resources</td>
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<tr>
<td>Control over cash, spending, and time use</td>
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<td>Household expenditure decision making</td>
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<td>Control over loan</td>
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<tr>
<td>Economic security</td>
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<tr>
<td>Ability to make large purchases</td>
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<tr>
<td>Role in economic decision making (major say in purchase of jewelry)</td>
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<td>Control over money matters</td>
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<td>Control over income</td>
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<tr>
<td>Labor Force Participation</td>
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<tr>
<td>Ration analysis – women in high power positions/salary of women.</td>
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*These indicators were identified in Malhotra et. al, 2002 Whitepaper for the World Bank.

Indicators of economic control were used in almost all of the 45 studies analyzed. Rarely were other indicators of empowerment such as mobility, participation in protests, decision making in the household, and exposure to domestic violence discussed. Only one study looked at women’s perceived changes in self worth. These of measuring success in terms of economic factors generally demonstrates success of foreign aid programs (US Congress, Office of Technological Assessment, 1995), but as developmental aid has changed from a purely economic to participatory approaches, other factors must be considered.
Furthermore, these economic indicators were depicted as having a causal effect in which empowerment was an “intermediary factor affecting other development outcomes” (Malhotra et. al, 2002, p. 34). For example, a case study in Togo in 1995 reported that women’s access to cash through paid work (indicator of empowerment) had a positive effect on contraceptive use in the area (outcome). However, cultural norms and values might prevent the replication of this causal relationship in other countries. In order for long-term outcomes in the interest of US national goals to be met, ceteris paribus must take effect. Cultural conditions might thwart the possibility of “all other things being equal” as other factors override the relationship between the economic indicators and the resulting outcome.

**What are Cultural Conditions?**

Many development projects designed to educate and empower women are heavily invested in the idea rather than in the outcome. The idea of educating girls and women is altruistic and organizations pursuing the expansion of women’s education do not want to see their programs end. As a result, those programs can create projects that do not monitor their results with the same scientific rigor as other research projects because unfavorable outcomes could impede the solicitation of contributions and the continuation of their programs in the future (Kristof and WuDunn, 2009).

Catherine Scott, a feminist who studied the impacts of women during modernization, helped funders and researchers understand the limitations of societal constraints. Women’s empowerment may not be fully effective because of cultural
restrictions. The current power holders will not want to relinquish their control over resources, regardless of whether a woman is educationally skilled to do so. “Access to markets has benefits for women, but those benefits are always limited, even if markets are entirely free of gender discrimination. They are limited because the reproduction and maintenance of human resources is structured by unequal gender relations, and because the reproduction and maintenance of human resources cannot be directly and immediately responsive to market signals” (Scott, 1995, p.79).

Anju Malhotra, Rohini Pande, and Caren Grown, all of whom work for the International Center for Research on Women, wrote a white paper on the impact of investments in female education on gender equality commissioned by the World Bank Gender and Development Group in 2003. Their research highlights continuous references to social conditions which could hinder the ability for women to translate education into real working conditions after graduating from educational initiatives.

Social conditions create “if only” situations. For example, a woman will be able to get a new job in technical training if only the cultural condition of patriarchy does not exist which would prevent her from applying for a job. In other words, measuring the number of women to have an education or be educated may not necessarily produce intended causal outcomes because it does not allow for “all other things to be equal.” Economic outputs will not increase if women are not allowed to work, and a woman will not become empowered if her gender prevents her from finding a job. The three areas of
culture which impact the ability of programs to achieve results are established gender roles and norms, investment in education, and level of education (Malhotra et. al, 2003).

<table>
<thead>
<tr>
<th>Provisional Categories of Cultural Conditions</th>
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<tbody>
<tr>
<td>Established Gender Roles and Norms</td>
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<tr>
<td>Patriarchy</td>
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<tr>
<td>Ideology of women’s work</td>
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<tr>
<td>Permission</td>
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<tr>
<td>Negotiation</td>
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<td>Class Hierarchy</td>
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Established Gender Roles

Established norms and restrictive roles of women in society have a major impact on the capabilities women have to use their education. Women can use their education to negotiate equal rights if only their educational experience is taken seriously (Fox et al, 2007). This concept can be broken into four areas of focus: socioeconomic factors (class/hierarchy), location (urban/rural), societal norms (patriarchy, ideology of women’s work), and mobility (permission/access/negotiation).

Without looking at the location and socioeconomic status of where initiatives are being implemented, intended outcomes may fall short of expectations due to mobility barriers or restrictions on women’s capabilities after graduation. Mobility is inextricably linked to socioeconomic status and location. Women from poorer areas are more likely to live in areas far away from training locations. They are likely to be dependent on
public transportation making them less mobile, both in terms of permission and access to attend courses (Malhotra et. al, 2003). Behind mobility, the second largest hurdle women face is societal norms for women to utilize their education towards a career. Location, socioeconomic status, mobility, and societal norms are the *Established Gender Roles and Norms* which may also change the reason why cultures invest in the education of women.

*Investment in Education*

The reasons why women, and/or their parents want to spend the money and time needed to increase a woman’s education is based on a perceived rate on return on their investment. Parents will educate their daughters *if only* they can see a reason for the investment (Malhotra et al, 2003). Returns on investment may include marriageability (increased opportunity to marry/dowry money), economic need (what reason does the wife have to work), and remittance (sons will always provide for immediate family). These concerns about investment and return factors explain the underlying reasons behind why women are encouraged to pursue higher levels of education.

*Level of Education*

The *level of education* for both parents and children also impacts the capabilities educational initiatives have on anticipated outcomes. Women are more likely to participate in maternal healthcare *if only* they have higher than a primary level of education (Malhotra et al, 2003). *Level of education* can be looked at in two ways: amount of education completed (“primary” “secondary” “specialized”) and comparative markers (how women’s skill levels are “compared to” men in the classroom). Women’s
level of education compared to men as a determining factor for success is very important. In order to combat *Established Gender Roles and Norms*, women must be as prepared as their male colleagues to have a measurable impact in the classroom and following graduation.

So why is *if only* important? First, these conditions could provide significant roadblocks for achieving immediate programmatic goals. Unless cultural conditions are explored prior to establishing program objectives and strategic initiatives, they could create an impossible set of circumstances to achieve success. Secondly, when initial indicators are used to create an analogy in which long-term strategies are achieved, *ceteris paribus* must hold true. Cultural conditions diminish the possibility that all other things will be equal, so it is impossible to link immediate indicators of economics success to future outcomes related to project goals and objectives. Furthermore, if indicators and outcomes are only concerned with large-scale economic interests, a deeper understanding of the socioeconomic and cultural impacts may never be discovered.

Limited measurements exclude alternative forms of programmatic success, and causal relationships are damaging because they create a straw-man argument (Talisse & Aikin, 2006). Flawed causal relationships lead to critics of empowerment theory, easily refuting the need for funding educational empowerment initiatives. In the same way modernization was deconstructed, arguments dependent upon *ceteris paribus* leave the door open for cultural constraints to sabotage program results and provide ammunition for critics to debate the usefulness of empowerment theory. An impression of lackluster
results is created because economic indicators do not embody the changes inherent in the empowerment strategy and claims are asserted that cannot be fully supported with evidence. As a result, development projects using education to empower women may not be funded in the future because effectiveness cannot be proved in a meaningful way.

The following two case studies provide further insight into this idea of empowermetrics. Case 1 provides real-world examples of how cultural conditions can impede ceteris paribus. By examining both project construction and assessment, this case shows the dangers in depending upon nascent indicators to prove long-term strategic goals. Case 2 is an ethnographic study that explores how a new set of indicators based on interviews and observation could be used to measure empowerment. While these findings are still preliminary, they demonstrate the potential of empowermetrics in the future.

Chapter 3/Case 1 – Real-world Examples of Inadequate Indicators

This chapter demonstrates why current empowermetrics are inadequate by analyzing two assessment reports. These reports summarize the importance of cultural conditions in both program creation and assessment. This focus on creation and assessment will ultimately show how the use of inadequate indicators, dependent on ceteris paribus (all other things being equal), create weak arguments for why a program
is successful (Malhotra et. al, 2003). I argue that weak assertions allow critics to question the validity of empowerment theory, compromising future funding.

As Chapter 1 demonstrated, foreign assistance from the United States is continuously modified to improve upon past successes and failures. Current methods for developmental aid use “participatory” or “community-lead” development strategy (Mansuri & Rao 2004; Uphoff 1996) and, more recently, “empowerment” (Khwaya, 2005). At the heart of empowerment theory in current international development strategy is education (Almond and Verba (quoted in Arat, 1988); and, since women are more likely to be living in poverty, have lower paying jobs, and be pulled out of school to care for the sick more frequently than boys (USAID – Various Country Gender Assessments, 2003 and 2005), education projects usually focus on women.

Empowerment through education can have a powerful impact on a woman’s role in society, her sense of self-worth, and expand her technical capabilities. Through education a woman can escape poverty and be able to provide for her family. One could easily measure the outcome of such an initiative in GDP growth or control over resources, but does that measurement capture the essence of the program? Think of a woman who transitions from cleaning houses to working as a secretary: she now has benefits, job security, and can contribute to household finances. Is she empowered because she contributes to the “working economy” (Williamson, 2004), or is she empowered because her children and her employers now respect her?
The process of empowerment is complicated, but empowerment programs have the potential to showcase the myriad of results they accomplish. Measuring success with economic indicators only accounts for financial changes, but empowerment initiatives can also build trust and cooperative interactions within a society that have the potential to make markets more efficient (US Congress, Office of Technological Assessment, 1995). Measuring success with economic indicators alone will not demonstrate these types of changes.

Simplified metrics do not fully capture the success of a program, but using indicators to project is a more serious complications. Specifically, showcasing the success of a program based on causal outcomes could result in critics easily deconstructing the argument that the program was effective. As Chapter 2 has demonstrated, the reliance on ceteris paribus will fail if cultural conditions change the direction of a project.

Revising metrics is important because how a program frames its project goals and objectives is how funding is allocated. After programs receive funding, they must prove those goals and objectives were met to receive funding in the future. Programs that can accurately demonstrate their ability to achieve their goals are more likely to receive continued funding. In essence, the indicator is proof that the program is working and the key to continued funding. I fear that if empowermetrics are not improved, empowerment programs will not adequately demonstrate why they are effective and important enough to receive continued funding.
Despite the limitations of looking at empowerment through an economic lens and the possibilities of outcomes not materializing because of *ceteris paribus*, economic indicators and causal predictions continue to dominate how programs measure success (Malhotra et al, 2002). The United States has made great strides in revising how we approach international development strategy, now we must pay the same attention to metrics.

**Methodology**

The purpose of this investigation is to show first-hand how current project plans and subsequent indicators do not work in real-world situations. One assessment exemplifies the importance of creating program objectives with cultural conditions in mind, and the other assessment demonstrates how cultural conditions can impede the proposed success of educational empowerment initiatives that use rudimentary indicators.

The assessment reports were selected by first studying the United Nations Development Program (UNDP) Millennium Goals, specifically Goal #3 (Gender Equity) which UNDP created to “eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.” Focusing specifically on Goal #3, a search was conducted of US government programs aimed at education and empowerment. USAID/WID is one of many organizations that create programs around UNDP goal #3, using women’s education and empowerment as a way to combat HIV/AIDS prevention, promote economic stability, and spread democracy.

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4 A full outline of the UN Millennium Goals can be found on their website ([http://www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/))
Under WID requirements, USAID must conduct a gender assessment as part of the strategy preparation process. The purpose of these assessments is to provide an overview of key gender issues in the area, and to make recommendations for how to overcome these issues (Dev Tech Systems, Inc, 2003). The first report analyzed in this study is a gender assessment for USAID/Guyana. This assessment exemplifies the importance of looking at how program goals and objectives are created because indicators are used to prove these goals and objectives are achieved. In appropriate goals and objectives create a situation dependent upon inadequate indicators.

The second assessment is a report created for the Cisco Networking Academy in Bangladesh. Cisco Systems, a for-profit publically traded company, also has a long history of Corporate Social Responsibility (CSR) projects targeting UNDP Goal #3. Many of these CSR projects are tied to Cisco’s global Network Academies, which provide “innovative education initiatives that deliver ICT skills to improve career and economic opportunities around the world.” The Academy offers classes based on the economic needs of the country in which it operates and creates special training initiatives in particularly poverty stricken areas. In such areas, Cisco Networking Academy has partnered with US government entities such as the USAID or global organizations, such as UNDP. Most of these partnerships focus on expanding educational opportunities for women.

The assessment report for Cisco Networking Academy/Bangladesh, used basic indicators of women’s enrollment and graduation rates to measure programmatic success.
However, relating these indicators back to cultural conditions (Malhotra et. al, 2003) explained in Chapter 2, Case 1 demonstrates how graduation and enrollment rates depend on causal relationships that may not materialize.

These codes of “cultural conditions” outlined in Chapter 2 are applied to USAID/Guyana and Cisco Networking Academy/Bangladesh reports. This axial coding not only solidifies the ideas of Malhotra et al (2003), that cultural conditions impede the progress of program goals and objectives; but also, demonstrates why cultural conditions can have a damaging effect on showcasing the progress of both programs.

Analysis of the USAID/Guyana report suggests that USAID/Guyana indicators stemmed from pre-existing program objectives rather than using the findings from the gender report. Furthermore, proving that the program objectives of economic stability, health promotion, and democracy were achieved rely on ceteris paribus.

The findings from the Cisco impact report explain the danger that linking limiting indicators to future successes can have. The report shows that the program uses only two types of indicators: enrollment and graduation rates of women. To prove programmatic goals, these indicators are then linked to broader social and economic changes. By going through each of the levels of cultural conditions outlined by Malhotra et. al (2003), Case 1 shows how easy it is to deconstruct the argument that the Cisco Networking Academy in Bangladesh is effective.

The goal of this research is not to discourage funding of women’s educational initiatives, but rather, to demonstrate why new empowermetrics are vital to the future of
women’s empowerment initiatives. Continued reliance on measurement tools of the past will prevent empowerment programs from showcasing the full extent of their results. The possibility of reporting lackluster results because of faulty indicators is frustrating when programs created by USAID, Cisco Networking Academy, and other international development initiatives are making a big difference in the lives of women around the globe. Those differences and successes have yet to be captured.

**Gender Assessment USAID/Guyana**

The purpose of this review of a USAID Gendered Focus Assessment is to see if programs reframe program goals and objectives based on the results of their pre-program assessments. Analysis of this report shows that even though a gender analysis was conducted the nature of program goals and objectives will depend on *ceteris paribus* to prove success.

The purpose of the gender assessment was to discover *if only* factors (Chapter 2) and then build program goals around those factors. The report reveals the *established gender roles* in Guyana, noting that women are more likely to live in poverty; make lower wages than men in lower status jobs; and/or have little to no representation in decision-making positions (i.e. managers and government officials). The assessment report also discusses the *level of education* of women in Guyana, who are more likely to drop out of school or be pushed into a gendered career. The report concludes by noting that *gender is a key element affecting the results of development programs, particularly in health, education, and poverty reduction.*
In one way, the USAID/Guyana assessment has done a good job clarifying the cultural conditions which could stand in the way of program officers achieving success. Yet, directly following these findings, the report suggests three strategic objectives (economic stability, health promotion, and democratic equalization) which are all dependent upon *ceteris paribus* As Chapter 2 has demonstrated *cultural conditions* could spoil the possibility of “all things remaining equal” in order to achieve the intended results. The USAID/Guyana assessment suggests that education in microfinance will spur women run businesses; that HIV/AIDS transmission education will slow infection rates; and education of the democratic process will empower women to run for office and become elected (Dev Tech Systems, Inc, 2003). Women’s entrepreneurship, health promotion, and democracy are no doubt important objectives, but assertions that women’s education will act as a catalyst to achieve these goals cannot be proven with existing indicators.

The USAID/Guyana assessment references the fact that current indicators are inadequate for measuring this type of success recommending the creation of “gender-based indicators to monitor the impact of gender mainstreaming in the programs,” (p. 23). Even if gender-based indicators were developed to more accurately gauge how women become empowered through microfinance education, proving that her empowerment inspired her to obtain a loan and start her own business resulting in an overall impact on Guyana’s GDP would depend too heavily on *ceteris paribus*.
For example, *established gender norms and roles* could prevent women from obtaining a bank loan, or the *level of education* of her husband may restrict the independence needed to run her own business. Even though the report notes that *gender is a key element affecting the results of development programs*, none of the suggested program goals take into account these constraints, setting the program up for potential failure.

Annex A of the USAID/Guyana assessment gives insight as to why programmatic success is rooted in causal relationships rather than independent indicators. This section reveals that “under the new ADS requirements, the Mission must address gender in the strategy first, and then in the design, contracting, and monitoring and evaluation of Mission activities,” (DevTech Systems, 2003, p. 23). Therefore, this report is aimed at creating a better understanding of the disparities of women in Guyana. However, Annex A also notes that the Country Strategic Plan (CSP) for 2004-2008 already had a Mission Concept Paper of what they wanted to achieve, which had been approved in Washington prior to the assessment (DevTech, 2003 Annex A). The strategic objects of this plan included: 1) Improving Economic Policy Environment to Foster and Expand Trade; 2) Consolidation of Democracy/Governance; and 3) Reduction of Risk of HIV/AIDS Transmission. Coincidentally these strategic objectives ended up being the same program objectives recommended in the report (economic stability, health promotion, and democratic equalization). Therefore, the *if only* factors discovered by the gender assessment were not actually taken into account but rather a reflection on goals that had already been outlined and approved.
Creating a gender assessment of the country prior to project implementation was a good start, but ultimately the initial assessment failed to consider how cultural constraints would impact the ability to achieve the proposed objectives. While education and empowerment may lead to economic trade, greater participation in the democratic process, and health promotion, these strategic objectives could equally fail because of cultural conditions.

Ultimately this report highlights the importance of taking cultural conditions into account before creating project goals and outcomes. It also illustrates why an independent indicator for measuring gender assessment or empowermetrics must be considered. The next report, shows how results that rely on ceteris paribus are easy to deconstruct. This deconstruction of Cisco Networking Academy’s assessment of their Bangladesh project is not meant to show why Cisco programs are not working, rather this report is meant to highlight the dangers of reporting successes dependent upon all other parts being equal.

Cisco Networking Academy – Bangladesh

The Cisco Networking Academy is committed to the advancement of women’s education throughout the globe as demonstrated by various initiatives supported by the company. Examples of empowerment through education include: offering tuition assistance to women scholars or encouraging 30% female participation by developing a Gender Tool Kit, a handbook designed to increase the participation of women and
teenage girls in IT careers that instructors can use to meet the unique needs of female students.

Cisco did not have a pre-programmatic report for analysis, but it did have an impact assessment of a project in Bangladesh available for public download. In this report only two indicators were used to measure the success of the program – enrollment and graduation rates of women. Using women’s enrollment and graduation rates as indicators, this assessment then assumes that women who graduate from their program will find a job in the IT/Networking sector. This assumption matches the goals outlined Cisco’s Gender Tool Kit which is to empower women through education by providing them with access to new jobs in IT/Networking. Ultimately, this report links programmatic success to an increase in women who work in IT careers after they graduate. This is inadequate because, similar to the goals of USAID/Guyana, the argument that a woman who graduates with IT skills will be able to implement those skills into a job is dependent upon *ceteris paribus*. By using Malhotra et. al, 2003 *if only* factors, this study exposes why causal relationships are problematic.

*Established Gender Roles*

Established gender roles such as mobility, location, societal norms and socioeconomic factors show how women may not have the chance to graduate and how their ability to utilize their education after graduation may be impaired. As the Bangladesh analysis describes, most women cannot travel after dark because of increased
danger, or may not receive the permission they need to stay on campus after class is over. Women’s ability to spend more time on campus (during the evening or early morning hours) impacts their ability to fully understand the material (IRIS, 2005, p. 8). Transportation hurdles and permission to attend late classes and complete lab assignments are dependent on mobility and socioeconomic status. People in urban areas have greater access to transportation or are in closer proximity to the campus (eliminating the danger of late night travel). Wealthier families/students can afford to hire personal drivers for female students.

Patriarchal societies, socioeconomic factors, and location may limit women’s ability to enroll and complete the course, but even women who do graduate may have difficulty negotiating hurdles when entering the workforce. Some women can never even apply their skills because of gender role restrictions. For example, Bangladesh still has job postings that advertise “only male applicants” (IRIS 2005, p. 6). Measuring female enrollment rates proves that the percentage of women in the classroom has risen, but does not take into account that they may be unable to participate because of male dominance in the class; and measuring female graduation rates does not account for women’s inability to find a job because of their gender.

Investment in Education

Strictly measuring enrollment and graduation rates does not take into account why women initially enroll in a course. In instances where parents pay for their daughters to
participate, it also does not account for the reasons why they want their daughters to enroll. Another Cisco Networking Academy assessment reports (Kelly Executive Partners, 2006) that women’s “career goals,” can be contradictory because most of the women enrolled do not want a “career” in Networking/IT. Therefore the underlying reasons for student enrollment must be explored before it can be inferred that 1) empowerment is part of the process in which ICT education leads to more women working in IT/Networking jobs; and 2) that a woman who graduates from the training will become empowered when she finds a different job working with computers.

Level of Education

While level of education of the parents was not studied in the Cisco Networking Academy analyses, level of education and comparison markers between men and women students were frequently discussed. The skill level for students in the Bangladesh classroom revealed that female students often lacked basic IT skills, which is why the report recommends female students take an “IT Essentials” courses prior to their enrollment in Cisco Certified Networking Associate (CCNA) classes (IRIS, 2005, p. 9). Justification for this preliminary training includes the concept of “leveling the playing field” (IRIS, 2005, p. 9) and taking into account the “unique needs of female students, such as their low technology skills” (Kelly Executive Partners, p. 21). When assessments only measure enrollment or graduation rates they do not take into account the preparedness of women. Women who enroll may drop out if they are not prepared for the content, and women who are not prepared in the class may feel intimidated to
continue their education if there are always behind. Women, who graduate from training with mediocre grades, could also have trouble translating their certificate into a new job for which they are still under-qualified.

**Discussion**

UNDP efforts’ to improve women’s access to education has allowed for empowerment theory to flourish; both private and public organizations are taking the lead in creating projects aimed at women’s empowerment. While USAID/Guyana is making an attempt to assess gender restrictions, they need to stand true to the reason behind the assessment and have the report come prior to program creation rather than validate existing program goals. Goals of economic security have been part of the master-narrative of US development programs since the 1940s, the underlying idea being that foreign-aid will create a domino effect that will lead to the eradication of larger problems like global health and poverty. The assessment for USAID/Guyana suggests that the continuation of such project goals, dependent upon *ceteris paribus*, may be creating a situation in which empowerment programs are set up to fail. As the report indicates gender relations have been an impediment to development goals in the past, so it is plausible that *if only* factors will continue to hinder program goals.

Cisco Networking Academy in Bangladesh has attempted to utilize basic indicators to measure the success of their programs – enrollment and graduation rates of women. But these indicators may not lead to the ultimate measure of empowerment – increased participation of women in the IT industry. *If only* factors will affect the impact
of such indicators as well as the causal relationships they create. Women will graduate if only they have access to safe transportation, permission to attend late night classes and labs, and are not intimidated by their male colleagues. They will find new jobs after graduation if only companies will hire women, or invest in education to obtain a job in Networking/IT instead of increasing their prospects for marriage.

Both of these programs rely heavily on assumptions that female education will act as a catalyst in reducing gender inequality and empowering women on a broader scale, but as cultural conditions have demonstrated, these goals may not be realized.

**Conclusion**

This chapter exposes two problems in current developmental strategy – program creation and measurement. While program creation cannot completely disconnect itself with the larger goals of US international development strategy, the focus on demonstrating an impact on economic stability, health promotion, and democratic reform on ceteris paribus sets programs up to fail before they begin. Measuring the number of women to be directly touched by educational initiatives is important, but it is unfair to assume the success of program goals based on these numbers. Rather than measuring graduation/enrollment numbers of women, perhaps other tools should be implemented that focus on leadership initiatives for women in both the professional and educational settings. There must be an alternative set of indicators that can be used to measure empowerment, and these indicators must explain why they are used and demonstrate how they have been created.
Chapter 4 / Case 2 – ASTRADOMES and the Creation of New Empowermetrics

Over the course of twelve weeks, thirty-six women working as domestic employees in Costa Rica discovered their value and self-worth. Prior to their involvement in ASTRADOMES (the Association for Domestic Employees), they were thirty-six separate souls, living alone with little self-esteem. Today, they stand united as a family. It is Monday, December 14th, 2009 and these women are about to graduate with a certificate in computer training. At face value, a certificate in computer training may not mean much, especially to someone who was raised in a digital age, but for these thirty-six, this course was the chance of a lifetime.

One-on-one interviews, classroom observation, and Internet research help explain why these women enrolled in the courses. Put simply, they wanted to change their lives. In Costa Rica, domestic employees are considered to be property--someone who cooks and cleans. They are also expected to perform menial tasks such as standing in line for their boss at the store, or running their errands. They are part of the “informal sector” of the labor market and, as such, “do not enjoy the most basic societal benefits, such as health insurance, some form of safeguard against unemployment, and the right to a pension in their old age,” (Williamson, 2004

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5 One of these websites is [http://www.bella-tierra.com/domestichelp.html](http://www.bella-tierra.com/domestichelp.html). Note that this site, among others, is in English catering to the influx of Western residents to the country. However, many upper/middle class Costa Rican families also have domestic employees.
At the end of the working day, their bodies hurt and their minds are bored. The women share their feelings of exploitation and also their frustrations. They think working more than 10 hours a day is unfair, but they do not know to whom to talk about it. Because many of these people are undocumented workers, under-educated, and lacking access to legal support, their employers can violate their rights without consequence.

Case 1 shows two examples in which indicators were inadequately used to demonstrate success. First, it demonstrates the limitations of indicators to capture the success of a program’s objectives. Secondly it shows the inability of those indicators to accurately determine long term successes because of social constraints. When evaluators of these studies are unable to use appropriate indicators to demonstrate success, it appears that empowerment initiatives do not work.

However, alternative methods for measuring success have the potential to showcase that empowerment occurs through education. Case 2 proves the way in which education can have a profound impact on empowering women.

After graduation, the women of ASTRADOMES were not only more self-confident, they were also more connected to and respected by the community in which they worked. The metrics used to show ASTRADOMES’s success focus on graduation rates and job placement. These indicators of graduation and employment fail to take into account alternative methods for showcasing programmatic success and rely on ceteris
paribus to prove that a woman who graduates from ASTRADOMES will be able to obtain a new job in the future. The focus on future outcomes obscures our understanding of these women’s short-term and immediate gains. Just coming to class increased these women’s sense of self-worth, decreased their societal isolation, and changed their interactions with their employers and spouses.

Today, the women of ASTRADOMES are more powerful because the classroom afforded them opportunities they felt they were unworthy of. Moreover, the program combated societal isolation, and provided these women with the tools to reinforce their support networks. The women were taught by other women who once shared the same life frustrations, and in the end they graduated which increased their self-confidence, and a newfound comfort level with the computer. The impact of ASTRADOMES on individual and societal empowerment must be viewed from the perspective of immediate successes, not the inferred promises of tomorrow.

A History of ASTRADOMES

ASTRADOMES (Asociación de Trabajadoras Domesticas), is a non-governmental organization that was established in 1991. Part of the culture of ASTRADOMES is the oral history of its conception. It was created by women working as full-time domestic employees, who were seeking a place where they could join together and create a community. The “as” in trabajadoras domesticas signifies that ASTRADOMES is an entirely female-based organization. At first the women only met
on Sundays because that was, and continues to be, the only day that full-time domestic employees have off.

Using this powerful network, the organization expanded into a thriving non-governmental organization. Brochures in the office highlight services offered: a telephone number where family members from their home country can contact the women on the weekends; job location services; temporary housing for women who are unexpectedly dismissed from employment; and legal advice for migrant workers who experience labor violations. In addition to providing access to amenities and representation, the organization also publicizes various workshops designed to educate domestic employees on basic rights (labor, sexual, reproductive health).

After ten years, ASTRADOMES teamed up with International Organization for Migration (IOM) and the International Labor Organization (ILO) to create and distribute surveys to domestic workers to gauge the level of knowledge these women had about their labor rights. Today ASTRADOMES uses their network and leverage to lobby the government for women’s rights. Appealing on a national level, ASTRADOMES is currently working to revoke and amend the existing labor code, which allows domestic help to work up to 12 hours a day (the women in the training tell me their work-load often exceeds 16 hours per day). This lobbying effort aims to equalize the labor rights of

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domestic workers with those in other sectors throughout the country –8 hours/6 days a week or 48 hours per week.\(^7\)

Through these various initiatives to train and educate women working as domestic employees in Costa Rica, the Intituto Nacional de las Mujeres (INAMU) encouraged ASTRADOMES to apply for a grant through the United Nations Development Program. The grant intended to expand ASTRADOMES’ course offerings to include low-cost computer training. After learning about the grant ASTRADOMES applied for, the local Cisco Networking Academy joined as a partner, providing curriculum and ongoing support for instructor training and the development of the courses. With UNDP funds, ASTRADOMES was able to purchase the technology needed to provide the desired courses, which included computers, printers, scanners, a projector, and air conditioning for the room so the computers would not get damaged by the heat\(^8\).

UNDP requires ASTRADOMES to document funding distribution, as well as achievable outcomes. Explaining funding distribution for computers and salaries is easy, but measuring the impact of the program is a more difficult process. Currently, impact is measured solely by graduation rates and job transition, but as Case 1 demonstrates, these measurements limit the ability to document success at all levels because they are dependent upon “if only” factors. Case 2 uses interviews and classroom observation to show how life changes are taking place prior to graduation and are independent of job

\(^7\) http://www.elpregon.org/costarica/76-sociedad/885-aprueban-en-plena-tercera-proyecto-de-ley-de-astradomes

\(^8\) This information was provided to me in interviews with the local area Cisco Representative, UNDP Project Officers assigned to ASTRADOMES, and the current President of ASTRADOMES.
placement. While a computer training certificate opens up the possibility for new employment, sometimes—as Case 1 shows—the context is as important as the content of the course. The data supports that simply participating in the course changed individual and societal perceptions. These indicators are independent of whether or not the women graduate or find a new job.

Methodology

The following is an ethnographic study based on classroom observation and interviews done with the women of ASTRADOMES. The data from this case was collected during a two-week period in December leading up to these women’s graduation. During these two weeks, I observed classes and talked individually with students, professors and project directors. These observations encompassed the curriculum taught by professors, oral presentations given by the students, and conversation with the students during daily coffee breaks. Daily classroom visits allowed me to record and analyze group presentation and various lectures while taking extensive field notes on the daily interactions between the women. The goal of my research was to assess what empowerment trends emerged from the training, so that I could elaborate on the idea of empowermetrics. On the basis of this trend data, I suggest alternative ways of measuring empowerment in the future.

Complementing my qualitative analysis, I also created a set of surveys that built upon the initial interviews conducted during my first visit in August. The surveys were designed to provide both a baseline assessment (done on the first day of training) and an
exit survey (completed on their last day of class).\textsuperscript{9} The sample size of data consisted of four courses with nine women in each course\textsuperscript{10}:

- Basic Course – Mondays and Wednesdays from 1:00pm – 4:00pm (part-time workers)
- Basic Course – Tuesdays and Thursdays from 1:00pm – 4:00pm (part-time workers)
- Advanced Computer Skills – Wednesdays and Fridays from 9am – 12:00pm (part-time workers)
- IT Essentials – Sundays and every other Saturday 9:00am – 5:00pm (Sundays) and 1:00pm – 5:00pm (Saturdays) – (full-time workers)

In considering the results, I noted the difference between part-time and full-time domestic employees. Any woman participating in courses during the weekdays is a part-time employee who is able to negotiate with her boss about how she can arrange her part-time work around her class schedule. A woman working as a full-time employee does not have the luxury of negotiating time off. Full-time workers only have “free time,”\textsuperscript{11} on Sundays and must still ask permission from their employers to leave the house.

The surveys, which were distributed to all four classes, yielded a total of 26 completed surveys (72% of the women currently in training). Of these, seven were from

\textsuperscript{9} Due to IRB restrictions I was unable to complete the baseline surveys but was still able to conduct a revised survey for when I arrived and then used data collected from the surveys to expand my interview questions.

\textsuperscript{10} There was also an instructor training which took place on Saturdays at the University of Costa Rica from 1pm – 9p. Some of these women came into ASTRADOMES on Saturday mornings before class and Sundays.

\textsuperscript{11} This idea of “free time” was expressed by all of the women either in the surveys or in the interviews. In many instances it was described in terms of “little” free time. Importantly, they used this little free time they had to go to class and study.
the M/W Basic Course, eight from the T/Th Basic Course, six from the W/F Advanced Computer Course, and five from the Sat/Sun IT Essentials course.

<table>
<thead>
<tr>
<th>Provisional Trends from Surveys</th>
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<tbody>
<tr>
<td>Categories</td>
</tr>
<tr>
<td>Role of Classmates</td>
</tr>
<tr>
<td>Free Time</td>
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<tr>
<td>Immigration</td>
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<tr>
<td>Desire to Learn</td>
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<tr>
<td>Dislike of Job</td>
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Using the trend analysis from the surveys, I focused the discussion of my interviews around classmate interaction - how participants had learned about the program; why studying computers was so important to them, when they had very little spare time; and why they disliked their jobs. The interviews provided a rich set of contextual data from which common themes of shame, isolation, fear and desire emerged. Thirty women participated in the interviews including seven from the M/W class, six from the T/Th class, five from the W/F class and seven from the Sat/Sun class. In addition, three of the assistants were interviewed (all of whom participated in the first phase of ASTRADOMES), as well as two women who participated in the instructor training at UCR on Saturday evenings. Other recordings, which were listened to and coded for data, included eight classroom recordings from all of the weekday courses as well as two separate interviews done with the instructor of the W/F course and the UNDP Program Director for ASTRADOMES.

12 The names of all of the interviewees have been changed to protect their identity.
Conclusive Trends

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency Recorded</th>
<th>Course Level</th>
<th>Statement Identification</th>
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<tbody>
<tr>
<td>Shame</td>
<td>High</td>
<td>Basic</td>
<td>Individual (I, Me)</td>
</tr>
<tr>
<td>Isolation</td>
<td>Low</td>
<td>Intermediate</td>
<td>Collective (Us, We)</td>
</tr>
<tr>
<td>Fear</td>
<td>Individual (Once)</td>
<td>Advanced Instructor</td>
<td></td>
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<tr>
<td>Instructor</td>
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<tr>
<td>Support</td>
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<td>Desire to:</td>
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<tr>
<td>- learn more</td>
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<td>- help others</td>
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<td>- look for</td>
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<td>information</td>
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A Day in the Life of ASTRADOMES

Miles away from the busy La Calle Principal is the ASTRADOMES headquarters; a small unassuming building in an alley next to the Plaza Crystal. On the corner of the main street, before you turn left to get to the training, there is a panadería that sells fresh pastries, which many professors purchase for their classes to share during coffee breaks. It is easy to get lost on the way to ASTRADOMES; none of the streets are labeled and the only sign to direct you is a crumpled piece of paper taped to a garbage bin.

The doors are permanently locked, and visitors must knock on the door to gain entry. The door is locked not only to protect the women who attend the training, but also to secure the computers. The front door is adorn with a series of stickers that reaffirms the equality of all who come to ASTRADOMES “Nicas y Ticas somos hermanos” – Costaricans and Nicaraguans we are all brothers.
The inside of the building is as simple as the outside. There are three rows of computers with three computers in each row.

Taped to the walls are newspaper clippings from the first phase of the program and informational posters on the laws protecting domestic employees.

The women describe their transformation, from the time they first walked through those doors to the present, as they are talking with me today. The interviews made clear
that, because of these classes and the mentorship that they afforded, the women’s initial feelings of shame and isolation have become feelings of value. Not only did the courses offered by ASTRADOMES open the way to alternative work; they also changed the women’s perceived role in society, and the role that the computer would play in their lives.

Findings

Shame

“Once at my job I cleaned up urine in a bathroom while other women were in the bathroom, watching me, it was humiliating.”

(Adriana\textsuperscript{13} – W/F Intermediate Course)

Many of the women sought out the opportunity of low-cost computer courses because it meant a possibility that they would not have to be domestic employees for the rest of their lives. Part of this motivation stemmed from the shame women described when talking about why they did not like their jobs.

These women enrolled in ASTRADOMES because they believed computers skills would help them “change their lives”. Women from all of the courses talked about “advancing their education”\textsuperscript{14}. Teresa and Sofia from the Basic T/Th class talked about continuing their education by learning English and furthering their computer education. They expressed their desire to eventually find a new job or potentially working for

\textsuperscript{13} All of the names in this report have been fictionally created to protect the identity of the women who participated in the study. No real names or identifiers were collected on the surveys or in the interviews.

\textsuperscript{14} 22 women from all of the levels of training expressed a desire to “learn more”.
themselves (including running an Internet café from their houses, or an on-line store to sell handmade clothing). Their desire to change was related to dissatisfaction with their current jobs.

Their dissatisfaction was also reflected in how they talked about their unhappiness cleaning houses. Describing why they wanted to change jobs, they said: “it is boring,” “it doesn’t pay well,” “there is no security,” “it is hard.” We might expect that the women who applied to ASTRADOMES courses would desire a job change, but we need to differentiate between dissatisfaction and shame. Someone who is dissatisfied with her job dislikes the work she does; someone who is ashamed of what she does dislikes who she is.

The women of ASTRADOMES were not in a position of power and were often isolated from society. Since many are undocumented workers, their shame and isolation was compounded by the fear of being exposed. This fear increased the likelihood that they would not protest when their rights were violated. Eventually this fear led to shame. The women of ASTRADOMES portrayed a sense of shame on two levels—the individual and the social.

Individual shame became evident when the interviewees would discuss feelings of shame for what they did or who they were. Shame was used as the reason for why they wanted a different job, as well as in self descriptors. “I felt shame for being a stranger, an immigrant,” (Alejandra – Basic Course T/Th), or when discussing the desire to change

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15 Various sentiments used for describing to me their job – all women from the Basic Course, various days.
jobs because of the “embarrassment”, one woman noted: “it’s an awful job and I feel ashamed,” (Claudia – Intermediate Course W/F).

When expressing societal shame, the interviewees used more self-deprecating language and hinted that individual shame came from the opinions of their communities. In addition to using demeaning language, the women substituted “we,” “they,” or “us,” for “I.” As a collective entity “domestic employees were not suppose to have these opportunities;” they were constrained in their life goals, or had “limitations.” They were not “part of the working economy,” or were “violated because they were immigrants”\textsuperscript{16}. This societal belief that the women of ASTRADOMES were unworthy of this learning opportunity also explained the “surprise” or “disbelief” they felt that they could “learn so quickly.” The most blatant reference to societal shame was expressed by Yvelis, a woman who participated in the first phase of ASTRADOMES, and is now training to become a future instructor. She stated: “Sometimes, maybe not all the time, our bosses will look at us like we are less important, like we are worthless when you have to do this type of house work. For example, where I work now they look at me like I’m below them.”

Embarrassment for what they do, enforced by employers and other sectors of society, taught these women not to value what they did or who they were. Not only was there an individual and societal sense of shame, but, also isolation and loneliness.

\textsuperscript{16} Ten different women from all levels of training expressed this idea that they were beneath the people that they worked for.
Isolation

“But there is not much to tell. The sad thing is the closure. It’s nice to be able to go outside, to have a life separate from your job.”

(Elena - Saturday Morning, IT Essentials Class)

Every woman interviewed regardless of course level described some sense of loneliness, which came from the extreme isolation she felt both at her job and in her community. When asked how life was different prior to coming to training, the women described “never leaving their house;” concern that when their children left the house they would “remain the same;” that life was “sad and lonely;” that they “had no social life.”17 This attitude was especially prevalent for women who worked full time, living with their employers. They described their lives as one of constant work without friends, or, as one women said, her employers “never talk to me, and I had no one to talk to.”18

For many of these women, the only people they talked to prior to coming to ASTRADOMES were members of their families. Many of those working as full-time employees did not have family in the country, further limiting their social interaction.

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17 Sentiments given by woman ranging from the beginning class on M/W to the IT Essential class on Saturday mornings.
18 Both of these women were full-time employee who took classes on Saturday mornings.
The Symbolism of the Computer

“I would feel inferior to the women who knew how to use the computer. When I would clean at my job I would be very careful not to even touch the computer,”

(Isabel - M/W Basic Course)

As a result of their shame and isolation, many women of ASTRADOMES came to their first day of training with little self confidence. When asked to reflect back to that day of class (or for their first day in the basic class for those in the advanced levels), many women replied: “I did not know anything,”\(^\text{19}\) instead of explaining their level of knowledge with the technology. For example, none of the women said that she did not know anything about computers. Rather, they used language to insinuate that because they did not know about computers they did not know anything, or that they did not feel worthy of learning about computers.

Expressions such as [I had never] “touched a computer before,” or that while working [I] “clean around the computer” suggested that they had been told not to touch a computer, or were threatened with retaliation if they were to break it. In saying they did not know anything, these women suggested that, for them, the computer was a symbol of everything.

This context helps to explain other phrases commonly used when describing the women’s first day of class. They said: “I had fear,” “great fear,” or “worry,” that by

\(^{19}\) This idea of “no sabia nada” was expressed not only by the women in the Basic Class but also by the women in the IT Essentials course, as well as by a woman now working as an assistant for the current Basic Classes.
taking this class it would be obvious to the other women in the class that “I did not know anything.” “At first I kept very quiet in class.” As noted above, these women feared that given their lack of knowledge, they might break the computer. Ninety percent of those interviewed expressed this fear – the fear of learning (or being afraid they would not be capable of learning) and/or the fear of “breaking the computer.”

This fear of learning and concern about breaking an object relates back to the concept of “shame.” For these women, the computer was a symbol of something (more importantly someone) who had repressed them. The computer was part of the community that had contributed to societal shame both at work and in the greater community. Communal fear of breaking a computer prevented many women from even entering an Internet café, because they were afraid of breaking the machines. This fear of breaking the machine generated a fear of learning, as if the act itself was too much for a woman in their position to handle.

*Creating Value*

“We may not know everything but we feel capable of fixing the computer for us that gives us a little more value…. even a domestic employee who doesn’t know anything can have respect because they have trained and have the capacity to demonstrate what they are capable of”

(Pilar – a woman from the first phase now working as an assistant)

The training had a direct impact on feelings of shame and isolation. This slow transformation was evident in the way women described their approach to the class and to learning – [we would learn] “little by little”, “next time we had a little less fear”, “slowly
we had confidence”, “I know more than I think I know”.20 The women began to value themselves as they learned in their classes about women’s rights and Costa Rican labor laws. Many women expressed this knowledge to me, saying they had rights “as people and as employees”, “rights as women”, and personally “I have my rights.” Most importantly, they learned information about labor, immigrant and gender rights at ASTRADOMES—rights they did not know they had before coming to class.

Examining how women described and achieved their goals illustrates how women learned to value themselves. Many of these women seemed to have two sets of goals – a tangible goal and an abstract one. The tangible goals were based on simple metrics: I want to “pass the course,” “get good grades,” or “find a new job.” The abstract goals were personal and confrontational: I want to “look for information,” “become aware,” “become active in society,” and/or “overcome.”

When the women of ASTRADOMES met their goals, their triumphs had an impact on both the individual shame and societal shame they felt before enrolling in class. Getting good grades and passing the class created “self value” and removed some of the “individual shame” the women felt before the course.

20 Expressions of pride, confidence, and capabilities were said by women from all levels of training.
Many women would also transfer their knowledge to others in the community, including employers, spouses, or children. Teaching computer skills to those who once told them not to touch the computer made an impact on societal shame, shifting their inherent place in society.

Rosita, a lady from the Saturday morning course, now helps her boss with her e-mail, and another woman is now able to use her boss’ computer. In one interview, a woman confided that her boss had purchased a used computer for her and her kids to use. The ability to talk with their employers about their skills and also help their bosses with computer troubles represents a paradigm shift in how cleaning ladies are perceived within their homes and perhaps how they are discussed in conversation with their neighbors. One can imagine the employers of these women stating that not only can their maid clean the house and stand in line for them at the store, but she can also repair their computers and help them send e-mails. Language that indicated a shift in societal shame again used the “we” - “we value ourselves more” or [we are] “worthy of love.”

Two women show me their grades on the last day of class. Not only did they pass, they both received A’s on their final exams.
This shift away from societal shame could also be witnessed outside of the workplace. Many women described role reversals with their children or husbands who used to tell them not to touch the computer, but now called on them for help. One woman described the feeling of being able to look for information on the Internet by herself and how nice it was not to have to rely on her husband to navigate the technology. Luisa, a woman from the W/F intermediate level course, explained how the courses helped her become more independent from her husband. As she said: “Before, my husband would always ask where I was going and always needed to know where I went, but now…it’s better. I can go to study or to work without so many questions.” All of these shifts in roles represent a larger shift in power – whereas in every situation each of these women in these programs used to be under the power of others (her employer, her husband, her children) now she can demonstrate her own “value” because of the computer skills she learned in the courses.

Forming a Support Network

Even though, as explained earlier, the difference in part-time/full-time work impacts the days and times that women are able to attend training, the women of ASTRADOMES face the same struggles and needs regardless of their work status. Manuela from the Saturday morning IT Essentials course puts it best: “We are women, we are fighters, and many of us are also heads of our house (single mothers).” The class has helped them reaffirm this core belief, creating a support network of classmates with
whom they can empathize. The women emphasized the importance of maintaining that
network in the interviews.

Because of how the courses were structured, women matriculated through training
as a group rather than as individuals. As a result, the support network could grow as
women advanced to the next level of classes. Women in the advanced training described
how their “friends” from class were their “classmates” from the basic course; that they
“continued together” to the next level of training. This was especially important for
women training to become future instructors because they had been working with the
same women for over a year and a half.

When asked to describe the relationship with their classmates, or to elaborate on
whether they would stay in touch, many women stressed the importance of maintaining
contact because of the “support,” and that “they helped each other.” Evita, who
participates in the M/W Basic Course, described how a woman in her class had another
classmate over for Christmas so that “she would not be alone.” Carmen from the W/F
intermediate class described the elated feeling of going outside “and having someone to
say hello to and have them say hello back.” One woman’s classmates “paid her bus fare”
so that she could afford transportation to attend the training.

Every woman interviewed in the basic courses (both M/W and T/Th) expressed
the “hope” that they would remain in contact. The women from the immediate and
advanced level courses discussed how their relationships grew over time. They were
much more confident about keeping in touch with their classmates after the course was
completed, because they had “decided to remain in contact” after their first course, informing me that they already “exchanged e-mails regularly.”

This experience shows that even during the basic course, women were less isolated, given their regular interaction with each other. Many women continued to engage on the way home as they took the same bus after training. In some cases, their bus rides turned into extended interactions and opportunities to talk with one another. I once witnessed a group waiting for a bus transfer together, laughing, talking, and waving as they called out to me when they saw me pass by in a different bus.

The support network was more important for some of the women than the computer skills. As Lola, a woman in the Saturday morning IT Essentials course, best explained: what she learned most from class was “to have relationships, to have friends, to live, to have a social life.”

Not only did the in-class support network physically diminish the sense of isolation women felt when they started school; the technology they learned to use helped them to fight isolation after they graduated. Prior to this course, these women had never touched a computer. Afterwards, they all had e-mail addresses and the confidence to enter an Internet café and go on-line alone. It is the education and access to these tools that will maintain their support network in the future.

*The Computer as Tool – Shifting Perceptions of the Computer*

“I feel good because before I was ignorant but now I play around on the computer – and learn so many things,” (Maria-Laura, Saturday Morning IT Essentials)
Learning to use the computer as a tool to maintain the support network after the class had ended, and to look for information to prevent an exploitation of rights in the future, were the most important skills learned in class.

All of the women believed they would maintain contact with their friends after graduation. When asked how, the women in the basic course replied “e-mail.” The women from the more advanced courses already were communicating by “e-mail” with their friends from the basic course outside of the classroom.

Along with learning technology to communicate and cultivate relationships with their peers, the women are also able to communicate more frequently with their families. Since most of these women are immigrants and unable to see their families on a regular basis, they now use Skype and e-mail to talk with family, and to do so more often because “it’s free” or “it’s cheaper than the telephone.” Along with opening an e-mail account and teaching them Skype, these courses taught the women about other cost-saving tools on the Internet that could provide them with a less expensive, and easier, way to communicate with their family and friends.

One such example is “Havegalo.com,” which allows people to send SMS to mobile phones in Costa Rica and Nicaragua for free. Given the way the telecommunications structure is set up in most of Latin America, this service is free for both the user and the receiver. By learning these types of Internet-based tools, the
women will be able to continue to maintain the support network they created during class as well as expand their access to family in other countries.

The women in this program not only learned how to use communication tools, they also learned how to ‘communicate.’ For example, in the W/F morning class, they were required to give presentations instead of doing a written test as a final for the course. Splitting into groups of two or three, each of these women had to pick a topic to present and, using Power Point, create a presentation based on the research they found online. The topics picked for the presentations included domestic violence, labor rights, child exploitation, Nicaraguan heritage, and sexual reproduction rights.

The presentations are important on two levels.

The first level is basic computer and research skills. Most offices require the use of Microsoft Office Suite, and all of these women now know how to make Power Point slides and effectively present their information. The professor emphasizes the importance of font choice, explaining that the audience is likely to lose interest if they cannot read their slides. Likewise, the professor notes how distracting it is to have too many bells and whistles. Students also learn research skills. When facts are given in the presentation the professor asks them where they were obtained. By learning how to look for facts, and when to trust their source, these women learn how to evaluate information found on the Internet.

On a more advanced level, they discuss more general, probing topics. Some of the topics and discussion that took place during the presentations included:
• **Violence** “Do you think it’s possible to live in a world without violence?”
  “Violence is learned, so your kids risk learning what their fathers do.” “No one chooses to live in violence.” “Violence is more than just physical, it is also about words and humiliation.”

• **Childcare** “If there is not access to good care for your children, is there a risk of them being exploited?”

• **Reproductive Rights** “Do you think abortion should be legal?”

• **Cultural Heritage** “In Nicaragua we celebrate this holiday wearing this attire and doing this dance” (music is played).

Being able to speak about these important issues, and then use technological tools to present their thoughts to a class, enhances their self-esteem while decreasing their sense of isolation. From the encounter, they can all discern how they have experienced some type of discrimination.

Most importantly, the project and all of the courses offered by ASTRADOMES provided these women with an easy and inexpensive tool to *look for information* and learn about their rights as women and as workers – the Internet. All of the women cited the use of the Internet to “look for information” as an important component of the course, which helped them to more clearly understand their rights. Paula, a participant in the T/Th Basic Course, explained how the women had used the Internet to “defend those rights,” and to learn more about their rights so they were no longer “exploited by their employers.” The women also used the Internet for fun, learning how to download and listen to music, read about other cultures, and keep current with world events.
In addition to looking for information about their rights, current events, and cultural content, these women also used the Internet to “look for a new job.” This term “look for a new job,” included searches for other work in domestic services as well as informational searches to see the jobs for which they are qualified, given their new computer skills. This search for information was important because it showed these women their range of options. Knowing about other available jobs, they could assert their rights without fear of losing the only job they knew about.

Learning how to use the computer as a tool to continue to combat shame and isolation also created a shift in their view of what a computer symbolized. Before attending classes, the computer symbolized fear and segregation. Now the computer represents power and opportunity. Sentiments like “the Internet is everything,” “the computer allows us to find things we want to know,” “now I encourage my kids to learn computers,” and “the Internet is what drives the world,” were expressed by women from all of the courses and levels of training.

Part of this transformation of shame, isolation and symbolism came from the help of professors and assistants who taught the courses, or as the women described it, “professorial support.” What is interesting is that all of the assistants used to be domestic employees, just like the students. The assistants tell me how at one point they felt the same way.

*The role of mentorship*
When asked how they had discovered ASTRADOMES, most of the women said they either read about the program in the newspaper or heard about it on television. Four different articles were written about the program: “Domestic Workers Are Trained in Computers,” “Domestic Workers Specialize in Computer Skills,” “Domestic Workers Graduate with Computer Skills,” and “Leaving Cleaning and Fixing Computers.” They were published in three different newspapers: La Nacion, Diario Extra, and El Nuevo Diario (a Nicaraguan paper, also an indicator of the number of women working as domestic employees in Costa Rica who are Nicaraguan). In addition to the editorial coverage, local news channels also ran a feature on the program and covered the graduation day of the first group of women. As can be seen from the titles, the articles highlighted the benefits of the program, and the television broadcasts provided a window into the lives of eleven women, showing viewers how the program changed their lives.

After the news of the program aired, women from all over the region began contacting ASTRADOMES to see if there would be other opportunities. “They just kept calling,” said one of the program coordinators, “they called UNDP, they called INAMU, they called ASTRADOMES, they called everyone.”

The women were hungry for the opportunity to learn, but the applicants did not realize that they would be learning with teaching assistants who had been featured in the newspaper and television exposé. Three of the women from the first training period currently work as assistants for the courses, and four others from the original eleven are

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21 One of these stories was uploaded to YouTube – the link to this video can be found here.
http://www.youtube.com/watch?v=hNoFpAlUMYw
taking instructor training courses with Cisco Networking Academy at the University of Costa Rica so they can teach the courses offered by ASTRADOMES in the future. Teaching the women of today to train the women of tomorrow not only saves ASTRADOMES money, but it also provides a foundation for mentorship. This circular process of removing shame and isolation, and then teaching the shamed and isolated, creates a greater value for the women as instructors as well as hope and encouragement for the women currently enrolled in the courses.

The instructors see their personal growth and the development in the next generation of learners. “I see myself in them,” “I see the fear they once felt,” said an assistant, as she empathizes with their good days and bad “when they get a bad grade, I cry with them, when they get a good grade I am also happy”. The women being trained feel this support, noting on multiple occasions how the “professional support” increased their computer abilities and sense of value.

Women working as assistants teach the women to value themselves, and the importance of learning and sharing knowledge. The women reinforce these lessons when they discuss their aspirations. One woman told me she wanted to “teach other women [who were not able to come to ASTRADOMES] about their rights.” This desire to “teach other women who did not have the opportunity,” or to “teach others what they had learned,” was expressed on multiple occasions. I believe this stems from their close relationship with the assistants.
Finally, having women from the first group assist subsequent groups has also reinforced the support network achieved in the Basic Courses. All of these women came in ashamed and alone, but through the training found a network of friends. This friendship was reaffirmed when the women form the Basic Course could observe the connections continued with women in the more advanced courses.

Discussion

These themes of isolation and shame were uncovered using a grounded theory method in which the indicators emerged from the data. Ultimately, all of the women who participated in the program expressed how the course impacted their individual sense of shame and isolation. Furthermore, these individual changes (i.e. forming a support network and creating personal value) also impacted these women’s societal roles in the home and with their employers.

Given the extent to which themes of shame and isolation were discussed in the interviews, I believe there is potential to create indicators to show how various educational programs can empower women by reducing their sense of individual shame.
and isolation. Since individual shame and isolation also have a larger impact on the role these women have played both in the home and in their jobs, it is reasonable to conclude that women who are educated have a stronger support network and become more confident. In turn, that confidence can change the way women are viewed by their husbands, children, and employers. It can also have larger societal impacts.\textsuperscript{22} Examples of these indicators would be relevant to other Cisco Networking Academy programs. Rather than focusing only on enrollment or graduation rates of women, these indicators and causal relationships could be replicable as well as context-specific.

\textbf{Initial Empowerment Indicators within Cisco Networking Academy Programs}

<table>
<thead>
<tr>
<th>Individual Empowerment</th>
<th>Potential Indicators</th>
<th>Societal Empowerment</th>
<th>Potential Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Information</td>
<td>Do women have more/less access to a computer? To what degree are women comfortable/know how to operate the computer? How has this changed since the beginning of class?</td>
<td>Role of women in the home</td>
<td>Do women need to ask permission from their spouses to attend class? Has this shifted over time?</td>
</tr>
<tr>
<td>Communication Frequency</td>
<td>How many times a week do women see family and friends? Do friends and family live in the country they currently reside?</td>
<td>Role of Women in Society</td>
<td>Do women need permission from employers to attend classes? Do employers ask them for computer help?</td>
</tr>
<tr>
<td>Access to Mentorship</td>
<td>What level of education have</td>
<td>Role of women in the</td>
<td>What role does the mentor play in</td>
</tr>
</tbody>
</table>

\textsuperscript{22} A long-term study looking at the societal effects of these programs is suggested.
Conclusion

Combining classroom observation, coffee break chats, individual interviews, survey analysis, and published materials about the world of ASTRADOMES, I unearthed examples of how women became empowered through their education and how that empowerment was expressed. Over the course of twelve weeks, all of these women learned their capabilities, which were more than they had initially expected. The lessons they learned, reinforced by a new support network of women in similar positions, created self confidence. In class, they were able to look for information using a technology that once frightened them, and to learn about their rights both as women and as domestic employees. These lessons removed the stigma of what a computer meant to these women, and restructured the symbolism of the machine. The classes, through the mentorship of the professors, instilled a desire in these women to teach other women the skills and information they learned during these classes.
It can be inferred that after graduation, the women of ASTRADOMES could find a better job, which would empower them in an economic sense. For many of these women, finding a new job was an ultimate goal, but one contingent upon other societal factors. It also can be inferred that woman may find a new job using the computer skills from training. But there is another measure of success. It can be demonstrated that these women, prior to attending the training, were individually and socially ashamed and isolated. My research shows that after taking these courses the women of ASTRADOMES had a new social network of other domestic employees; could maintain that network with the tools provided to them; and look for information on their rights as women and as workers. In addition to learning that knowledge, they were able to teach other women outside of the program what they had learned. Only measuring how many women graduated from the program and continued on to new jobs completely misses many of these key changes.

Chapter 5 – Analysis & Discussion

Organizations working to fund empowerment strategies want to support the idea that funding a woman’s education today will solve societal problems of tomorrow. Ultimately, the metrics used to prove that empowerment diminishes greater societal ills is rooted in a dated view of why the United States invests in foreign-aid policy. The master narrative that a prosperous nation is a peaceful one is ideologically inspiring, but perhaps overlooks other underlying reasons for why organizations should fund empowerment
initiatives. Funding for empowerment program can have a powerful impact on a woman’s role in society, her sense of self-worth, and expand her technical capabilities, but none of those outcomes can be measured if they continue to focus on the larger goals in US international development strategy.

Best practices for how to approach international development have continuously changed. With every change comes a modification to improve on past successes or fix problems unaddressed. The same meticulous construction of indicators must match policy changes with the same fervor. And yet, indicators have remained relatively the same since the Marshall Plan was unveiled. This is interesting because without effective measurements, one can never prove the programs work, and replication of measured success is limited to *ceteris paribus*.

When government agencies, corporate entities or non-governmental organizations create empowerment programs under the assumptions that women’s education will combat global poverty, indicators adhere to those desires and then rely on proxy measures (Malhotra et. al, 2002, p. 29). Proxy measures rely on *ceteris paribus*, which cultural conditions have the power to change. This is a problem for empowerment theory because limited indicators linked to long term strategies could create an impression that empowerment is not effective. In order to show how empowerment programs shift individual and societal impressions of women by following and tracking the immediate results from empowerment programs, I advocate for the creation of new *empowermetrics*. 
Chapters 1 and 2 demonstrate that even though the theory for how to approach development is in flux, the master-narrative for that the US uses to justify developmental aid is an elaboration the post WWII model. While the so-called threat to American life has shifted from communism to terrorism, the mantra continues to emphasize that a stable and secure economy will promote democracy. This history of development strategy helps explain the origins of empowerment theory and justifies the continued use of economic indicators. However, this perspective may not provide the kind of solid evidence that agencies and corporations need to maintain investment in empowerment programs.

Case 1 depicts how indicators are used to prove program goals and objectives often created in isolation. Lofty goals of health promotion, economic security, and democracy have the same damaging effect on empowerment theory that previous participatory approaches has. Without determining how to achieve the success of such programmatic goals, the success of women’s empowerment will depend on cultural conditions beyond the control of program implementation. Case 1 shows that limiting indicators, such as enrollment or graduation rates, depend on *ceteris paribus* to prove the success of program initiatives. Outcomes built on the need for all other things to remain constant create a straw-man argument based on assumptions rather than evidence.

Most scholars affiliated with the World Bank continue to look at empowerment as a process (Malhotra et. al, 2002) and debate the strengths and weaknesses of qualitative or quantitative metrics (Rao & Woolcock, 2005; Uphoff, 2005). Various scholars in the
health field have shown that measuring empowerment presents complicated situations that include disagreement with regards to the feasibility of creating universal metrics (Zimmerman, 1995). True, it is risky to assume that empowerment means the same thing for women everywhere, and yet it seems that many women, at a fundamental level, desire the same things: a network of friends, food for their children, and/or acceptance by their community.

The level of empowerment a woman achieves could never be universal because a woman’s goals for empowerment vary, but the ability to track empowerment outside of an economic framework is feasible. The data analysis in Chapter 2 provides a better understanding of how empowerment happens at an individual level, and provides insight into how empowerment could be monitored. Alternative indicators of shame and isolation, instead of economics, provide a justified approached to metrics and the potential for replication.

The preliminary findings in Case 2 prove that participation (not graduation) from the program made these women more confident, less isolated, and increased their societal value within their communities. Indicators of shame and isolation are still preliminary and more testing would need to be done before a substantive theory of new indictors could be universally implemented. Not only was the sample size is limited to the women who participated in the program; the sample itself was not random. Also, because of time constraints, a preliminary assessment was not feasible. Therefore, this study suggests that these themes of shame and isolation be tested in multiple countries to increase the
validity of these findings. Furthermore, the findings also suggest that the individual shift in shame and isolation might have a broader impact on societal and familial perceptions on the role of women. Rigorous testing could provide a more plausible and provable causal relationship between initial indicators of individual empowerment and demonstrated changes in societal empowerment.

The findings in Case 2 is substantive evidence that isolation can lead to deconstructive ideas of self within a society and that while women may not directly use their education to find a different job, what they learn from class provides them with greater confidence and a support network for future hurdles. This has a direct impact on the relationships between these women and their employers, their husbands, and their children. While an economic indicator may never appear in these situations (i.e. a change in job or more control over household finances) the women of ASTRADOMES have become empowered and that empowerment is independent from cultural conditions.

Ultimately, these findings underscore that classroom interaction and process of education are as important as the content of the coursework itself, and the educational experience may not provide tools directly useable in the economic marketplace these skills nevertheless represent value. Empowermetrics must stop looking at educational initiatives as the means to an end and rather step back to see it as a means to itself.
Chapter 6 - Conclusion

Manuela may never find a different job after graduation, but she is still empowered. The removal of isolation and fear that came from her participation in ASTRADOMES is the outcome that needs to be measured today, not the potential to use her computer skills in the future. Cultural conditions (Chapter 2) affect her ability to change jobs. These cultural conditions are outside of Manuela’s control, but her decision to enroll in IT Essentials was entirely up to her. Even if Manuela continues to work as a domestic employee, she is now free from the confines of fear and isolation. Prior to attending computer classes, Manuela was alone and scared. She worked full-time for employers who let her live in their home but did not converse with her, and rarely communicated with her family because of the cost of long-distance phone calls. She may continue to work for those same employers, but her relationship with them has changed, and her ability to talk with her family has increased.

Over the course of 12 weeks, Manuela has become less isolated, more confident, and created a support network of other women working as domestic employees. She has changed the role the computer plays in her life, learning how the Internet can make her more connected. She has forged friendships with other women working as domestic employees and redefined her own goals and objectives for running her own business one
day. If Manuela is unable to find a new job, the program did not fail, but the *empowermetrics* used to assess programmatic achievements have.

In order to assess the true development of Manuela’s empowerment and the impact it has on societal empowerment, *empowermetrics* must take a step back from the program goals in order to accurately measure how educational programs empower the women who participate. Indicators like: access to information, support networks, ability to establish mentorships and how often people communicate with family and friends, are equally important as are control over economic resources or the ability to change jobs. Incorporating new indicators into preliminary and post assessments would more accurately gauge the efficacy of empowerment initiatives. Exploring these alternative indicators in other empowerment programs could provide a justified alternative for how to approach *empowermetrics* in the future.

If new *empowermetrics* are not implemented soon, success stories like Manuela’s will continue to be marked as failures. To prove empowerment theory is successful, legitimate and replicable indicators must be incorporated in both the program assessment period and the program planning period. Unless the theory behind why we invest in women’s education changes along with *empowermetrics*, funding needed to continue educational initiatives for women may no longer be available. My findings show how educational initiatives can have a profound impact on the individual and societal empowerment of women. Now it is time to showcase Manuela’s success.
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