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Opening the black box: women's empowerment and innovative secondary education in Honduras

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This article aims to clarify the relationship between education and women's empowerment. Drawing from qualitative data collected in a study of four Garifuna villages on the north coast of Honduras, it argues that education can trigger the empowerment process if it expands women's knowledge and understanding, self-confidence and awareness of gender equity. However, not all education programs will do this. The program studied, *Sistema de Aprendizaje Tutorial*, has several unique features that appear to foster the empowerment process and are not traditionally present in Latin American secondary schools. We must carefully consider the content and pedagogy of educational programs that attempt to promote women's empowerment, rather than assuming that education and empowerment automatically go hand-in-hand.

Keywords: gender; secondary education; Honduras; Garifuna; empowerment; development

Introduction

Women's empowerment is on the international development agenda. Education is often touted as a way to promote women's empowerment. Previous research suggests that women's education is strongly associated with desirable social outcomes, or to borrow a phrase from Robinson-Pant, 'women's education is a 'good thing'' (2004, 474). However, linking education to women's empowerment has rarely been informed by empirical analyses (Malhotra and Mather 1997), particularly qualitative studies. The tendency in international development discourse has been to equate years of schooling or literacy with empowerment, as if the two are unquestionably linked. For example, the ratio of literate women to men 15- to 24-years-old and the ratio of girls to boys in primary, secondary and tertiary education are two indicators of the Millennium Development Goal to 'promote gender equality and empower women'. Missing from the discourse on education and women's empowerment is a discussion of the process by which education can transform dominant values and gender inequality (Robinson-Pant 2004).

There is little debate that women's empowerment is a critical goal of international development initiatives. What role, if any, can education play in advancing this goal? This article hopes to shed light on this question by first identifying mechanisms through which education might foster empowerment and second by describing the curricular features necessary for education to be genuinely 'empowering'. In the following pages I present findings from a qualitative study of the ways in which an innovative secondary education program, *Sistema de Aprendizaje Tutorial* (SAT),¹ promotes women's empowerment. Interviews and observation were conducted in Garifuna communities on the north coast of Honduras between January and June 2004. The findings from this study suggest that education can act as a catalyst of empowerment if it increases women's knowledge and understanding, self-confidence, and awareness of gender equity. I then

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describe several components of the SAT curriculum and pedagogy that might help explain these findings.

Development, empowerment and education

Development is a process whereby the latent capabilities of individuals, cultures and societies are drawn out. According to the United Nations 2005 Human Development Report, development is 'about building human capabilities – the range of things that people can do, and what they can be' (UNDP 2005, 18). As one of the creators of the SAT program explained, development is not something that one does for others, rather it is a process in which 'the rich and the poor, the illiterate and the educated are all to participate in the building of a new civilization that ensures the material and spiritual prosperity of the entire human race' (Arbab 2000, 154).

There have been several attempts by development organisations such as the United Nations Development Program to break the development process down into more tangible, concrete goals which often include gender equity and women's empowerment. The most recent iteration of this is the Millennium Declaration, a resolution adopted by the General Assembly of the United Nations in 2000. In it, eight Millennium Development Goals (MDGs) are declared, one of which is to 'promote gender equity and empower women'.

Many other development initiatives and organisations claim 'women's empowerment' as one of their aims (Medel-Anonuevo and Bochynek 1995; Oxaal and Baden 1997; Parpart, Rai and Staudt 2002), but there is no one agreed upon definition of this concept. Scholars continue to 'question', 'rethink', 'retheorise' and 'reflect' on what empowerment means (Kabeer 1999; Kesby 2005; Parpart et al. 2002; Rowlands 1997). Some have argued that the term has been over-used and misused in recent decades, becoming a synonym for participation (Stacki and Monkman 2003). Despite this ongoing discussion, there is some agreement about the key components of empowerment. In their review of the theoretical and empirical literature on women's empowerment, *Measuring women's empowerment as a variable in international development*, Malhotra, Schuler and Boender (2002) found greater consensus on how writers conceptualise empowerment than they expected. They found that a few overlapping terms were often included in defining empowerment: options, choice, control and power (Malhotra et al. 2002, 5). They also found frequent reference to the ability to 'affect one's own well-being' and 'make strategic life choices'. The theoretical literature also points to empowerment as a process of change rather than a static condition (Jejeebhoy 2000; Kabeer 1999; Malhotra et al. 2002).

In this article, I adopt Kabeer's (1999) compelling definition of empowerment where 'women's empowerment is a process by which those who have been denied the ability to make strategic life choices acquire such an ability' and 'the essence of empowerment is to enhance women's capacity for self-determination' (1999, pp. 435, 462). Defined as such, empowerment is an integral part of the development process. The ability to make strategic life choices and capacity for self-determination are prerequisites in the process of drawing out individuals' latent capabilities.

In discussing empowerment, Kabeer argues that three inter-related dimensions are critical: resources (access and future claims on material, human and social resources), agency (the ability to define one's goals and act upon them) and achievements (well-being outcomes). In this framework, education is considered a potential resource or catalyst of empowerment. However, Kabeer explains that *access to* resources such as education is less valuable as a measure of empowerment than the potential that resource has to enhance women's capacity for self-determination. Thus, not all forms of education will necessarily serve as 'resources' for empowerment.

The tendency of some previous empirical studies on women's empowerment has been to investigate or assume a relationship between education and empowerment without examining the

content and context of the educational intervention. This is problematic because educational systems reflect prevailing social attitudes and prejudices and can serve to reproduce rather than challenge the social status quo (Stromquist 1995b). Schools and other educational programs do this through both the explicit and the 'hidden' curriculum.² Thus to assume that education automatically leads to empowerment is an 'analytical leap of faith' (Malhotra and Mather 1997, 604). As Stacki and Monkman (2003) describe, educational initiatives are often weak in addressing change at societal levels.

Some prior research has taken this 'analytical leap', treating education as a proxy variable for women's empowerment (see Bradley and Khor 1993; Desai and Alva 1998). Kishor (2000) investigates the relationship between women's empowerment and contraceptive use. In this case, women's education along with their role in household decision-making, freedom of movement, and participation in waged work are used as predictors of whether or not a woman will choose to use contraception. Education appears in this study, but we learn relatively little about the skills and dispositions that education imparts. In short, research that treats education as a proxy variable for women's empowerment often neglects the qualitative variations in schooling experiences and the content of what is learned.

Another genre of research treats empowerment as an outcome of a particular intervention (e.g., microcredit, literacy classes). When the intervention involves education, once again we rarely see an examination of the content of the educational intervention, or the process by which it triggers changes in women's lives. Education is treated as a 'black box'. For example, Adato and Mindek (2000) conducted a mixed-methods evaluation (focusing on women's empowerment) of Mexico's multifaceted federal welfare program, PROGRESA, which included an adult education component. They conclude that PROGRESA empowers women in that it increases their self-confidence and their awareness and control over their movements and household resources (Adato and Mindek 2000). However, this study does not discuss PROGRESA's educational component in any detail nor does it hypothesise its contribution to fostering women's empowerment relative to the other programmatic components of PROGRESA.

This paper intends to build on past research by opening the 'black box' of education. Prior research suggests that education plays an important role in the empowerment process, but we know little about how or why this is the case. This study aims to clarify the relationship between education and women's empowerment by first describing educational processes that are necessary for the development of women's self-determination. I draw from the theoretical work of Stromquist (2002), who argues that it is problematic to assume that the experience and knowledge schooling imparts are automatically empowering. Rather, to achieve empowerment through education, several concepts must be introduced to students. These include a curriculum that challenges current sexual stereotypes and provides students with alternative visions of society unburdened with gender inequality. Furthermore, I concur with Stacki and Monkman that 'to effect social and cultural change, a program must look beyond transmission of knowledge to individuals and incorporate social action that challenges social and cultural norms and transforms institutions' social relations' (2003, 182). I highlight several features of the SAT program that are potentially associated with women's empowerment. The paper concludes by discussing the implications of this research for our understanding of the relationship between empowerment, education and development.

Research context

The SAT program

The program this research describes, SAT, has several unique features that distinguish it from traditional secondary schools (Grades 7–12) in Honduras. It is interdisciplinary, with the curriculum

organised into five ‘capabilities’ rather than traditional academic disciplines. These include technology, mathematics, science, language and communication, and community service. The curriculum is presented in 70 textbooks which students get personal copies of.³ The tutor is trained to rarely lecture, but rather to guide students through the academic material in the textbooks by facilitating dialogue and debate among students, who normally sit in a circle or work in small groups. In addition to their classroom work, students engage in a variety of practical learning projects that attempt to build a bridge between theory and practice.⁴ The general theme that links together the curriculum is how knowledge can be applied to improve the lives of students and their communities. After finishing all of the SAT textbooks and practical activities, students receive the equivalent of a Honduran secondary school diploma. The program is coeducational and the target population is secondary school-aged youth (however, adults are also allowed to enroll).

Gender is mainstreamed into the curriculum. It is not treated as a separate, but integrated into lessons on math, science, language and technology. For example, a lesson on the digestive system concludes with the following questions for reflection and class discussion:

Our digestive system is in charge of taking in food and converting it to a form that can be absorbed by the cells of our body. This is an entirely physical process over which we have little control once we have swallowed the food. In the world of thought, our mind does something similar to digestion. It receives ideas and works with them. Some it keeps and makes its own. Others it rejects and tries to forget. Think of one of your convictions, for example, your belief in the equality of men and women. Do you remember when you first encountered this idea? Were you convinced of its truth immediately? Can you describe what you thought and did until it became part of your systems of beliefs?

Other lessons have similar content, prompting students to discuss their beliefs about gender equity and challenge gender stereotypes. Two of these are included in Appendix 1.

The SAT program was designed by the *Fundación para la Aplicación y Enseñanza de las Ciencias*, a Colombian nongovernmental organisation (NGO), in the early 1980s. The curriculum was designed by staff at FUNDAEC through a process of action research, a process that continues today as textbooks are periodically revised. SAT is now being implemented in several Central American countries, including Guatemala, Costa Rica and Honduras. Colombia has the largest SAT program and Honduras the second largest. SAT began in Honduras in 1996 in one department (Gracias a Dios) as a pilot project and has since expanded to over 30 communities in six departments. At present the program is jointly sponsored and funded by a Honduran non-governmental organisation (NGO) called *Asociación Bayán* and the Honduran Ministry of Education (which pays the majority of operating costs).⁵ It is slated to expand nationally in Honduras over the next decade.

Gender and Garifuna villages on the north coast of Honduras

The Garifuna in Honduras are an ethnic group that trace their origins to the Caribbean island of St Vincent, where intermarriage between African slaves and Carib Indians produced a ‘Black Carib’ culture of Garifuna speakers⁶ (Herlihy 1997; Sunshine 1996). There are approximately 50 Garifuna settlements along the Caribbean coast (estimates vary between 51 and 54) (Herlihy 1997). The vast majority of these (roughly 44 villages) are in Honduras (Herlihy 1997; Yuscaran 1991). The 2001 Honduran Census estimates that there are 46,448 Garifuna in Honduras, corresponding with approximately 1% of the population. Other estimates are much higher, and range between 200,000 and 300,000 (Herlihy 1997).

In a previous study on gender relations in Garifuna villages, I found that women and men alike described a rigid gender division of labor in Garifuna communities, with women working more hours per day than men (Murphy-Graham 2005). As one woman, Alejandra, explained, ‘Men don’t like to work. Women work more’ (Murphy-Graham 2005, 44). One of the reasons why women explained that they work more than men is because of their responsibilities in agri-

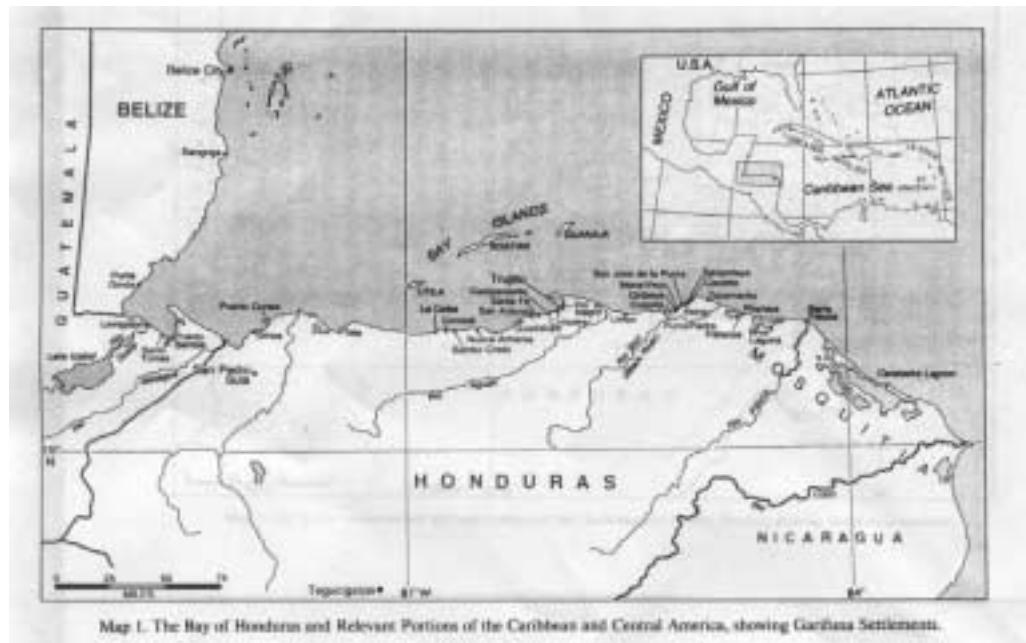


Figure 1. Map of Honduras and Garifuna communities (Gonzales 1988).

culture. Men help clearing the fields for planting, but after that their role is minimal. Women plant, tend, and harvest the crops. They then turn the crops into a finished product. On top of this they are responsible for cooking, cleaning, and child-rearing. Another participant, Sonia, explained that 'Women do almost everything in the home. All men do is work fishing. She is the one who washes, cleans, takes the children to the doctor, goes to meetings ... Men do maybe one quarter of what women do' (Murphy-Graham 2005, 41).

Women's main source of cash income comes from their work in subsistence agriculture. Typically they grow yucca, plantains, corn and several tropical root vegetables. The crop they grow the most of is yucca, which they then process into a flatbread called *cassave*. Women often work collectively with their neighbors or relatives in making cassave, as it is a laborious task. The yucca must be peeled, pressed, grated, dried and then finally cooked on a large wood stove, a process that takes at least two days. They will eat part of the cassave they produce and sell the rest. Garifuna communities in peri-urban areas are the main buyers of this product. While women do earn some income from cassave, they largely depend on the financial assistance of their spouse to meet the needs of their household.

Methodology

This paper draws on data collected in a qualitative study in four Garifuna villages on the North Coast of Honduras, three that had the SAT program for five years or more, and one comparison village that had SAT for three months. In the SAT villages, 12 women were randomly selected from the original student roster that had participated in the program for between two and six years. In the comparison village, the SAT program was implemented in early 1996; however, because the tutor was not reliable the program was discontinued there after only three months. From this now defunct SAT group six women were randomly selected from an original roster of students. Women selected from this site served as an appropriate comparison group because they shared

similar characteristics as those who participated in the program (including prior education, socio-economic status and ethnicity) and they *elected to participate in the SAT program*, although due to chance circumstances they were ultimately unable to do so. This feature of my sampling strategy helps address the important issue of selection bias.

Data were collected between February and June 2004. Three rounds of interviews were conducted. The first used a structured protocol, developed in an earlier pilot study, which was designed to allow a direct comparison between women in SAT and the comparison group. The second interview that I conducted was semi-structured, consisting of open-ended questions. The first two interviews helped clarify the central themes of the study, to develop preliminary hypothesis, and to identify issues to clarify further in a third and final round of interviews. The third interview asked both closed and open-ended questions that followed-up on various themes raised in the first two rounds of interviews.

Supplementing these interviews I also conducted approximately 200 total hours of observation in the four villages. I shadowed women in their daily activities, helped with chores, had informal conversations with them, and spent time observing their household environment. I used these observations to triangulate my data sources to see if data from the interviews matched women's accounts of their daily activities and those of their partners.

One of the limitations of this study is that I do not speak Garifuna, the native language of study participants. All participants speak Spanish as their second language, however they use Garifuna for almost all conversations. Because of this, I was unable to understand conversations between women and their spouses and children. This limited the range of questions that could guide my observations to *what do they do* as opposed to what do they say or how do they interact.

Interviews were conducted in Spanish, tape recorded and then transcribed by a Honduran university student. Using the research questions and preliminary analysis as a basis, I developed an initial coding scheme, and then coded the interviews using the qualitative data analysis software AtlasTi. After an initial coding I created case studies for each participant in the study, and began to identify cross-cutting themes. In order to verify these themes I returned to the coded transcripts to gather evidence in support of and in contradiction to the initial arguments. I consulted with other researchers who read a sample of interview transcripts and case studies to help address issues of interpretive validity and researcher bias.

Findings

The data reveal important differences between the comparison and SAT groups. While the goal of this article is not to measure the extent to which women become empowered through SAT, it is necessary to illustrate that there are differences between these two groups in terms of their capacity for self-determination and their ability to make strategic life choices before advancing a hypothesis about *why* education might be responsible for these differences. Therefore, I first describe key differences between these two groups with regards to their empowerment (defined as their capacity for self-determination and abilities to make strategic life choices).⁷ I then move on to hypothesise that these differences exist because women's knowledge and understanding, self-confidence and awareness of gender equity were enhanced through their participation in the SAT program.

Capacity for self-determination

Reminiscent of Kabeer's (1999) theory of empowerment as the enhancement of women's capacity for self-determination, women in the SAT group frequently used the phrase, '*para seguir adelante*' which means to get ahead or move forward. They explained that SAT has helped them get ahead

in life, which they desire for themselves and their families. Several SAT graduates have taken concrete steps towards this end. Two former students are currently enrolled in courses of higher education outside of their village. Four have started small, income-generating enterprises. Two women left their abusive husbands. One woman plans to enroll in distance education courses and another is starting a bee-keeping project. Women in the comparison did not mention any similar initiatives or life changes.

In addition to the achievements of these women, there also was a marked difference in the ways in which those in SAT and those in the comparison group spoke about their future plans. Women in the comparison group do not have concrete plans for the future, whereas most of the SAT women do. This might in part be due to the fact that women in the comparison group have fewer options. For example, when I asked one woman from the comparison group, Esmeralda,⁸ if she had any future plans she replied, 'Yeah, I have many, many plans'. I asked her what these plans were, and she replied, 'Many things'. I probed further, asking, 'for example, a year from now, what would you like to be doing?' 'Oh, own a business, a hotel, something like that'. These plans are very ambitious, considering that she does not have any access to a steady income, and she depends on the earnings of her partner. She seems to have a vague idea that she would like to be doing something different, but lacks a concrete plan of how to move forward.

Like Esmeralda, most of the women in the comparison group responded to my question about their future plans by saying that their plan was to improve their lives. They also discussed giving their children a better future. For example, Dulcinea responded to my question of whether or not she had a plan by saying, 'yes, I think that I am going to improve this life that I have'. Carolina's response was similar, 'Well, my plan is to improve my life, more than I am right now'. Angela replied that she wanted to 'have a nice house, with nice furniture, and that my children move ahead, continue studying'. None of these three women had a concrete plan of how to carry out these visions. It is possible that they have not thought about specific steps that they would need to take to fulfill their plans because they lack the opportunities to do so. What choices do they have? Their lack of education, access to income, and geographic isolation place serious limitations on their future prospects.

In contrast, the women who have participated in SAT have smaller, more tangible goals. Having completed either Grade 9 or 12 opens up new doors for them. For example, Renata had given birth to her second child, a baby girl, just a few months prior to our interview. When I asked her about her future plans, she explained that, 'My plan right now is to not have any more children so that she [her infant] can grow older and I can continue my studies'. Later in our interview she explained how she was planning to visit the health clinic for birth control once her menstrual cycle returned.

Teodora, another SAT student, is starting an apicultural (bee keeping) project with her cousin. Her only future plan was to begin this project in June 2004. Juanita also had plans for June 2004. 'I am going to keep studying at the university in Tocoa,⁹ starting in June. I would like to study math and social studies. Then after I want to work in the school as a teacher wherever they offer me work'. Initia, one of the SAT graduates who is currently enrolled in a nursing program, plans to return to her community because she has heard they are opening up a new health clinic. Other graduates, including Alejandra, Teodora, Irina, Napoleana and Renata mentioned that they plan to continue their studies.¹⁰

The differences between those in SAT and those in the comparison group in terms of their actions and plans for the future suggest that women in SAT have more options available to them, and also that they may have increased agency (the ability to define one's goals and act upon them). Individuals in both groups have a desire to improve their lives. However, it appears those in SAT are able to more clearly define their self-interest and make choices to improve their lives. Why do women have an enhanced capacity for self-determination? The data suggests that this is

the case because women in the SAT group have increased knowledge and understanding, self-confidence and awareness of gender equity. Advances in these three areas are difficult to tease apart and seem to positively reinforce one another. While difficult to disentangle, the combination of increased knowledge and understanding, self-confidence and gender awareness seem to enable women to take charge of their lives and work towards self-improvement. The connection between these three areas echoes Stacki and Monkman's previous findings that the empowerment process is not static. Understanding empowerment requires analysis of the dynamic processes of interaction that occur in women's lives (2003, 173).

Knowledge and understanding

SAT seems to have equipped women with both specific knowledge and critical understanding. By critical understanding I mean that some women described a new way of viewing the world, a more critical way of thinking. This is called 'cognitive empowerment' by Stromquist (1993). Stacki and Monkman explain that gaining awareness, knowledge and skills are important early steps in the empowerment process (2002, 182). Below I first describe the specific skills women mentioned and then move on to their development of critical understanding.

Knowledge

Women described specific, tangible skills and knowledge they gained through their studies. For example, one woman explained how her vocabulary increased:

Sometimes when I was on the bus people would say some words, but these words I barely understood ... but in SAT there it said it in our book ... when I started in SAT I said 'Ah! That is what those people were saying' ... I didn't know this word. For example, 'theory'. They were talking about theory and I said, 'What is theory, what is this?' I didn't know anything because I hadn't studied, but now yeah, I know.

Since the textbooks were in Spanish,¹¹ while the mother tongue of study participants is Garifuna, it is not surprising that one of the frequently mentioned ways in which the program helped women was by improving their oral and written Spanish. Fluency in Spanish is an important skill for employability and for those who plan to continue in higher education.

Women also commonly described agricultural skills they gained through SAT. This is significant given the role that agriculture plays in individual and community life. The majority of women in these four villages grow yucca and other root vegetables. As part of the SAT curriculum, women experimented with different planting techniques. They planted yucca seedlings in a variety of directions – vertical, horizontal, diagonal, etc. They then observed which of these planting techniques seemed to work the best.

Irina described how she learned how to plant her yucca seedlings in beds in a line. She explained that before SAT she planted yucca haphazardly. After our interview Irina proudly showed me her straight yucca plants. Another woman, Teodora, made a similar comment. 'I plant a little different from the traditional way,' she explained. 'I still plant traditionally, but I also use the techniques that I learned in SAT'. She claimed that she now has a higher yield because of these new techniques.

Another common skill that women mentioned they learned in SAT was chicken-raising. The SAT textbooks describe production systems, and the practical activity that goes along with this theoretical material is to raise chicken. SAT students are required to build a chicken coop, acquire young chicks, immunise, feed, and complete all other tasks necessary for raising chickens. At the end, they write a report documenting what they did and learned. For most students, this was the first time they had raised chicken in a systematic way. It is somewhat common for

households to have one or perhaps two chickens, but medium and large-scale production attempts are rare. This experience stayed fresh in the minds of SAT graduates, even several years after the project was completed.

Critical understanding: seeing the world differently

Along with very specific skills and knowledge such as chicken-raising, women and program staff explained that their participation in SAT caused them to see their context through a new lens. For example, one SAT student, Inita, described how SAT had given her a new level of awareness about the world around her. Her 'mind is different'.

The SAT program has helped me with everything, you know, because it has opened my mind. Because before I didn't think about anything. I looked at the world as if, [it were] nothing. But now after SAT my mind is different.

Sonia made a similar comment. She explained that as a result of SAT she is aware of things for the first time. Her comment also implies an expanded awareness or level of consciousness. Sonia said that, 'My mind is not closed'. These remarks of Sonia and Inita might reflect the emphasis of SAT on the development of critical thinking skills and understanding rather than rote learning. SAT did not simply require them to memorise information but encouraged them to investigate their own context. They now see their environment through a different lens.

One example of how women apply this critical understanding is in their identification and proposal of solutions to community problems. One of the program coordinators, Alejandro, explained that when the program began women were unable to critique their context:

I remember when we started out with SAT. We asked the students what problems they saw or identified in their communities. Honestly, we didn't get answers, or there wasn't the possibility of problems. It was all, 'everything was fine', there weren't any problems in the community in the student's eyes. After a period of working, of studying in SAT, after having done some community service activities ... it was then that people could see things, you know? ... Before it wasn't so easy to see them. So even though they still don't take decisive actions in an organised way to confront them, an important first step is to identify them.

I asked women in both the SAT and comparison group to identify and propose solutions to problems in their communities. All of the women who had studied in SAT were able to do so, whereas only two women in the comparison group were able to. Women commonly identified the following problems:

- Lack of men's involvement, male abandonment and male domination.
- Alcohol abuse by men.
- Lack of jobs, and the opportunity to learn a trade.
- Community disintegration, lack of unity, and lack of educational opportunities.
- Lack of a stable market to sell their products.
- Threats to their land rights.

Some of the ideas that women had to solve community problems included:

- Counseling and talking with men about their attitudes and alcohol use.
- Having institutions that provide job opportunities or loans in exchange for land use.
- Studying so that one can get a job in the future.
- Raising the consciousness of youth and educating them so that they can start a healthy family.
- Encouraging men to join the church so they won't drink (several churches discourage or prohibit alcohol consumption).

- Limiting the amount of alcohol a man can buy, not selling alcohol to those already intoxicated.

The inability of women in the comparison group to identify and propose solutions to community problems suggests that SAT might enable women to think in new ways and to see their community through a different lens. This ability may be clearly linked to their desire and actions towards self and/or community improvement. If an individual does not see anything lacking in their community or in their own lives, there is little likelihood that they will work for betterment. SAT seems to foster the necessary thinking skills and equip women with knowledge that helps them identify areas that need improvement. This is a critical component of self-determination.

In short, SAT may provide an opportunity for women to learn new things and develop critical understanding. This is an important component in enabling them work towards improving their lives. Increased knowledge does not act independently, however. It is closely linked to a new sense of self-worth or self-confidence among women who participated in the program. They feel proud that they have studied, and confident of their cognitive abilities. Knowledge and critical understanding are key components of the empowerment process that seem to facilitate and foster empowerment in other domains.

Self-confidence

Self-confidence is a central component of many conceptualisations of empowerment. For example, Stromquist (1993) calls the development of self-esteem and self-confidence 'psychological empowerment', which she hypothesises will enable women to recognise their own power and motivate them to act. Rowlands (1997) also finds that the development of self-confidence and self-esteem are central to the empowerment process. My findings suggest that education can trigger increased self-confidence. Women in the SAT group frequently mentioned that they were proud that they had studied. For example, Juanita explained that she was proud of, 'having studied, serving my community, and being a mother'. When I asked Sonia what she was proud of, her answer was similar:

Having studied through the ninth grade because I can defend myself better, because I know something from there [SAT]. I know how to analyse my problems. When they give talks or workshops, I have seen it. My mind is not closed. I can read and analyse things.

Here Sonia links her knowledge with her confidence – she is proud because she 'knows something'. She can analyse her problems because of her knowledge and open mind, and she feels confident when she goes to a talk or workshop because often the material presented is familiar to her. This illustrates how the various components of empowerment are difficult to disentangle; that empowerment is a dynamic process (Stacki and Monkman 2003).

Another student, Irina, mentioned that she felt proud when 'we are at Mass and I read from the Bible and then explain what I have read'. It is likely that prior to her participation in SAT, Irina did not have literacy skills required for this task.¹² Now she is able to read in public (which requires self-confidence), and can explain what she has read to others (which requires reading comprehension). Both Irina and Sonia feel more confident because of the new opportunities their study has granted them. Again, these examples also illustrate the dynamic nature of empowerment, as knowledge and self-confidence are closely connected.

Women's self-perceptions were also enhanced by their participation in SAT. Even though most of the women in the sample do not have jobs in the formal economy, they explained that they feel like a 'professional'. Juanita explained that before studying she felt inferior to professionals in her community. Now she feels equal to them. 'Before I felt like less when I was around professional people. But now I think we are equal'. In Alejandra's case, she believes that she is

on the road to becoming a professional. 'Having studied makes me feel good. ... When I complete my studies I am going to be a professional'.

Feeling equal to professionals is closely related to women's level of self-confidence. The pride or confidence that stems from having studied also seems to enable women to speak in group settings. Several women commented that prior to SAT they were too shy to speak in public, or didn't feel capable of doing so. For example, Soraida explained that now she is a trained professional and so she is not afraid of sharing her thoughts with others.

I mean, I didn't do it [speak in public] because I was afraid and ashamed because I ... because I hadn't studied. So now that I am a professional and trained, now I am not afraid of confronting any situation and expressing myself.

Leticia made a similar remark. She explained that through her participation in the SAT program she has gained confidence for public speaking. 'I have seen a great change in myself, because before I couldn't speak in public. Now I can give a presentation at the university. I couldn't do this before, no way!' One of the reasons women offer for why they are not afraid to speak in public is because they have improved communication skills. The pedagogy of SAT encourages everyone to share their ideas and participate in class discussion. Through their experience in SAT they have practiced expressing themselves in front of others, and now they can do this in other settings.

In contrast with the SAT group, four of the six women in the comparison group mentioned that they do not like to speak in public. Their response to this question might indicate a low level of self-confidence in comparison with the SAT group. For example, Dulcinea, who is not a member of any formal community organisation but likes to go to meetings, explained that when she attends she just listens. She does not like to speak in public because she is 'ashamed'. Esmeralda's response was similar. She is not a member of any community organisations, but she does attend meetings from time to time, 'to listen'. She does not like to speak in public. Another woman in the comparison group, Susy, does not attend meetings, nor does she like to speak in public. When I asked her why she replied, 'I don't like those things'.

In summary, changes in women's knowledge and self-confidence are reminiscent of the 'inner transformation' that several scholars consider an important aspect of the empowerment process (Sen 1993; Kabeer 1999; Rowlands 1997). These authors argue that women should consider themselves as not only able but also entitled to make important life choices. Women who have gone through the SAT program associate self-confidence or being proud with having studied. This self-confidence enables them to speak up in public settings. This confidence is also linked to their decisions to pursue options that were previously unavailable to them. It helps women take charge of their lives. A third dimension, a keen awareness of gender equity, may also enable women to make new choices and become more self-determined.

Gender awareness: criticising the gender division of labor and belief in gender equity

Women in SAT seem to have developed a critical understanding of gender issues. Awareness of gender inequality is part of Stromquist's notion of cognitive empowerment (1993). Rowlands also argues that an essential component of empowerment is for the individual to move out of the gender assigned roles that her context and culture have given her (1997). The combination of knowledge and critical understanding, self-confidence and gender awareness seems to be a powerful impetus for action and change.

As mentioned above, several women in the study mentioned that they see the world differently and are able to identify problems in their community. Several of the problems were related to gender (see list above). To further probe study participants about their thoughts and ideas related

to gender, I asked them what the responsibilities and daily tasks of men and women were, and what they thought of this. Three women from the comparison group and two women from the SAT group thought that the traditional division of labor was fine. Dulcinea, from the comparison group, had answers to what the roles of men and woman were in the community that were consistent with what I heard from most women. Women typically do more work, taking care of the household, children, growing yucca and other crops. Men, in contrast, work in fishing for part of the year but have next to no household duties. Dulcinea explained that she saw this scenario as fine: 'Women behind men'. She sees the man as the authority figure and that women are inferior. At another moment in our interview she said, 'the man comes first in the home'.

Other women in the comparison group, including Angela, also saw the current division of labor as natural and even divinely ordained. Angela described a very traditional division of labor in her community. When I first asked her about her views on the division of labor in her household and in the community, she replied, 'that is how it should be'. However, only a few moments later she explained that she thinks that men and women should work together, but that in Garifuna communities women work more than men. It appears that one of the ways Angela justifies this inequality is her religious beliefs. At one point during our interview she says, 'Since the beginning man has been the head of the household. God made man ... he is the head of the household, and the woman follows him'.

While two women in the SAT group¹³ didn't see any problem with the current division of labor, the majority of women in SAT were more critical of the distribution of labor in the household. They thought that men should take on more responsibility in the household and share work equally with women because it is unfair that women work more than men. For example, when I asked Sonia what she thought of how work was shared between men and women she replied, 'It shouldn't be like it is. Work should be shared equally among the two [men and women]'. Juanita agrees with Sonia. She believes that the current division of labor 'is bad because we all have to earn our daily bread. Sometimes a woman works for four people in her house and she gets tired and kills herself from this, from so much work, she is spent'. Leticia, another student in SAT shared Juanita's views. When I asked her what she thought of the division of labor she explained, 'I think it is *machismo* because the two have to do the same, both men and women. They have a commitment, and both have to fulfill it'.

The notion of fulfilling a commitment also came up in my interview with Napoleana. She expressed the opinion that men are irresponsible.

There are men who like to have kids and then take off. The one who sacrifices is the mother. This isn't right, but that is how it is. The mother has to be responsible, because who would throw away their child?

In a follow-up interview, Napoleana repeated these sentiments. She argued that women are more responsible than men, using a creative term to explain the role of the mother – MAPA – joining together the first two letters of the Spanish word for mother (*madre*) and father (*padre*). She explained, 'A mother is more responsible than a man. She signs the name MAPA, *madre* and *padre*'. Napoleana believes that the mother has a dual role – as a mother and a father. Men do not assume the parental role that they should, and so a woman must assume her role as mother and his role as father. Napoleana wants to see men take on a more active role in parenting.

In addition to their ideas about the gender division of labor, women who participated in SAT expressed the idea that men and women were equal. When Teodora spoke about gender she did so with an ironic and questioning tone. She asked, 'why does a man have to feel so dominant? He doesn't have to be the one who has the final say at home. We both have a say, and we both have two hands'. Teodora also explained that a man didn't have to be so manly, because a woman could also be very womanly. She didn't think that either of these situations were desirable. Her

views on gender roles were more fluid. She believes that 'we are all human beings ... we all have two feet, two hands. I mean, we are all equal'. She joked that, 'why does a man have to act so *macho* in front of a woman? A woman can be aggressive if she wants, too!'

Leticia also spoke about gender equity in our interviews. She told me about her own experiences growing up; in her household her male siblings were allowed to do certain things that the girls couldn't do. She believes that parents should give equal rights to their male and female children, 'men and women have equal rights'. Irina echoed Leticia's remarks about equal rights for both women and men. She used a very practical situation to express this opinion.

When both a man and a woman go up to the fields, and if the woman gets home first she should clean the house, and if the man gets home first he has the right to clean the house and see what else needs to be done.

Most people might not think that sweeping or cleaning the house is a 'right'. However, Irina raises an important point. Gender equity does not mean that only women engage in activities previously denied to them. Men, also, should have the opportunity to partake of the full range of activities, even mundane ones like sweeping the patio. If there are cultural norms that dictate that sweeping the floor is a woman's job, men may feel that they don't have the 'right' to sweep. They might be ostracised by others (both men and women) for doing so. In Irina's scenario, both men and women would have opportunities to participate in aspects of daily life that fall outside of the traditional realm.

Increased choices or options are associated with awareness of gender equity. As Irina described, a man might not take advantage of his option to sweep the patio. Likewise, women may not take advantage of a variety of choices, such as conversing frankly with their partner, starting a small business, or joining a community organisation because they do not believe these options are appropriate or available to them. An awareness of gender equity might change this. Women may realise that they can participate in the same domains that men do, which makes more options available. Furthermore, they may come to realise that at present, they do more work than men and this is not fair. They may ask their partners to take on more household duties, which would free up time for them to pursue new opportunities. Thus, awareness of gender equity, coupled with increased knowledge and self-confidence may enable women to take charge of their lives and work for personal improvement. These three areas allow women to take advantage of options that will help them move forward.

Discussion

Increased knowledge, self-confidence and awareness of gender equity are components of the empowerment process that are difficult to disentangle. If education only boosted one or even two of these three components, it is unlikely that we would see the same results. It is the combination of these three factors that seems to enable women to take charge of their lives and take advantage of new and previously unavailable choices. Based on some of the data presented here, one could make the case that education that is not gender sensitive might also trigger empowerment. For example, students described how they learned new vocabulary and this made them feel more confident. However, if gains in knowledge and self-confidence are unaccompanied by increased gender awareness, a whole range of choices and opportunities will continue to be out of reach for women. Even though a woman may have more self-confidence, she might still believe her place is in the home. She therefore would not take part in income-generating activities or community organisations because she feels these are activities for men, not women. Thus, only educational efforts that expand awareness of gender equity can be genuinely empowering as these will allow women to have access to opportunities they were previously denied.

That knowledge, self-confidence and gender awareness are important components of empowerment is not a new idea. In fact, these components are frequently mentioned in previous theoretical and empirical work on empowerment (Hashemi et al. 1996; Stromquist 1995; Rowlands 1997; Adato and Mindek 2000). This study offers empirical evidence that supports these theories and clarifies how education can contribute to the empowerment process. My findings suggest that we must not equate empowerment with one's years of schooling. Rather, we must look critically at whether students actually learn something, if their self-confidence grows, and if they learn to challenge instead of accept traditional gender roles.

This leads to the question of whether SAT is unique in triggering the empowerment process. Would any secondary education program foster women's empowerment? If not, what are the features of the SAT program that might be relevant? There are some options that education enables, such as mobility and the option to enroll in further education that are not unique to SAT. However, in several dimensions, such as promoting awareness of gender equity, SAT might have a comparative advantage over traditional secondary schools.

Table I below summarises the innovative features of the program that may make it more conducive to triggering the empowerment process. While my study did not explicitly compare women in the SAT program with those in traditional secondary schools (TSS), these hypotheses are based on my observations visiting traditional secondary schools in Honduras and a review of studies on secondary education in Latin America (Alvarez 2000; IDB 2000; de Moura Castro, Carnoy and Wolff 2000; Braslavsky 1999; Caillods and Maldonado-Villar 1997). A comparative design would be required to make any strong claims about the differences between SAT and TSS and their relative influence (or lack thereof) on women's empowerment. The hypotheses listed below are intended to point out areas that merit further investigation.

There are several features of the SAT program that lend themselves to women's empowerment. These features are not typically present in traditional secondary schools in Honduras. For example, students in SAT may learn more than they would in TSS because the program emphasises understanding, not memorisation.¹⁴ The goal of the curriculum is to engage students in a dialogue with each other and with the tutor. This emphasis on dialogue may encourage students to value communication both within the SAT classrooms and in their homes. Improved communication skills may boost their self-confidence. Through practical activities, students get a chance to apply their academic knowledge in direct ways. They gain concrete skills in agriculture, micro-enterprise and community health. Both men and women may step outside of their traditional gender roles when conducting these activities. Therefore, this might influence their thinking about gender roles and cause them to behave differently. This feature of SAT is particularly striking, given previous critiques of programs that are narrowly focused on psychological models of empowerment. The findings here confirm Stacki and Monkman's (2003) hypothesis that to effect social and cultural change, education must look beyond transmission of knowledge and incorporate social action.

Furthermore, gender is mainstreamed into the curriculum, with specific lessons that encourage students to debate and articulate their ideas on gender issues. This feature addresses Stromquist's (2002) concern that educational programs often lack curricular content that challenge sexual stereotypes and provide students with alternative visions of society unburdened with sexism.

Conclusion

The expansion of SAT in Honduras and other parts of Central America will provide further opportunities to study the relationship between education and women's empowerment. This paper has attempted to highlight three areas that seem to be essential for education to act as a catalyst of the empowerment process: knowledge and understanding, self-confidence and awareness of gender equity. Assumptions are commonly made that students gain knowledge and under-

Table 1. Hypothesised differences between SAT and traditional secondary schools (TSS).

Dimension of the empowerment process	Is SAT unique? Would traditional secondary schools (TSS) play the same role?	Features of the SAT program that are relevant
Knowledge	Students would presumably learn in both SAT and TSS, however TSS have been criticized because the emphasis is on the memorization of information, not learning. TSS curriculum is less applied. Women in SAT stressed the importance of learning concrete skills (e.g., agricultural skills) that they could directly apply in their daily lives.	Students learn, not memorize. Practical application of what is learned. Students receive individual copies of textbooks. Interdisciplinary curriculum.
Self-confidence	Both SAT and TSS may boost self-confidence because they further educational attainment. Learning seems to play a key role in boosting student self-confidence. Students in SAT may learn more than those in TSS. The emphasis that SAT places on group work and dialogue may make women feel more comfortable speaking in public, which in turn boosts their confidence. These pedagogical strategies are absent from most TSS.	Students gain knowledge and understanding. Required practical activities. Goal of engaging students in a dialogue/role of the tutor.
Awareness of gender equity	Explicit mention of gender equity is not a common feature of TSS. In contrast, SAT explicitly aims to promote gender equity, and the concept is mainstreamed into the curriculum. In addition to the lessons on gender equity, SAT attempts to put this belief into practice, asking both men and women to step outside their traditional roles in the application of practical activities. For example, in this context men are required to plant yucca. These practical activities may foster gender equity in a way that TSS do not.	Learning new gender roles through practical activities. Gender mainstreamed into curriculum.

standing in school. However, the low quality of secondary education in Latin America makes one question this assumption (de Moura Castro et al. 2000). Likewise, education can boost a student's self-confidence, but in many schools students do not have the opportunity to voice their opinions or be engaged as learners. Even more challenging is for education to raise awareness of gender equity. If education is to be a catalyst for women's empowerment, schools should explicitly promote gender equity. The curriculum should challenge rather than reinforce the idea that women are inferior to men, and enable their students to recognise that gender roles are socially constructed. To return to the words of Teodora, 'we are all equal'.

While education and empowerment are important components of the development process, they are not a panacea. As the 2005 UN Human Development Report explains, 'people are restricted in what they can do if they are poor, ill, illiterate, discriminated against, threatened by violence or denied a political voice' (18). Education only satisfies one of the three 'most basic capabilities' for human development, which include 'leading a long and healthy life, being educated, and having adequate resources for a decent standard of living' (18). Thus, while education and empowerment might remove certain barriers to development, critical obstacles remain. These obstacles include poverty, violence, corruption, disease and the complacency of those in power.

Furthermore, the effects of education on women's empowerment and development will be mediated by social constraints that individuals cannot overcome or can change only marginally. For example, education might prepare women for jobs, but if there are no job opportunities than their choice set remains limited. Likewise, education might empower women to become more involved in community organisations, but cultural norms may dictate that men occupy the leadership positions in these organisations. While women might be empowered or have an enhanced capacity for self-determination, the choices available to them are constrained by the economy, society and culture. Thus, they will remain unable to develop the 'range of things that [they] can do, and what they can be' (UNDP 2005, 18).

Individual empowerment through education is a key long-term strategy to change social and cultural norms. However, individual empowerment cannot, by itself, change the boundaries within which women live, work and participate in public spaces. Schools and other educational programs can potentially play a role in promoting empowerment and challenging cultural norms, however they do not operate in a vacuum. The role of education in changing cultural norms and social structures will be mediated by the influence of other institutions, such as the family, the mass media and religious organisations. Efforts for change must come from many fronts and will require the participation and commitment of the poor and rich alike.

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Notes

1. Tutorial Learning System. In Latin America, the program is referred to as 'SAT'. (The acronym is pronounced like the verb, sat, not the standardised achievement test, the SAT.) In previous English publications, the acronym has not been translated into English and so I follow suit here.
2. The 'hidden' curriculum is the 'unstated lessons that students learn in school; the running subtext through which teachers communicate behavioral norms and individual status in the school culture, the process of socialisation that cues children into their place in the hierarchy of larger society' (Orenstein 1994, 5).
3. Personal copies of textbooks for students is quite unique in Central America due to the costs involved. SAT textbooks are softcover and basic in their design (no glossy photos), making them much less expensive to reproduce. Each textbook costs approximately US\$1.50. Students pay for their textbooks out of pocket or organise fund-raising activities to cover the costs of textbooks.
4. For example, in the villages where I conducted my research, students have started palm tree and fruit tree nurseries, and raised chickens.
5. SAT has also received funding from the Ford Foundation, the Pestalozzi Foundation, the Canadian International Development Association, the British Department for International Development, the United States Agency for International Development, the Inter American Development Bank and the Baha'i International Community.
6. In much of the literature, the terms 'Black Carib' and 'Garifuna' are used interchangeably. 'Garifuna' is the term that Garifuna use to refer to themselves, and therefore this term will be used in this study, rather than 'Black Carib'.
7. The remote and economically disadvantaged environment in which these women live limits the choices available to women. Thus, while the differences in choice may seem insubstantial in some contexts, in these villages they are substantial.
8. All names are pseudonyms.
9. A small town roughly four hours by bus from her village.
10. Unfortunately I have not been able to verify if they have carried through on these plans due to lack of communication infrastructure between the US and study villages.
11. Whenever possible, tutors are from the villages where they tutor SAT. In the case of study villages, all tutors were native Garifuna. While texts were in Spanish, students and tutors were encouraged to use Garifuna in classroom discussions and to explain concepts in the texts.

12. While all students had completed Grade 6, many enrolled in the program with very low literacy skills (Murphy-Graham et al. 2002).
13. Interestingly, these two women had minimal exposure to the program compared with other women in the study, less than two years each.
14. A preliminary study conducted by the Honduran Ministry of Education supports this hypothesis. SAT students performed better than the national average on standardised tests in mathematics and Spanish (Dubois, Vega and Pavon 2001).
15. Excerpts from SAT textbooks copyright of FUNDAEC, Cali, Colombia.

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Appendix 1. Examples of gender mainstreaming in SAT curriculum¹⁵

Example I

A lesson from a mathematics textbook describes the concept of sets and subsets. After a series of questions that develop students' understanding of these categories, a 'Reflection on the concept of subsets: the human race' asks six questions. Two of them make explicit reference to gender and read:

2) Next let us consider the two subsets, all the female members of the human race and all the male members of the human race. Below is a list of words. Some of them describe relations between the two sexes when they live according to the principle of equality, and others describe relations when the principle is disregarded. Decide which are which:

<input type="checkbox"/> cooperation	<input type="checkbox"/> control	<input type="checkbox"/> power
<input type="checkbox"/> respect	<input type="checkbox"/> consultation	<input type="checkbox"/> violence
<input type="checkbox"/> love	<input type="checkbox"/> helplessness	<input type="checkbox"/> protectiveness
<input type="checkbox"/> domination	<input type="checkbox"/> consideration	

In a society governed by the principle of equality of the sexes, would women ever be treated as sex objects?

3) The following is a list of characteristics of human beings. In many societies people think that certain qualities only apply to men. For example, there are those who claim that only men have the intelligence to become outstanding in science and mathematics. If, on the other hand, we believe strictly in the equality of men and women, would we accept that any of the characteristics below apply only to one sex or the other?

<input type="checkbox"/> courage	<input type="checkbox"/> gentleness	<input type="checkbox"/> intelligence
<input type="checkbox"/> tenderness	<input type="checkbox"/> truthfulness	<input type="checkbox"/> intuition

Example II

A lesson from a technology textbook describes social, cultural and economic factors that determine crop production. The lesson starts with a dialogue between Roberto and his grandmother where they discuss the various aspects of life that can influence crop production. The first exercise asks students to: 'write down how the following situations might affect farming choices and the outcomes of the harvest. After you write them down, discuss them with your group'. The first category, cultural, makes explicit reference to gender in Part B.

Cultural:

a. People in the village prefer to eat one color of bean over another.

b. Men do not like to do the jobs traditionally done by women, and women do not like to do the jobs usually done by men

c. Certain life events, like weddings or funerals are very expensive, and create the need for people to get a lot of cash at once

d. Traditionally, certain vegetables are planted together, and seem to thrive that way.
