ECHIDNA GLOBAL SCHOLARS PROGRAM POLICY BRIEF | NOVEMBER 2017

Understanding Girls' Education in Indigenous Maya Communities in the Yucatán Peninsula Implications for Policy and Practice

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Acknowledgements

I would like to extend my gratitude to the girls and parents who participated in this research study, whose insights have been a guide to better understand their aspirations, dreams, and challenges regarding education. Also to my indigenous students and friends who shared with me their personal and professional experiences that were also considered while writing this document, I am very grateful.

To Father Joel Tuz, Father Jorge Balam, and Father Jorge Martínez who facilitated the interview process with their congregations, thank you. I would like also to thank Anita Chi and Carmita González who supported me in the last weeks of my field research. Special appreciation to my colleagues and friends Marisol Cen Caamal, Gretty Guadalupe Escalante Góngora, José Antonio Silveira Bolio, and Hans Bressers who encouraged me and supported me in this project. I would like to recognize the work of María Fancisca Poot Cahun, who has been my translator working with Maya communities in several projects and initiatives, including the present.

To the authorities of Universidad Anáhuac Mayab, who allow me to conduct research with the academic freedom needed to achieve innovation, especially to the president Ing. Miguel Pérez Gómez, and to the directors Dr. Narciso Antonio Acuña González, Dr. Jaime Antonio Zaldivar Rae, Prof. Raúl Galán Quiñones, Prof. Hansel Francisco Ortiz Heredia and Prof. Benjamín Negroe Monforte. I would like to express my appreciation to Diana Cournoyer and John Around Him from the National Indian Education Association (NIEA) for generously sharing with me their insights and educational advances working with indigenous students in the United States.

To the Center for Universal Education (CUE) at Brookings who gave me the opportunity to learn and share my perspective about indigenous Maya girls' education living in the Yucatán Peninsula, southeast Mexico. Particularly to Dr. Rebecca Winthrop, Dr. Christina Kwauk, Amanda Braga, Tasbeeha Mirza, David Batcheck, Aline Pognonec, Judy G. Meehan, and Emily Richardson, as well as my Echidna colleagues Armene Modi, Dasmine Kennedy, and Damaris Parsitau, thank you all. To Elena Anderson-de Lay, Aki Nemoto, Yvonne Thurman-Dogruer and Dr. George Ingram for their advice, guidance, and friendship in my time at Brookings. To my reviewers Dr. Katherine Marshall and Dr. Carol Benson, thank you for helping me to improve this paper.

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Brookings gratefully acknowledges the program support provided to the Center for Universal Education by Echidna Giving.

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Abstract

Mexico is a multiethnic country with large groups of indigenous populations that experience disadvantages in education due to a quadruple burden of poverty, indigeneity, rurality, and gender. This policy brief proposes alternative practices for improving the educational opportunities for indigenous Maya girls living in the Yucatán peninsula in southeastern Mexico. Based on the experiences shared by the girls and their parents who participated in this research, this brief analyzes the main barriers, perceptions, and levers of support in these communities. The results of this study propose an alternative route to the educational development of populations marginalized by poverty and linguistic barriers, based on the opinion of Maya girls attending public schools at primary, secondary, and tertiary levels in the National Educational System in Mexico administered by the Secretariat of Public Education.

The Current State of Indigenous Education in Mexico

Today, there are approximately 370 million indigenous peoples, or five percent of the global population (U.N., 2010). Throughout history, indigenous peoples have been disadvantaged as a result of colonization. Today, they comprise approximately 15 percent of the world's poor, and one-third of the world's rural poor (World Bank, 2016). Consequently, they are typically marginalized and excluded from government policies, health and education systems, and their societies in general.

Some progress has been achieved in recent decades. For example, in 2007, the United Nations (U.N.) General Assembly adopted the U.N. Declaration on the Rights of Indigenous Peoples in an effort to recognize indigenous groups and ensure their "survival, dignity and well-being" (U.N., 2017). In the same way, international organizations, including the World Bank and Inter-American Development Bank have supported research and actions to improve the life conditions of indigenous populations. Yet, vulnerability and exclusion persist, particularly among indigenous women, children, youth, and persons with disabilities (U.N., 2017).

Mexico, a multiethnic and pluricultural society¹ with approximately 68 linguistic groups in the country (DOF, 2008), is one such context where the majority of indigenous populations are disadvantaged. According to the National Council for the Evaluation of Social Development Policy (CONEVAL, 2014), 73 percent of indigenous peoples live in poverty and they have little participation in the decisionmaking process of the country.

Indigenous populations in Mexico face significant obstacles when it comes to education. Historically, educational practices have tended to be of assimilation rather than integration. For example, teaching is usually done in Spanish—the dominant language of communication in Mexico-instead of using indigenous languages. Indigenous children also have limited access to school and lower educational outcomes than their non-indigenous peers. According to the General Directorate of Indigenous Education of the Secretariat of Public Education, only 47 percent of indigenous students enrolled in primary school continue their studies at secondary level and only 39 percent of indigenous people have achieved the same levels of education as the non-indigenous population (DGEI, 2017). This represents an educational gap among Mexican society that must be addressed.

Indigenous children have to overcome multiple cultural barriers to succeed in school and to receive support from their households, communities, and society as a whole. In addition, indigenous children suffer from discrimination in classrooms, from both teachers and classmates, just for being different. Although equality for every citizen is enshrined in the constitution, society must recognize that the

In Mexico, indigenous population is identified either by self-identification or in reference to its language. According to INEGI (2015) 21.5 percent of the population are indigenous by self-identification, in contrast with 6.6 percent who speak an indigenous language.

problems of inequality and injustice are far from resolved.

For indigenous girls, the obstacles to education are even more acute as gender adds an additional layer of discrimination. Although country-wide statistics from the Secretariat of Public Education in Mexico (2017) show that access to primary level schooling is almost equal for both girls (49 percent) and boys (51 percent), data from other Latin American countries like Bolivia suggest that rural indigenous girls experience the greatest gender gaps in education (Sperling, Winthrop, and Kwauk, 2016). Thus, while statistics may suggest there are no issues for girls in Mexico, they do not necessarily reflect the circumstances and cultural barriers that indigenous girls face in order to continue studying.

Due to high rates of poverty and the patriarchal structures inside indigenous families, the limited economic resources available for attending school are primarily given to boys. Girls who receive family support to attend school also need to help their mothers with household chores in addition to their school activities. This diminishes their school performance as overwork affects their concentration and stamina. And in school, indigenous girls often encounter gender discrimination that affects 25.3 percent of girls nationwide. Male classmates are the enactors in 39.3 percent of the incidents reported, while male teachers are involved in 14.4 percent of the cases (INEGI, 2017). While these statistics reflect official reports of discrimination against girls in school, anecdotal data suggests the rates may be much higher in rural indigenous communities. In addition, the isolation of their villages from the urban centers is another safety factor that discourages indigenous parents to support girls to attend higher levels of education, which are only available outside of their communities. Some of the roads represent a hazard for indigenous girls walking long distances alone, sometimes before sunrise in order to attend early school activities, since they could be attacked, robbed or assaulted by passers-by during their journey to school.

Nevertheless, education is essential for the social and economic development of women, and especially marginalized girls. Several studies conducted by the United Nations Children's Fund (UNICEF), the Center for Universal Education (CUE) at Brookings, and the National Institute of Women (Inmujeres) in Mexico, show that with higher levels of education, girls improve their reproductive health, increase their economic productivity and income, and develop a greater degree of freedom and power over their life—with the consequent possibility of making better decisions about their well-being (UNICEF, 2015, Sperling, Winthrop, and Kwauk, 2016, Inmujeres, 2016). Education is a strategic factor in improving the social status of women and can lead to relationships that are more equal and ultimately raise their standard of living. On the contrary, gender inequality in education leads to unequal participation in the labor market and in public life.

Numerous studies have demonstrated that with a higher level of schooling, women are able to develop their numerical and communication abilities (Global Campaign for Education and RESULTS Educational Fund, 2011), strengthen their self-esteem, and promote respect from their partners within their family context—all of which contribute to reducing domestic violence and any form of abuse (Sen, 1999; Aikman & Unterhalter, 2005). In Mexico, 43.9 percent of women have suffered abuse from their partners, and 78.6 percent of these cases were not officially reported (INEGI, 2017).

As part of the contextual analysis of this research, it is important to mention the organizational culture of the Maya people, their traditions, and the role of indigenous women in a patriarchal system, where the will of the woman has been generationally subject to the will of a male figure. Additionally, the low levels of education do not allow them to compete fairly in the labor market. This is especially the case for adult women, most of whom have not completed a primary education.

Purpose of the Research

Education data on indigenous children, and girls, in particular, is limited. Moreover, while anecdotal evidence suggests that indigenous girls face major barriers, little research has explored, first-hand, these girls' voices, perceptions, challenges, and needs.

Therefore, this study seeks to gain indigenous Maya girls' and their parents' perspectives on obtaining an education in three Maya communities in the Yucatán peninsula, which includes three of the seven states with the largest presence of indigenous populations in Mexico: Yucatán (51.8 percent), Campeche (22.7 percent) and Quintana Roo (30.4 percent), where Yucatecan Maya is the predominant group. Moreover, Yucatecan Maya is the second most spoken indigenous language in basic education (7.1 percent) (UNICEF, 2015).

This study asked girls about their desires for the future, including their professional and educational goals and ambitions, and the challenges they often face as indigenous girls attending school. This study also explores parents' perceptions of the value of education, as well as the obstacles they see and the concerns they have for their daughters' education. Appendix 1 presents the research design and methodology for this study.

To ensure that indigenous girls are learning, it is vital to address the specific challenges that they face in their classrooms, communities, and homes. Indigenous girls need to be at the center of any program design, taking into account their contexts, needs, and aspirations. Thus, this research examines the first-hand perspective of indigenous girls' in an effort to identify more practical and tailored approaches to ensuring they have access to a high-quality education. This policy brief also aims to identify key stakeholders that need to take action on specific policy solutions to promote the greater inclusion of Maya girls in the educational system and, more generally, to support indigenous girls' education in Mexico.

The remainder of the brief is structured as follows: first, a discussion of the main constraints that the literature has identified that indigenous girls face

Figure 1

Percentage of Indigenous Populations in the Yucatán Peninsula, Southern Mexico



Note: Yucatán, Campeche and Quintana Roo are the three federal entities that form the Yucatán Peninsula.

in their educational path in Mexico. Second, an outline of current efforts to support girls' school attendance. Third, a presentation of the key barriers, perceptions, and levers of support to Maya girls' education as identified by Maya girls and their families in the Yucatán peninsula. Finally, the brief offers policy recommendations to implement a number of actions to increase educational opportunities for Maya girls.

Educational Barriers for Maya Girls

Maya girls face innumerable challenges in pursuing an education as an indigenous person in a school system designed for the majority, i.e., non-indigenous children. In addition, simply being born a girl in a rural community further exacerbates these challenges. This section briefly highlights the literature and data from this study on the quadruple burden of poverty, indigeneity, rurality, and gender that rural Maya girls face in accessing education in Mexico.

POVERTY

The poverty conditions of many indigenous families make it very difficult to support their girls' education. Even today, communities with patriarchal systems see indigenous girls as an economic burden to their families (Bando, Lopez-Calva, & Patrinos, 2005). Girls are aware of this and fear that their education is a strain for their parents. One girl stated, "I want to go to university, but there isn't enough money for me to attend, but I want to go."

In addition to school activities, Maya girls typically contribute to their families' income through agricultural work, selling products at local markets, and household chores such as cooking, cleaning, caring for others,² washing clothes, feeding backyard animals, and more. Consequently, due to economic constraints, girls are often not able to attend school or are forced to drop out early in order to help at home.

Parents can apply for scholarships and programs for the educational advancement of their daughters. However, information about these scholarships and programs is not often evenly distributed among the population. Even if parents are aware of scholarships available, they often do not know how to apply for them. As a mother said during the study, "There are scholarships available, but we don't know how to get them."

INDIGENEITY

Studies demonstrate that children who speak indigenous languages, specifically those belonging to the Yucatán Maya population, memorize rather than comprehend the curriculum (which is often taught in the national language), participate little in class, and are often overlooked and ignored by teachers (Mijangos-Noh & Cardos-Dzul, 2011). During my interviews, girls who speak the Maya language at home confirmed these issues and explained that it was difficult for them to express their ideas and ask questions in classes that are conducted in Spanish.

There are several causes for why Maya girls have difficulty understanding some class subjects including language barriers, poor teacher training, or teachers' lack of interest toward indigenous students. Parents also expressed the need for greater support from teachers. Some parents added that rural teachers should have a humble attitude when working with Maya people, since they usually appear assertive and domineering instead of trying to understand them.

Due to misconceptions about their culture, indigenous girls still often face discrimination, racism, and abuse from their non-indigenous peers and even teachers (Mijangos-Noh & Cardos-Dzul, 2011; De Guevara, Pacheco, & Hernandez, 2012; Cen, 2016). During interviews, several girls mentioned how discouraging and humiliating it is for them to experience name-calling from classmates and

² Cultural values that promote the idea that women should take care of their husbands, children, parents, grandparents, elderly or sick relatives, and in general, anyone requiring daily support. This is unrecognized, unpaid work and is not only a disproportionate burden on women but also, in practice, an invisible subsidy to the economic system (Lavalle, 2010: 54).

teachers related to their darker skin tone or because they cannot pronounce certain words in Spanish. One mother stated, "It is really important to work with them at home to give them confidence, because some people still discriminate against them." Such abuse affects indigenous girls' self-esteem and their capacity to concentrate in class.

Indeed, according to the girls, verbal and physical abuse is frequent in the classroom. They often encounter criticism and discouragement from their male classmates, specifically when the girls receive high grades and express desire to continue their studies at the university level. This abuse is related to jealousy and rivalry from other indigenous and non-indigenous students when indigenous girls stand out. Some parents in Izamal commented that the reason indigenous girls are outperforming indigenous and non-indigenous boys in the community is because boys often have to drop out or work on the side to contribute to the family income.

While indigenous parents do not want their children to face discrimination, they do wish for their children to be educated in their indigenous cultures and traditions. Parents from the three Yucatán Maya communities mentioned their concern regarding the gradual loss of the Maya culture and language, and the increasing migration of young adults to urban centers for work, since agriculture no longer produces enough to support many families.

Parents believe, for example, that the Maya language may die off and should therefore be included in the educational curricula alongside Spanish and English. One mother said, "In school they only teach English besides Spanish. Our children should be studying Maya as well, because we are losing our language."

These comments describe a real concern about losing their indigenous identity because of the diminished use of their mother tongue. Therefore, the practice and learning of the Maya language should be encouraged not only among indigenous peoples but also among everyone living in the Yucatán Peninsula as it represents the cultural background of a large part of its inhabitants.

RURALITY

Due to the remoteness of their villages, girls from rural communities who have family support for school face difficulties in getting to school safely. Scarce and unpredictable transportation means girls have to walk long distances in lonely areas, which puts them at a greater risk of being stalked, harassed, or attacked by outsiders (De Guevara, Pacheco, Hernandez, 2012).

The distance between their villages and cities, where higher education institutes are located, may be the difference between obtaining a professional career or not. Lodging and transportation are barriers to parents' support of their daughters pursuing a university degree, since they need a safe space for girls to stay in the city and violent incidents on the roads are frequent in the region. In fact, the majority of parents who participated in this research consider distance and the lack of transportation a major constraint in girls' education in this particular region.

In contrast to the parents' fear of girls leaving, almost all girls who participated in this study said they had no desire to leave the community to continue studying. Moving away to cities represents a severe hardship to girls who are emotionally attached to their families. They added that they feel free and out of danger in their communities, and they heard from their relatives that people would take advantage of their naivety in cities. Parents expressed similar fears, with one stating, "People in the city think the girls could be easily deceived because they are from a rural community and are naïve. Yes, when girls move to cities to study, they suffer a lot as people don't treat them well. Some of them succeed in spite of that."

For example, the public transport drop off in Merida city is seen as a dangerous place with many thugs. One mother mentioned, "That place downtown is really dangerous, I don't know why is not relocated. It is an unsafe place for girls and at night the risk is even higher since there are many thieves and dangerous people."

GENDER

The right to obtain an education is not only impacted by poverty, indigeneity, and rurality but also by gender roles, an interconnected and overarching aspect of indigenous culture. Women are responsible for a variety of household chores in the Maya rural areas of Mexico. In addition, they also participate in agricultural activities and assist in the preparation of food. The amount of work can be extensive when family members who require help due to their age or infirmity, such as children, the elderly, or relatives with disabilities are included.

It is not common for women to behave independently in these communities. Indeed, in a patriarchal indigenous society, fathers, as heads of the household, exert control of their children, and especially their daughters' activities.

Another gender-specific barrier stems from social expectations and perceptions around early marriage and unexpected pregnancies. All the girls who participated in this research, at all levels of education, want to finish their university studies before marriage and childbearing. But parents, especially fathers, do not want their daughter to date if they are investing in their girls' education, as courtship is seen as a distraction from school activities. One father mentioned, "When they start dating, they lose interest in having a professional career in the future to pursue marriage."

The need to move to nearby cities to attend higher levels of education poses another hurdle for girls. Because parents cannot look after their daughters when they study outside their villages, they, especially fathers, fear that their daughters will have premarital sex and unplanned pregnancies. Cities are socially identified as places of sexual freedom that could influence girls' sexual behavior. Furthermore, unexpected pregnancy within Maya communities, oftentimes at the hand of non-indigenous male teachers poses another layer of complexity to gender-related barriers for Maya girls.

Perceptions of Education Among Maya Communities

Despite these barriers, it is evident in the three communities researched that Maya parents and daughters place great value on education.

First, education can be a way for their children to become well-informed citizens, and ward off exploitation or manipulation by outsiders and who have historically been considered as untrustworthy by the Maya people. As one parent expressed, "People from the cities think we are ignorant, so we are often despised and scammed ... if you are educated, you know your rights as a citizen."

Education can also be a support system inside Maya villages to promote community development, through the implementation of projects and local businesses. It was also mentioned that girls who are educated have greater influence over others, as one of the fathers stated, "The example of my daughter could influence other people inside the community to study."

Education can be a way for their children to become wellinformed citizens.

Second, girls in all three communities believe that education represents hope in the future, i.e., a way to overcome the economic constraints experienced in their childhood and to achieve a professional career. For instance, one girl commented, "I know if I attend school I will have a future. If you do not attend school, you cannot obtain a job and an income, and you will have a hard life dealing with poverty." Other girls similarly mentioned that with an education they can help support their families. One girl said, "I want to continue studying because it is for my own good and for the welfare of my family. If I have an education I can get a good job to support my relatives."

In a complementary way, mothers have the same expectations about the relationship between education and greater professional opportunities for their girls' future and, subsequently, a better income. One mother shared, "My life has been hard, doing hours of exhausting work and earning very little. Because of that, I want to facilitate my daughter's life through education." Another mother mentioned, "As a woman it is harder to find a job and to deal with the challenges life throws at you. If you are educated, you are better prepared for the future."

Girls in all three communities believe that education represents hope in the future, i.e., a way to overcome the economic constraints experienced in their childhood and to achieve a professional career.

These last comments reflect the patriarchal structures that still exist in Mexican society, where women, particularly in rural communities, are seen as incapable of achieving their goals without the support of a male figure in their life.

All fathers believe their daughters should be educated so that they can overcome life challenges, be economically independent, and avoid domestic abuse. As one father said, "If she studies, she will be able to support herself and not depend on her husband in the future." The notion of education as a tool to avoid dependence on husbands came up frequently during interviews. In particular, parents and their daughters acknowledged that some are subject to physical and verbal abuse from their husbands and fathers. Several mothers and daughters openly shared the difficult circumstances some of them live with in a daily basis. They see education as a way to overcome and avoid physical and verbal abuse in marriage.

Girls also consider that having an education, and thus becoming more independent and having an income, helps them fight domestic violence. One of the girls explained, "You never know what could happen in the future, my husband could become ill or have an accident that does not allow him to work; or maybe he could not contribute to the family income or leave me. For those reasons it is necessary to have an income of my own." Another girl commented, "I want to study because I don't want to receive beatings from my husband. If he mistreated me I could leave him." And another echoed a similar sentiment, "I want to continue studying because I don't want to be in a marriage where my husband beat me all the time."

Third, according to both girls and their parents, education helps to build character and skills, and prevents girls from engaging in negative behaviors or from being negatively influenced. One girl said, "I want to study because I don't want to be like others who only drink and waste their time in the village. I know education will give me more opportunities in life."

Younger parents with girls attending primary school relate girls' education to the development of important social-emotional skills. One young father mentioned, "Education shapes their character because they learn to interact with other children in the classroom, which give the girls confidence in themselves." When comparing the perceptions of education among younger and older parents, it appears that the younger parents see more than just the economic returns of education and believe the development of other skill sets is necessary to succeed in the workplace.

It is important to note that while parents see education as invaluable for their daughters, they are concerned that the Mayan culture will fade away—both through the school curriculum and through girls leaving their communities to continue their studies. Not only do educational curricula emphasize a national unified culture, especially as teachers teach in Spanish, but there is also a lack of opportunities for girls to advance their education in their community. Consequently, there is a need to address not only the barriers to access and learning for indigenous children, but also the needs and interests of indigenous communities within the existing education system.

Education helps to build character and skills and prevents girls from engaging in negative behaviors or from being negatively influenced.

Current Efforts to Support Indigenous Education

As stated before, efforts to consolidate Mexico as a country with one identity led to assimilative approaches to indigenous education. There have been, however, shortcomings as indigenous children's participation and full understanding of classroom subjects. The New Educational Model, Mexico's latest educational reform, highlights the importance of including indigenous knowledge in the curricula. This is an attempt to not only recognize—but to also value—the indigenous background as a nation.

So, what is Mexico currently doing to address the access and learning barriers that Maya girls face? How is Mexico's existing system set up to meet the needs of Maya communities? At present, Mexico has instituted a number of international guidelines, government programs, and indigenous approaches which have contributed to reducing educational gaps. But just how are these pursuits actually advancing the education of indigenous girls?

INTERNATIONAL GUIDELINES

There are three international guidelines that represent major advances regarding girls' education: the Sustainable Development Goals (SDGs), the Declaration on the Rights of Indigenous Peoples, and the Convention on the Rights of the Child, all promoted by the United Nations.

The SDGs have been adopted by most countries worldwide, including Mexico, in order to achieve inclusive development. For example, Goal 4: Ensure inclusive and quality education for all and promote lifelong learning, and Goal 5: Achieve gender equality and empower all women and girls stipulate that girls who live in conditions of marginalization should be the priority of the Mexican government.

Another advancement, the United Nations Declaration on the Rights of Indigenous Peoples, affirmed the right of indigenous peoples to education in their own language, with respect to their culture, customs, and traditions. The curricula and educational practices in the classrooms should likewise include storytelling, and emphasize dialogue over lectures.

Finally, the United Nations Convention on the Rights of the Child states that children have the right to express themselves and to be heard. This statement was vital while conducting field research in the present study, as the opinions of Maya girls are rarely included in the educational practices applied to indigenous children. Therefore, this is an advancement that will help define the pertinent improvements to the educational system in Mexico. The first steps have already been taken through the national consultation forums carried out by the Secretariat of Public Education (SEP), with support from the Center for Research and Teaching of Economics (CIDE) for the implementation of the New Educational Model.

Although Mexico is a signatory country in several international agreements for the advancement of indigenous peoples and other marginalized sectors of Mexican society, the benefits of these declarations sometimes stay on paper and have not reached the affected population.

GOVERNMENT PROGRAMS

Public programs such as Mexico's Prospera, which encourages school attendance and improved nu-

trition (which facilitates cognitive development), are now a model support program for other Latin American countries. These types of programs subsidize educational costs like books, clothes, and transportation—which in some cases represent the difference between getting an education and dropping out of school. It is essential that these support programs continue working in the region in favor of indigenous population.

Other programs that have contributed to a greater inclusion of indigenous girls are the scholarship and support programs of the Secretariat of Public Education (SEP), the National Council for Educational Development (CONAFE), and the National Council of Science and Technology (CONACYT) built in coordination with the National Commission for the Development of Indigenous Peoples (CDI).

Although these government programs have obtained positive results in the advancement of indigenous girls' education, some shortcomings are evident. Most information is still provided in Spanish and the instructional guidelines are ambiguous for indigenous populations. In addition, most program applications are required to be submitted in cities, which present an additional financial burden for indigenous peoples living in rural villages. Government officials often only speak Spanish, which provides an additional barrier for Maya speakers. Finally, there have been several reports that encounters with government officials are unpleasant, as officials often engage in overt discriminatory and racist behavior toward indigenous people.

INDIGENOUS APPROACHES

Previous experiences in the Yucatán Peninsula with Canadian universities and U.S. initiatives have demonstrated the benefits of dialogue and support programs among indigenous populations from different nations experiencing similar circumstances of poverty, discrimination, geographic remoteness, and gender-based violence. These programs offer round tables of dialogue among indigenous communities and academic-based scholarships to pursue studies abroad. The intention and hope is that students will return to their villages to support local development after completion of their studies.

Similarly, the meetings of indigenous youths promoted by the National Institute of Indigenous Languages (INALI), a Mexican organization supported by the federal government, encourage unity among different indigenous youth groups that positively reinforce their indigenous identity.

In addition, the presence of intercultural and indigenous universities across remote areas of Mexico provides access to professional careers in higher education to indigenous populations (Despagne, 2013). These universities also support community development by including indigenous language and culture classes in their curricula, as well as offering bachelor degrees to address the specific needs of indigenous communities.

These efforts by indigenous institutions should be celebrated, however the gender barriers that indigenous girls encounter throughout their educational path should also be recognized. If indigenous approaches to improve educational access and learning among indigenous groups do not differentiate gender, they risk not achieving effective and sustainable results.



Key Levers to Support of Maya Girls' Education

Current efforts to support indigenous education miss an important opportunity to address the education– al gaps experienced by indigenous girls in Mexico. To improve education for Maya girls specifically, it is essential to engage the levers that are available within the Maya community. As highlighted by this study, Maya parents play a significant role in their daughters' lives. As such, they must be engaged in the dialogue and decisions around their daughters' education at every step of the way.

For starters, findings suggest that Maya mothers' attitude toward education could significantly influence the success or academic failure of their girls. This is because it is the mother that provides the emotional support girls need to pursue their education. One of the girls explained, "My mom is the one that supports me the most because she wasn't able to study, as her family was very poor and they didn't have the means to support school expenses." Another mother said, "I wanted to go to school but my father didn't allow me. He said education was for boys only. Because of that I now support my daughter."

In Tihosuco, where patriarchy runs strong within the community, several girls mentioned that they receive more economic and emotional support from their mothers and extended family, as some of the fathers in this village are reluctant to educate a girl. One of the mothers explained that fathers believe women should not obtain higher education because they will provide for their husbands, and it is the responsibility of men to provide for the family. "If a girl studies it only makes her future husband irresponsible, since she starts paying for all the family expenses," she said. In other cases, fathers lack emotional support and are often absent from family life because they work outside the community (either in Merida city or in Cancún). One girl mentioned during the interviews, "I only see my dad on the weekend, but he's very tired, as he has to travel to work in constructions to support us."

In thinking about the emotional support provided by Maya parents, in communities further away from cities, it is actually the extended family rather than the nuclear family that plays a significant role in Maya community life. In remote Maya communities, relatives usually live nearby, building their homes on the same plot of land as their parents or in-laws, or living within walking distance. In this case, the responsibility of raising children not only falls on the parents but also on other members of the family. The extended family thus represents an invaluable support system if leveraged in favor of girls' education.

Finally, female role models should not be overlooked as a key lever for promoting Maya girls' education. Girls in the study mentioned their desire to be like the female figures that are close to them. In Tihosuco, for example, girls mentioned they would like to follow the steps of their sisters. About half of them work in Cancún and the Riviera Maya as waitresses or other low-paying tourism hospitality jobs while the other half are teachers. Because girls aspire to be what they can see, Maya girls need more female role models with academic degrees. They currently observe and desire to be similar to their mothers, female church leaders, teachers, and sisters, which determine the decisions they will make in the future.

Recommendations: A Pathway Forward for Maya Girls' Education

The evidence from this study demonstrates the specific needs and concerns Maya girls and their parents have about education. For example, parents are concerned about the well-being of their daugh-ters who must travel to cities if they want to obtain higher levels of education. Girls want to be close to their families and friends, but they also want to continue studying.

Taking into account the barriers to education, perceptions of the value of education, and key levers of support for Maya girls' education, the following recommendations should be taken up by the Secretariat of Public Education (SEP); the federal, state, and municipal governments; and civil society in Mexico. These recommendations are presented first to the educational system-level, followed by civil society (including community leaders).

EDUCATIONAL SYSTEM-LEVEL

Over the last few years, the National Education System in Mexico has implemented a large number of innovations. In order to see progress for indigenous populations, the specific actions suggested below must be undertaken.

1. Ensure that the curricula are inclusive of indigenous populations

Indigenous practices emphasize learning through observation and storytelling, and more recently, writing.³ Likewise, the use of indigenous language in the learning process is essential. Thus, it is necessary to include in the curricula educational practices that encourage the use of Maya language, customs, and traditions in the classroom⁴ so that all children have an opportunity to learn in a way that is culturally relevant to them.

Research focused on bilingual education with an intercultural approach shows that bilingual education allows for a gradual acquisition of Spanish without losing abilities in the mother tongue (Stavenhagen, 2015; De Guevara, Pacheco & Hernandez, 2012; Benson & Wong, 2017). However, based on interviews with parents, Mexican classrooms must move toward a capacity building approach intent on preparing indigenous youth to live in a globalized world. In the case of Maya communities in southern Mexico, this would mean Maya, Spanish, and English language instruction coexist in the classroom to foster and expand indigenous girls' competence and social capital, with more connections inside their communities, cities, and the world.

It is also necessary to encourage a sense of pride in girls about who they are. Inclusivity appreciates all cultures. Thus, curricula and education practices should account for culture in the classroom, whether it is through examples, activities, or other approaches. Consequently, when these girls move to cities to pursue university studies, they will value who they are and where they come from, which will, in turn, reinforce a sense of belonging and engagement to their communities.

2. Select and train teachers to better support indigenous children, especially girls, in the classroom

It is critically important to ensure that teachers who work in rural indigenous villages demonstrate a real commitment to their profession and the students they serve. Young, inexperienced teachers are commonly assigned to remote and isolated communities. They also often see their location as a temporary stepping-stone to a better job in a city and are therefore rarely interested in the professional future of Maya girls. Unfortunately, as the evidence from this research demonstrated, some of them are not only uninterested in the academic future of Maya girls but also abuse them verbally and physically.

Therefore, it is necessary to improve the selection of teachers who work in indigenous communities and ensure that they respect indigenous customs and traditions. Preference should be given to indigenous teachers who have family ties inside the communities, as they speak the local language and understand firsthand the challenges that come with being a part of an indigenous population in Mexico. Teachers with an indigenous background will more likely be empathetic and understanding toward indigenous students.

Indigenous and non-indigenous teachers who are hired to work with indigenous communities should have a probation period of three years in order to learn the local language. They should have all the

³ For further information, consult the work done by Prof. Hilario Poot Cahun and Nelsy Cituk in: Poot, H. & Cituk, N. (2015). "Nojnajil xook yéetel jultuukulil intercultural: U asab ma'alob chíikulil ti 'ma'alob ch'iijil yéetel kuxtalil", pp. 26-38 in Osorio, M. (ed.) Memoirs of the Colloquium on Indigenous Education Mexico-Canada, as part of the International Day of Mother Tongues. Mexico: UIMQRoo.

⁴ These educational practices have proven to be effective with Indigenous children (NIEA, 2017).

institutional support to achieve this goal, taking indigenous language classes within working hours at no cost to the teacher. This will open new channels of communication with their indigenous students, which will also facilitate their integration to the rural communities.

3. Expand online learning in indigenous communities

Although most of the girls participating in this study wanted to continue living in their communities, academic development and professional expectations means they move to urban centers. Meanwhile, parents are concerned for their daughters' safety and well-being. Of special interest is the case of Tihosuco, where the girls expressed feeling protected in their villages and described cities as dangerous places. These girls have heard stories of discrimination and harsh living conditions experienced by relatives working in the tourist resorts in the state of Quintana Roo.

To address the barriers of having higher learning institutions located in urban centers, one approach is to expand online learning in indigenous communities. Studies show that emerging teaching practices include online education, use of communication technologies, and other virtual media (Millions Learning Case Studies, 2016; Global Development Learning Network, 2017). In fact, these practices already have benefited indigenous populations living in remote locations in Latin America and other parts of the world (Contact North, 2016, Cruz, Goulart, Kwauk & Perlman, 2016; Perlman & Kwauk, 2016). In this sense, it is necessary to encourage the use of free online learning, especially in isolated communities with high rates of poverty, to allow indigenous girls to attend school in their own context. This will enable them to reaffirm their indigenous identity and achieve greater cognitive and emotional development before moving outside their communities to pursue university degrees.

The Mexican government understands the importance of online learning now and for the future. However, major investments are needed to connect isolated villages. Another hurdle my research suggests: indigenous communities view the internet and new communication technologies as a distraction and a threat to local customs. As a result, they overlook the potential benefits that these digital tools could bring to improve the educational access and learning outcomes of indigenous girls.

Thus, the government should engage in communications campaigns to promote awareness and persuade people of the educational benefits of the internet. The federal government, with the support of local governments and community leaders, should provide the infrastructure for the campaigns. Key messages should indicate how online education can promote the active participation of indigenous girls, where they could discuss themes of gender equity, cultural identity, and human rights. These classes should be in their mother tongue, the Maya language.

4. Establish effective mechanisms to report incidences of abuse toward indigenous girls

In Mexico, 6 of 10 indigenous women have experienced violence (CDI, 2014). This study confirms that Maya girls face various forms of abuse and mistreatment in the classroom, both their classmates and teachers. Undoubtedly, this impedes their academic and emotional development. Male rural teachers taking sexual advantage of underage Maya girls. Some teachers only stay in communities for a short period of time before moving to a less isolated village; therefore, they often do not have to face any social consequences for their actions. Furthermore, the majority of these abuses are not reported to family members, local, or school authorities due to the shame and the social stigma that these actions entail for the victims (De Guevara, Pacheco & Hernandez, 2012; Sperling, Winthrop & Kwauk, 2016). These injustices leave the girls with severe emotional distress and undermine their possibilities to achieve academic and social development.

It is necessary to open alternative channels of communication to reveal and stop these harmful situations. For example, the Secretariat of Public Education should develop campaigns inside the schools and communities to create awareness about what is and what is not acceptable in a teacher-student relationship. It is vital to involve a trusted figure within the school a social worker, for instance. This person should be a someone the girls can relate to and be able to express what they are going through. Evidence shows that a social worker's support can improve the emotional and psychological distress experienced by girls who suffered gender-based sexual violence (Okudi, 2016). Similarly, it is necessary to reinforce commissions formed by girls, parents, and school and local authorities within the same schools to report these incidents to education and government authorities.

CIVIL SOCIETY

The involvement and support of civil society is as important as the efforts made by the Mexican government. Without the participation and buy-in of the beneficiaries, any program or public policy will not be completely effective. From the findings of this research, it was found that mothers and other inspirational female role figures could positively influence the behavior of indigenous Maya girls to achieve higher levels of schooling.

1. Influence girls through indigenous female role models

One of the main findings in this research is the need to provide Maya girls and their parents a reference of a successful and resilient Maya woman. As the empirical evidence from this study demonstrates, girls are more likely to develop an interest in certain professions if they can see women they know living a fulfilling life in that job. Therefore, it is necessary to make visible the experience of accomplished Maya women who know from their own experience the challenges that girls will encounter. Their work as mentors can provide a model for Maya girls and assist them in their professional development.

Another action to consider is facilitating conversations among Maya university students and younger Maya girls who are still studying in their villages. This would create peer-to-peer relationships, opportunities to openly discuss key steps and challenges, and help girls to build their self-confidence and decide their professional future. These actions could be implemented as a way to give back to their own indigenous group for scholarships received, since it is important for them to develop a sense of social responsibility for their involvement in governmental support programs. These conversations will benefit both groups of girls, as research has shown that one of the ways to increase one's sense of worth is to help someone else (Radin, 1975).

2. Reinforce the participation of mothers in school activities

According to this study, Maya mothers are the main source of emotional support in the educational development of their girls. But indigenous mothers who do not speak Spanish are often relegated to the background and unheard in school activities. Therefore, it is recommended that civil society actors help amplify their voices and reinforce their participation in school meetings and activities. Then, as active members of the school community, mothers can hold teachers more accountable for the quality of education and the treatment their daughters receive.

Conclusion

These recommendations are based on the conversations with girls and parents in the Maya communities of the Yucatán Peninsula with the intention to improve learning opportunities for indigenous girls. Although the opinions expressed refer to this particular group, they could be applied across similar contexts with other indigenous groups.

The reinforcement of indigenous identity is a vital point in advancing the educational inclusion of Maya girls in a sustainable and successful way. Strengthening Maya identity and free expression in the mother tongue translates into higher likelihoods that the girl will achieve outstanding academic results. $^{\scriptscriptstyle 5}$

The New Education Model in Mexico seeks to reduce the race gap between indigenous and non-indigenous students that currently persists in public education—especially prevalent for girls living in poverty and rural isolation. The results of these educational programs will not be fully achieved without the active participation of indigenous communities. Therefore, it is necessary to hear them, respect them, and involve them as participative actors to improve the educational outcomes of indigenous Maya girls.

⁵ For further information, consult the work done by Salvador Castro and the Chicano Movement in California, U.S., to promote the strengthening of identity, free expression in Spanish of Mexican students in the classroom, and encourage a greater number of students of Mexican origin to attend U.S. universities. Also, the research of Jane Addams, who found a positive relation between preserving cultural identity and educational outcomes of immigrant children.

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Appendix 1: Research Design and Methodology

This study employs a qualitative approach aimed at promoting dialogue within the community, and was developed with an advocacy/participatory approach (Creswell, 2014) based on Freire's (1974) theoretical contributions of critical pedagogy and the Jesuit perspective of social justice (Sobrino, 2003, Social Justice and Ecology Secretariat, 2014). Under this specific approach, the participation and dialogue with indigenous populations creates awareness among the participants on how to overcome life challenges they have faced and build knowledge to incentivize personal and communitarian growth. The qualitative methodology of social science research also allows for conversations with the populations in their own environment, enabling participation in the research as active members.

Specifically, the study adopted an ethnographic approach to gather participants' narratives and individual case studies. Ethnography is a resource used mostly in the interaction between groups, and takes the cultural differences that might have occurred in the development of the research into account (Creswell, 2014). The research tools utilized here included observation, semi-structured interviews, in-depth interviews, and desk research for review-ing related documents and official data.

This research includes the perspectives on girls' education from three Maya communities as case studies. Case studies allow the researcher to obtain information and findings from a specific context. Due to the specificity of the research, the results should not be generalized, since they refer to a delimited group. However, under similar conditions, this knowledge could serve as a reference for future research.

The girls who participated in this study were enrolled at primary, secondary, and tertiary level in the national educational system in Mexico. From the three communities highlighted below, four girls participated at each level (i.e., 12 girls total), along with 12 fathers and 12 mothers.

The three Maya communities were chosen according to their characteristics to compare the attitudes and perspectives of Maya populations in diverse settings through the Yucatán peninsula. They include:

Motul, Yucatán, a Maya community close to the city of Mérida (26 miles/42 km) and influenced by urban life practices. The Maya language is rarely spoken, but traditions and customs are still practiced to an extent. In this community, it is common for girls to travel to the closest main urban center, which is Mérida, to continue their university studies. Due to the proximity to their community, they often travel during the morning and return the same day after school. The closeness to Mérida allows a high percentage of girls to aspire for higher education. However, economic constraints are present and were mentioned emphatically by girls and parents during this research, which represents an obstacle to their educational progress.

Izamal, Yucatán, a Maya community where girls have demonstrated outstanding academic results in comparison to students from other Maya communities in the region. This community has a strong religious component: it is known as a place of veneration of the Virgin of the Immaculate Conception from the Catholic Church and was visited by Pope John Paul II in 1993. In 2002, Izamal was chosen as a magical village, an initiative led by Mexico's Secretariat of Tourism (SECTUR) to attract visitors. In this community, Maya and Spanish languages are commonly spoken.

Tihosuco, Quintana Roo, a community with deeply rooted Maya traditions. This village is of special interest in Maya culture studies since it was the meeting point of Maya leaders and initiators of the Guerra de Castas (1847). This was where a resistance Maya movement against the abuse suffered at the hands of the Spaniards, the Creoles, and the Mestizos, who perceived the Mayas as an inferior race and who generally used them as their servants, was based. The Maya language is the predominant form of communication. Girls who want to pursue university degrees need to leave the community since the universities are located far away. This affects the opportunities they have to achieve higher education, due to the remoteness in the lack of economic means to support their travel and lodging.

We encountered some limitations during field research, among which an initial resistance of fathers to participate in the interview process. Although girls and their mothers participated enthusiastically and openly, fathers were hesitant at the beginning of this study. Because of this, the presence of the local catholic⁶ priests to persuade the fathers to participate helped achieve the results presented.

⁶ In Mexico 83 percent of the population is catholic (INEGI, 2010). However, in Maya communities the celebration of rituals of Maya culture and catholic religion are often mixed, which contributes to the prevalence of their traditions and community union.

Appendix 2: Questionnaires

SEMI-STRUCTURED QUESTIONNAIRE FOR GIRLS

1. How does education prepare you for life?

2. Do you think formal education is necessary to lead a successful life in your community?

3. Do you imagine yourself living in the community in the future? If not, where?

4. Who supports you economically to attend school?

5. Who supports you emotionally to attend school?

6. Why do you think s/he does it?

7. Between the university and marriage, which idea is more appealing to you? Why?

8. What's an unfulfilled life for you?

9. What does having a successful life mean to you?

10. Describe a successful woman:

11. Describe a girlfriend you consider to be success-ful:

12. Describe some of the challenges you have or have had to face in order to attend school and receive education:

13. Please share your aspiration and dreams:

14. What do you have to do in order to achieve this dream/aspiration?

- 15. Please describe your family:
- 16 Do you have brothers and sisters?
- 17. How many?
- 18. How old are they?
- 19. Have they finished/dropped out of school?
- 20. What are they doing?

SEMI-STRUCTURED QUESTIONNAIRE FOR PARENTS

1. Do you think education adequately prepare students for a successful life?

2. What services are available in your community to receive education?

3. How many sons and daughters under 18 do you have?

4. How many of them are in school?

5. If they are out of school, what are they doing?

6. In your opinion, which should be the maximum level of studies for women in your community (how many years if the concept level of studies it's not clear for the respondent):

7. What does having an unfulfilled life mean for you?

8. What means for you to have a successful life?

9. Describe a successful woman:

10. Does a Maya girl with college education have difficulties fulfilling expectations of being part of the Maya community?

11. What are the challenges Maya girls face to attend/or continue school?

12. How do you think education could contribute to the Maya way of life?

13. How do you see the future of Maya communities as the world changes?



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