

A GIRL WITH A BOOK: IMPROVING GIRLS' SECONDARY EDUCATION IN  
THE DEVELOPING WORLD

by

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A Girl with a Book: Improving Girls' Secondary Education in the Developing World

Thesis directed by Professor Jana Everett

### **ABSTRACT**

In many countries, particularly in the developing world, a large number of girls are receiving little or no formal education, in spite of all of the benefits that education can confer. Education has intrinsic value, as girls can experience a sense of agency and empowerment when they are able to achieve their educational goals. It is also important to human development, and there are tangible benefits to be gained from educating girls.

This study examines the effects of increased efforts to improve gender equality in education in the developing world. Specifically, I investigate many of the interventions that have been implemented for the purpose of improving girls' secondary education, and consider which have been the most effective, in terms of both numbers of girls in school and the quality of their educational experience. In evaluating quality, I specifically consider what ramifications the different strategies have for girls' capabilities as informed by Martha Nussbaum's conception of the capabilities approach.

The data come primarily from published papers and reports from a variety of countries, and also include a small amount of firsthand information that I collected from contacts that I met during recent travel in Uganda and Rwanda. Details from people who work in schools and in education-related NGOs in these countries, and who have seen up-close the effects of different interventions on girls' education, are utilized to add depth and personal

insights to the data from the published reports.

At the conclusion of the study, I make recommendations, with girls' capabilities in mind, about which interventions I think are the most beneficial and worth pursuing. Which strategies are the most effective at improving girls' access to schools and the experiences they have once they are there? Those that specifically address issues of quality, rather than just access, seem likely to have the most beneficial effects on girls' capabilities.

The form and content of this abstract are approved. I recommend its publication.

Approved: Jana Everett

## **DEDICATION**

For my husband, Eric. You've been here for me throughout all of this,  
and I could not have gotten it done without you. 愛しています.

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**ABBREVIATIONS**

BRIDGE	Broadening Regional Initiative for Developing Girls' Education
BRIGHT	Burkinabé Response to Improve Girls' Chances to Succeed
CCT	Conditional Cash Transfer
EFA	Education for All
EFA-FTI	Education for All-Fast Track Initiative
FFE	Food for Education
GBV	Gender-Based Violence
GEAC	Girls' Education Advisory Committees (in Ethiopia)
GER	Gross Enrollment Rate
GMR	Global Monitoring Report
GPI	Gender Parity Index
ICRW	International Center for Research on Women
MDG	Millennium Development Goal
MHM	Menstrual Hygiene Management
NGO	Non-Governmental Organization
THR	Take-Home Rations
UCT	Unconditional Cash Transfer
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNGEI	United Nations Girls' Education Initiative
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education



## **CHAPTER I**

### **INTRODUCTION**

In many countries, particularly in the developing world, a large number of girls are receiving little or no formal education. This is occurring in spite of the fact that educating girls is vital for a variety of reasons. It benefits the girls, their families, their countries, and society in general. Education has intrinsic value, as girls can experience a sense of agency and empowerment when they are able to achieve their educational goals. Additionally, there are tangible benefits to be gained from educating girls. The United Nations has asserted that education “is especially significant for girls and women... because education is an entry point to other opportunities, [and] also because the educational achievements of women can have ripple effects within the family and across generations” (UNFPA, n.d.). Furthermore, “[i]nvesting in girls' education is one of the most effective ways to reduce poverty” (UNFPA, n.d.). More educated women tend to marry later and have fewer, healthier children; they are also more likely to earn money for the household, and to send their children to school (UNFPA, n.d.).

Education is also an important aspect of human development, as asserted by Amartya Sen and Martha Nussbaum in their capabilities approach, which was developed as a framework to assess human development. Many of the predominant approaches to development tend to focus on “economic growth as an indicator of a nation’s quality of life” (Nussbaum, 2003, p. 33), and view people as human capital, their value tied to the part they play in improving a country’s economic position. The capabilities approach, on the other hand, emphasizes “what people are

actually able to do and to be” (Nussbaum, 2003, p. 33). According to Sen (1999), “ [t]he perspective of human capability focuses... on the ability—the substantive freedom—of people to lead the lives they have reason to value and to enhance the real choices they have” (p. 293). Educating girls is valuable for many reasons, and the capabilities approach considers the girls’ agency and freedom to choose their own paths at least as important as the economic and other pragmatic effects of having better-educated girls and women.

In some parts of the world, girls risk their safety, their freedom, or even their lives in order to go to school. Many know the story of Malala Yousafzai, the Pakistani teenager who, on her way home from school one day in 2012, was shot by the Taliban because she had been speaking up for girls’ education. In 2014, 276 girls were kidnapped from their boarding school in northern Nigeria by Boko Haram, a terrorist group that opposes Western education, especially for girls (Pearson, 2014). While these are extreme examples of the risks some families will take in order to get their girls educated, they also serve to illustrate the importance that so many place on educating their children. In her speech at the United Nations in 2013, Malala Yousafzai said, “We call upon all governments to ensure free, compulsory education all over the world for every child... We call upon the developed nations to support the expansion of education opportunities for girls in the developing world... We cannot all succeed when half of us are held back... Education is the only solution” (*The Independent*, 2013). In remarks made not long after Malala was attacked, Ban Ki-Moon, the Secretary General of the United Nations, commented on how difficult it can be for girls to get an education, saying, “[t]he terrorists showed

what frightens them most: a girl with a book. Nowhere in the world should it be an act of bravery for a young girl to go to school.” (UN, 2012).

Globally, about 31 million primary-school-age girls are out of school, and in some regions of the world, nearly two-thirds of the girls who are out of school are expected to *never* attend school (UNICEF, 2014a). Because educating girls is so valuable, and because of the recognition that all people deserve the opportunity to get an education, governments, international organizations, and development agencies have made education in general, and girls’ education in particular, a priority. The governments of many developing countries have endeavored to improve educational opportunities for their children, while the United Nations and numerous other organizations have committed to making schooling more accessible and beneficial for girls everywhere. Myriad strategies have been implemented in order to reach these goals, but more information is needed to determine what kinds of programs have the intended effects, and which give “the most bang for the buck.” It is crucial to determine what approaches are bearing the most fruit in the quest to achieve universal education for all children, as well as the best ways of improving girls’ education specifically, with regard to both the number of girls being educated and gender equality in schools.

### **Statement of the Question**

The United Nations undertook the Millennium Development Goals (MDGs), which address issues of poverty, health, education, women, and the environment, in order to eliminate extreme poverty and improve the lives of the people in developing countries. More specifically, MDG2 was “Achieve universal primary education,” and MDG3 was “Promote gender equality and

empower women”, and the UN proclaimed that the first target of MDG3 (Target 3.A) was to achieve gender parity in all levels of education (United Nations, n.d.). Most countries have made good progress towards these goals, and it appears that some countries have successfully achieved the education and gender-related Millennium Development Goals, although many more countries have not (United Nations, 2015). There are still tens of millions of children who are missing out on school, 55 percent of whom are girls (United Nations, 2015).

The measure that the MDGs have used to evaluate each country’s progress towards gender parity in education is the Gender Parity Index (GPI). The GPI is the ratio of the number of girls to boys in school. A GPI of 1 indicates that there is gender parity, while less than 1 means there are fewer girls than boys in school (UN Statistics Division, n.d.). Although gender parity is an important goal for many programs, it reflects only part of the picture, because it does not give any indication of how many children are in school overall, just the proportion of the children that are girls. The Gross Enrollment Rate (GER) gives this missing information, as it is the “number of pupils enrolled in a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education” (UN Statistics Division, n.d.). While achieving a GPI of 1 is valuable, if the GER is low, then there are still many children, of both genders, out of school. Other easily quantifiable gauges of programs’ effectiveness, or of the current situation, are things like average number of years of schooling that children and adults have completed, and adult literacy rates. However, all of

these types of data measure only the reach of educational programs, rather than their quality, which is one of the main criticisms of the MDGs.

Some scholars contend that the MDGs have focused too much on sheer numbers, to the exclusion of less quantifiable, but still important, objectives, such as the quality of the education, outcomes, and satisfaction with the educational experience. Unterhalter and North (2011) point out that “[g]ender parity in school enrollment... is not the same as gender equality” (p. 5), and assert that the MDGs do nothing to address issues of adult literacy or gender-based violence, and also fall short when it comes to employment, increasing women’s access to secondary and tertiary education, and women’s access to political power. Even the UN Secretary General notes that, “the narrow focus of Goal 3 fails to address such critical issues as violence against women, inequalities in the division of unpaid care work, women’s limited access to assets, violations of women’s and girls’ sexual and reproductive health and rights, and their unequal participation in private and public decision-making beyond national parliaments” (UN Economic and Social Council, 2013, p. 7).

In the quest for gender equality in education, it is important to consider more than simply the numbers of girls in school; the quality of the girls’ educational experiences should also be examined. However, important facets of education quality can be difficult to assess. Some measures that can be utilized to gauge the quality of instruction have numbers that can be attached to them, such as test scores or numbers of students promoted to the next grade level. School safety might be quantified using statistics about the number of incidents (of violence, bullying, etc.) occurring at a school, or textbook gender-sensitivity by assessing how many times males and females

are depicted in a variety of roles and settings. However, it is more challenging to measure things like school atmosphere, girls' or families' satisfaction with schools and teachers, outcomes, or overall quality of the education. Methods that could be used to assess these factors might include distributing questionnaires to find out what girls are doing after they leave school, conducting opinion surveys, or even having informal conversations with stakeholders. All of these approaches can aid in assessing, from various perspectives, how effective a program is.

The above methods could be used to evaluate individuals' opinions and outcomes. Additionally, the outcomes of girls' education can also be appraised using aggregate data from entire villages, cities, or countries. What difference does it make when girls are educated? Measures could include average age of marriage, birth rates, child mortality rates, employment levels, and income. Over long periods of time, the evolution of these data can indicate the effects that changes in girls' education are having, and how effective the strategies that have been implemented to improve educational quality have been.

This study examines the effects of increased efforts to improve gender equality in education in the developing world. Specifically, I investigate what kinds of interventions designed to improve girls' education have been undertaken in different locations, and which have been the most effective. I am particularly concerned with secondary education, rather than primary education, and while the number of girls in school is part of the story, I also examine other indicators of improvements in girls' education. Unfortunately, these types of qualitative aspects of girls' educational experiences have not garnered the amount of attention in the research as have studies that measure

data about participation numbers. What is being done to improve retention and completion rates among girls, and to encourage them to continue their studies? Are girls being afforded an educational experience that is of comparable quality to boys, and of good quality overall? How do the girls themselves perceive their school experiences? Are their educational experiences valuable in helping the girls to achieve their goals in life, whatever those goals may be? These are some of the questions that I explore in this study.

The value in this research is its contribution to the body of knowledge about how best to achieve improved educational opportunities, particularly for girls. Education has been recognized as a fundamental human right (as spelled out in the Universal Declaration of Human rights), just as food and shelter are (UN, n.d.). The positive effects of education are far-reaching, and can include improvements, for current and future generations, in health, poverty reduction, and global development. On an individual level, education can empower people—girls and boys, women and men alike—to achieve personal goals and become better citizens and better people, and possibly lead happier, more fulfilling lives.

I hope that my study will provide insight into the most useful ways of improving education, particularly secondary education for girls. The information learned here could be used to inform the activities of international NGOs and other organizations working to improve education in developing countries. This study might also contribute ideas for further and more in-depth exploration into various aspects of improving education in different places. As the international development community transitions

from the Millennium Development Goals to the Sustainable Development Goals, hopefully this and similar research will help to enable countries to meet these goals, and will help all people to get the education that is their right.

### **Literature Review**

Educating girls is beneficial for the girls and for society in general, yet globally, tens of millions of school-age children are out of school, and more than half of them are girls (Global Partnership for Education, 2014). According to the literature, there are advantages associated with improved girls' education, including improvements in health and economic development, as well as some disadvantages, such as reproducing social norms that value women less than men. The numerous obstacles that are preventing many girls from attending or remaining in school are also widely discussed by scholars. These barriers can include costs, concerns about safety and sanitation, constraints based on cultural and religious practices, and concerns about poor educational quality.

### **Benefits and Consequences**

Many scholars point out that improving girls' access to education will likely reap economic as well as health-related benefits for the girls and their families, their communities, and their countries. Abu-Ghaida and Klasen (2004) point out that improved education for girls leads to economic growth as well as reductions in fertility rates, child mortality, and undernutrition. Clarke (2011) asserts that “[g]irls' education is fundamental to the economic and social development of individuals, families, and nations” (p. 479). By the same token, failing to improve educational opportunities for girls has negative consequences for everyone. The girls lose out on opportunities to improve

their lives and their (future) children's lives and health, and their communities and countries bear the burdens of lost economic opportunities, as well as unrealized talent.

While the benefits of education are emphasized by many, some papers point out that there can be downsides as well. Education is empowering, but school is also where children are socialized, and where dominant norms are reinforced. Aikman and Rao (2012) and Ross et al. (2011) note that schools often serve to reproduce the traditional social values and gender hierarchies, socializing girls to behave in a manner that is considered appropriate. Additionally, Del Franco (2010) points out that for some girls in Bangladesh, additional years of education could entail tangible negative consequences, particularly for girls from poorer families. In this culture, generally, older girls require the payment of a higher dowry price than younger girls, so for some families, the cost of delaying marriage in order to keep their daughters in school is too great. Moreover, girls from poor families might have little choice but to marry a poor, illiterate man, and could effectively find themselves stuck in the position of being too educated to find a suitable husband. Iversen and Nyamakanga (2012) also note that parents in several African countries have expressed concern that keeping daughters in school would hinder their opportunities for marriage.

### **Barriers**

The literature discusses many barriers that are hampering efforts to educate girls, from financial issues to safety concerns to cultural constraints. For some families, the financial barriers and opportunity costs of sending their daughters to school are too great (Aikman and Unterhalter, 2007; Glick,

2008; Kane, 2004; Kavazanjian, 2010; Sika, 2011). Others keep their girls home because they are concerned about safety issues, on the journey to and from school as well as while the girls are at school (Aikman and Unterhalter, 2007; Burde & Linden, 2013; Chapman & Miske, 2008; Glick, 2008; Iversen & Nyamakanga, 2012; Kane, 2004; Kavazanjian, 2010). Some schools lack adequate sanitary facilities for girls, which cause many girls to miss school or drop out entirely because of menstruation (Glick, 2008; Iversen & Nyamakanga, 2012). In many countries, traditions regarding marriage and cultural practices that dictate that girls be separated from boys and men present further obstacles to girls' schooling (Glick, 2008; Kane, 2004; Kavazanjian, 2010; Sika, 2011). Finally, the quality of school materials and teachers can also impede girls' educational attainment (Clarke, 2011; Glick, 2008; Kane, 2004).

**Financial issues.** Financial barriers include the various fees associated with school attendance, as well as opportunity costs, and scholars discuss numerous factors associated with this. In many countries, the cost to send children to school can be high— there are school tuition fees; unofficial fees; costs of textbooks, uniforms, and supplies; as well as the price of transportation, food, and other costs. While some countries have abolished tuition fees for primary schools as part of the worldwide push towards universal free primary education, the same is not true nearly as often for secondary schools. These costs can make education prohibitively expensive for some families, especially where poverty is a pervasive problem. Kane (2004) points out that the costs of education pose a much greater financial burden for poor families than for rich ones, noting that “the disparity between richer and

poorer children in terms of educational participation is greater than disparities between urban and rural children...” (p. 66). She refers to research done in various countries that finds that, although wealthy families spend more money educating their children than do poor families, education costs consume a much greater percentage of poor families’ financial resources. An example given is Tanzania, where the cost to educate just one child can be one-fifth of a poor family’s total household income (Kane, 2004). Even when families manage to send their children to school for some amount of time, they are more likely to withdraw their daughters from school when money is tight. Sika (2011) notes that poor households that cannot withstand unexpected economic hardships are more susceptible to needing their children to drop out of school, and that “the likelihood for children, and most importantly girls, leaving school early increases with the increase in poverty levels” (pp. 31-32).

A further barrier to girls’ school attendance is opportunity costs. Many families rely on daughters to care for younger siblings or sick family members, do housework such as fetching water, and even sometimes work to earn wages for the household (Glick, 2008; Kavazanjian, 2010). Kane writes that “Girls in Africa and, in fact, in almost every region of the world work more than boys, regardless of whether they are in school” (p. 67), and points out that opportunity costs can often be greater for girls than boys, since girls are more likely to perform a greater share of necessary household chores. Glick (2008) notes that various different types of studies offer data showing that girls are more affected than boys by the need to perform household work and care for younger or sick siblings. Aikman and Unterhalter (2007) also point out that,

in both Africa and Asia, girls bear a greater share of the burden of household labor, citing in particular a study in Nepal and Bangladesh that determined that young girls often work ten hours a day.

In addition to childcare and other household chores, girls are frequently kept out of school because they are engaged in income-generating activities. Both Kane (2004) and Aikman and Unterhalter (2007) discuss the prevalence of girls in Africa earning money by working in markets and performing other business activities. Furthermore, “South Asia has the largest number of child labourers in the world... [G]irls are increasingly being employed, because they can be paid even less than boys. In India, estimates for Andhra Pradesh alone indicate that there are 150,000 children aged 7–14 engaged in seasonal agricultural work, 90 per cent of whom are girls” (p. 105). All of this work makes it extremely difficult for girls to attend school, and when they manage to do so, they don’t necessarily benefit very much because they are so exhausted. As Aikman and Unterhalter (2007) assert, “[t]he more children have to work, the lower the likelihood of their getting a good education” (p. 106).

Finally, there is one more cost associated with educating girls that families often consider, as discussed briefly by Lincove (2006). She asserts that not only are there greater opportunity costs to sending girls to school, but there are also lower financial benefits in the long run. Compared to her brothers, it is less likely that more years of education will help a girl obtain a better-paying job later, and even if she can earn more because of her schooling, that money will most likely benefit the girl’s future husband’s family, not her own family. This provides yet one more reason for many

families to assign a low priority to sending their daughters to school, especially when they also have sons.

**Safety and sanitation issues.** Matters pertaining to safety and sanitation include school bathrooms and other facilities, as well as school location, and the associated risks of harassment and violence at school or traveling between home and school. Aikman and Unterhalter (2007) note that “[g]irls are... vulnerable to abuse on the way to school, as well as at school” (p. 97). For some children, the distance from home to school is very far. Many authors cite parents’ refusal, or at least reluctance, to send girls to schools that they consider too far from home. Iversen and Nyamakanga (2012) point out that many girls are not attending schools because they are so far away, and other authors (Chapman & Miske, 2008; Glick, 2008; Kane, 2004) also make note that distance is a significant barrier to girls’ school participation. Burde and Linden (2013) discuss a specific example: in the Afghan province where they conducted their study, “only 29 percent of families live within 5 kilometers (km) of a primary school” (p. 28). The authors point out that the families in the villages they studied expressed that they wanted their sons and daughters to attend school, but that it was impossible to allow the girls to travel longer distances.

Distance can cause girls to not go to school for various reasons— the sheer distance itself; fear about being harassed or concerns for safety; and the opportunity costs of too much time spent in transit that is needed for other household activities (Kane 2004). While in some countries, the need to travel a long distance to school had a detrimental effect on both boys’ and girls’ participation, it was a much larger barrier for girls in other places. Younger

girls are considered too young to travel very far to school, and older girls face the fear of harassment as well as greater opportunity costs (Kane 2004). This obstacle can be particularly challenging for girls in secondary school, as there are often fewer secondary schools than primary schools, and they tend to be farther away. Kane (2004) points this out, and I observed it firsthand on a recent trip to Uganda, when I visited a village primary school in a rural area. I noticed how far the school was from some of the homes, and I asked a man that I knew from that village how far the children had to travel to get to secondary school. He said that it was a very long distance, that the secondary school was much farther away than the primary school. An educator in a different rural area told me that the secondary schools available to the children in their area were boarding schools, because the distance was too far to travel between school and home on a daily basis.

Safety is also an issue for many girls once they arrive at school, where they might have concerns about security, violence, and harassment. News of the 2014 abduction by Boko Haram of hundreds of girls from a school in northern Nigeria is well-known; Kavazanjian (2010), writing about girls' education in Afghanistan, comments that schools, teachers, and students "have become targets for terrorists" and that "[t]his fear of violence keeps many families from sending their girls to school" (p. 43). While the possibility of kidnappings and terrorism might not be very high in most places, other types of harassment and violence are common, and are often committed by outsiders allowed onto school grounds, other students, or even teachers. Aikman and Unterhalter (2007) assert that one significant reason that girls drop out of school is harassment by their male teachers. Kane (2004) notes

that there is research showing that sexual abuse by teachers, headmasters, students, and other men allowed on school grounds is widespread in numerous countries in Africa, and points out one story in particular of a headmaster who had caused numerous girls to drop out of school because he had raped them. Iversen and Nyamakanga (2012) have also found that violence and sexual abuse committed by teachers against students are extremely common, so much so that children in West African countries “have developed their own expressions for this such as ‘moyennes sexuellement transmissibles,’ meaning sexually transmitted grades...” (p. 38).

Bathrooms are another aspect of this type of barrier to girls’ education, for both sanitary and safety reasons. Because some schools lack separate toilets for girls, many who attend school will stop going once they reach puberty. Parents often consider it important for schools to provide separate girls’ bathrooms, according to Glick (2008), and Iversen and Nyamakanga (2012) assert that “...both girls and female teachers experience higher risks of harassment and abuse in schools with no separate latrines...” (p. 38).

**Cultural and religious practices.** There are certain cultural and religious customs that can make it more difficult for girls to attend school. Discrimination against females, as well as traditions of keeping men and women separated much of the time, can severely hinder girls’ educational opportunities. Kane (2004) points out that women in most African countries are discriminated against, either legally or customarily, and Sika (2011) comments that “[a] significant impediment to the realization of universal primary education in the Arab world lies in the subtle discriminatory practices against women and girls, which directly infringe on the attainment of their

right to basic education” (p. 33). Related to this issue is the custom of keeping males and females separated in most settings. Without girls’ schools, or a way to provide separate classes for girls and boys, some parents prefer to keep their daughters home. Kavazanjian (2010) asserts that “[i]f a girl does not conform to the traditional ideals of a secluded female and attends school in a public space, many families worry about the repercussions of challenging traditional norms” (p. 43).

Age can also be a factor, because parents will withdraw daughters from school once they reach a certain age. Combining this with longer distances to school in some places means that girls may only get a couple of years of schooling, according to Kane (2004). She gives an example of research in Eritrea that showed that, in some areas, both boys and girls typically started school later, around age eight, because they were not considered old enough to safely make the long trip to the nearest school until then. When this is combined with the tradition of withdrawing girls from school “at ten or eleven because they were considered to be of marriageable age and had to be secluded from men and boys” (p. 70), it means that girls in these places are getting very little education whatsoever.

A lack of female teachers contributes to the problem as well. Glick (2008) and Kavazanjian (2010) both point out that some parents will not allow their daughters to be taught by male teachers for religious or cultural reasons. Since in many countries there are often few female teachers, parents see no options for their girls to attend school. This is, of course, a self-perpetuating problem: girls who are not allowed to go to school are not going to grow up to become teachers because they are not educated. This means that

the next generation of girls will continue to be kept out of school because there are no female teachers, and the cycle continues.

Some cultures effectively discourage the education of girls because of traditions relating to marriage. Parents may decide not to send their daughters to school for very long because they worry that doing so could hinder the chances of arranging good marriages for the girls (Chapman & Miske, 2008; Kane, 2004). Aikman and Unterhalter (2007) point out that “[e]arly marriage and bride price are important factors in the social life of many African communities. In much of Sudan, for example, the more education a girl has, the lower her bride price, which creates significant opportunity costs for parents” (p. 97). Furthermore, the value of the costs of schooling and lost labor involved in educating girls may not help the parents in later years, when their daughters are married and often living elsewhere. Kane (2004) notes that many African cultures practice exogamy and patrilocal residence, which take girls away from their parents’ villages, traditions which mean that the parents will not likely benefit in the future from their daughters’ years of schooling. Combine this with “a shortage of employment opportunities for girls finishing school [and] discriminatory labor laws that guarantee poor outcomes for women who do work” (Kane, 2004, p. 63), and it is easy to see why some parents decide that educating their daughters does not provide enough benefits to justify the costs.

Finally, marriage and pregnancy can cause girls to leave school at an early age. The example of Eritrean girls being considered old enough to marry at age ten or eleven was mentioned above, and Nmadu, et al (2010) asserts that high dropout rates for primary school girls were most likely due to the

girls' getting married. According to the International Center for Research on Women (ICRW), one in nine girls in developing countries is married before the age of 15 (ICRW, 2015). Glick (2008) notes that many schools require that girls withdraw upon getting married or becoming pregnant, and Kane (2004) also points out that girls who are pregnant or who already have children are often barred from school, even when a country's laws have been changed to specifically allow these girls to attend.

**Issues regarding quality.** Many of the indicators that are used to evaluate improvements to girls' education focus solely on numbers—Gender Parity Index, enrollment rates, and other numerical values that tell only part of the picture. According to the literature, getting more girls into schools is important, but the quality of the education these girls receive is also a crucial piece of the puzzle in improving girls' education. Aikman and Unterhalter (2007) discuss what a quality education means, asserting that it includes curricula, materials, and instructional approaches, while Iversen and Nyamakanga (2012) stress that “[t]o ensure girls receive the empowering and transforming experience that education can offer, we must also look at girls' experiences in schools” (p. 35). The push towards universal primary education (UPE) has succeeded in getting more girls into schools, but quality can suffer when the higher numbers are not matched with more resources. Nishimura, et al (2009) discuss some of the quality issues that occurred after UPE policies were implemented in several African countries in the 1990s and 2000s. One of the concerns has been student-teacher ratios, which in some areas were more than 80-to-1.

Clarke (2011) claims that poor-quality education continues to be a problem in many countries, and both Glick (2008) and Kane (2004) proclaim the importance of quality educational experiences for girls. Kane (2004) suggests that school quality may have greater effects on girls than boys, and also on the decisions of girls' parents. According to Kane (2004), textbooks and materials that contain gender stereotypes and biases against women and use examples that are more relevant to boys than girls, as well as gender discrimination and unfavorable attitudes towards girls, can have negative effects on girls' achievement and attendance, and may even cause girls to drop out of school more than boys. Glick (2008) further notes that gender stereotyping in school curricula and textbooks, as well as teachers' attitudes toward girls, foster an atmosphere where girls are disadvantaged. While girls have benefited in recent years from increased access to educational opportunities, Clarke (2011) notes, learning outcomes have not kept pace, such that "[s]ignificant numbers of children are unable to read a single word after several years of schooling" (p. 488). Clarke concludes her study by asserting that "... it is imperative that the global community continue to focus on improving the educational experience of girls" (p. 490).

## Methodology

There are many dimensions to this issue, and in this study, I examine girls' education in a multi-faceted way. I attempt to look at the entire picture when investigating the strategies that are being employed in order to improve girls' education—the effects of various interventions on the numbers of girls attending school, remaining in school, and advancing to higher grade levels, as well as the effects on their educational achievement and the quality of their educational experiences. Numerical data, such as GPI and enrollment rates, are included [see Table 1], because the numbers do tell a part of the story.

However, there are other aspects of girls' education, beyond these numerical measurements, that are important as well. The MDGs have been criticized for their focus on quantity over quality, a concern that is noted in the UN Secretary General's report to the Commission on the Status of Women, which points out that the emphasis has been on enrollment numbers rather than educational excellence or learning outcomes (UN Economic and Social Council, 2013). Such overarching attention on enrollment numbers may have more of a detrimental than beneficial effect on education. Abu-Ghaida and Klasen (2004) point out that some countries' efforts to increase their enrollment rates could directly result in a drop in educational quality, as a result of larger class sizes and fewer resources per student.

Therefore, I have also tried to include as much data as I could find that pertains to educational *quality*. I hope to shed some light on what strategies are actually improving things like girls' retention and completion, learning outcomes, girls' perceptions of their educational experiences, and other elements that constitute the quality of girls' education in developing countries.

In order to uncover this kind of information, I have read and analyzed scholarly papers and reports from organizations that are working to improve girls' education in various developing countries. Numerous UN agencies, non-governmental organizations (NGOs), and governmental agencies are involved in this kind of work, and they, and scholars studying them, have produced many papers and reports detailing interventions and the results. I have compiled and categorized data from a wide variety of projects and countries, comparing the strategies that have been employed and the results they have had. Although it is impossible to examine each strategy in isolation, as they are nearly always employed in combination, the data do point to which strategies seem to be more and less effective under different conditions. In evaluating the various interventions, I utilize the lens of the capabilities approach, and try to consider which strategies seem to be the most effective at developing girls' capabilities.

In addition to gathering data from these reports, I have also collected first-hand information from some people who are doing this kind of work in East Africa. I traveled in Uganda and Rwanda, where I met some people who founded and others who work at schools and education-related NGOs. All of the people I met are working "on the ground" in girls' education, and so I asked them about their experiences, and their impressions of the best ways to improve girls' education. Although I was only able to talk with a handful of people, and therefore did not gather enough first-hand data to be broadly representative, the information that I learned adds depth and some interesting insights to my study.

The organization of this paper will proceed as follows: in chapter 2, I review the capabilities approach to human development. This chapter includes an overview of the fundamental ideas of the capabilities approach, a comparison of this approach to the human capital perspective, and a discussion of how the capabilities approach can be applied to assess different strategies used to improve girls' education. Chapter 3 examines the data that I have collected, from reports and from personal contacts, about strategies for improving girls' secondary education. Finally, chapter 4 includes my evaluation of the effectiveness of the different approaches with regard to the capabilities approach and my recommendations for the best way forward in the continuing effort to advance girls' secondary education in the developing world, as well as thoughts on opportunities for further research, and concluding remarks.

### **Conclusion**

Advancing the status of women worldwide by improving girls' education is an important and worthwhile goal for a variety of reasons. Evidence of the magnitude of this endeavor can be found on web pages and in reports from a host of UN agencies and other international and governmental organizations. Investing in girls' and women's education can reap myriad benefits, from poverty reduction and improved maternal and child health to enhanced personal agency, and the effects will be felt for generations to come.

It is incumbent upon all nations to strive towards better educational opportunities for everyone, particularly those in developing countries, and most especially the girls who do not have these chances currently. There are many ways to improve upon the current situation, and although programs

such as the MDGs and the EFA-FTI are not perfect, they serve a valuable purpose in the quest for better educational opportunities for girls around the world. Another such initiative, the UN Girls' Education Initiative (UNGEI), put forth a declaration on girls' education, which concludes: "We envision a world in which a special initiative for girls' education is no longer—a world in which... gender equality becomes a reality" (UNGEI, 2010).

My research adds to the conversation about girls' education improvement projects. By considering the results of this research, along with other studies, we can start to get a better picture of what has, and perhaps what has not, been effective in improving girls' education, in terms of the numbers of girls who are in school and especially regarding the quality of their educational experiences. This information can then inform future ideas about what avenues should be pursued in the quest for gender equality in education, particularly as the post-2015 development agenda, and the new Sustainable Development Goals (the follow-up to the Millennium Development Goals) are being finalized and implemented.

## CHAPTER II

### THE CAPABILITIES APPROACH

The capabilities approach (or capability approach) is a normative approach used to consider different aspects of human development. It was first articulated by economist Amartya Sen as an alternative way to conceptualize and evaluate development activities, and has been expanded upon by philosopher Martha Nussbaum. Rather than focusing on “economic growth as an indicator of a nation’s quality of life” (Nussbaum, 2003, p. 33), the capabilities approach takes a much broader view of development, looking at details such as poverty, inequality, social arrangements, and people’s well-being (Robeyns, 2003).

In this chapter, I explore the capabilities approach and its relationship to girls’ education. First, I discuss the fundamental ideas of the capabilities approach, and the contributions to this approach made by its two leading proponents, Amartya Sen and Martha Nussbaum. Then I compare the capabilities approach to a more common approach to education, the human capital approach. Finally, I apply the capabilities approach to girls’ education and consider how improvements in girls’ education can promote girls’ capabilities.

#### **Fundamentals of the Capabilities Approach**

The capabilities approach focuses on *human* development; in other words, not solely on resources, or income, or other economic measures, but rather on equality, justice, and quality of life (Robeyns, 2006a). Capability is the freedom and the ability to make well-informed choices about what kind of life one values, and to choose what kind of life to lead (Walker, 2005). An

individual's capabilities can be influenced by a wide array of factors, including financial resources, political practices, social or cultural practices and structures, traditions, and more. (Robeyns, 2003).

The fundamental ideas that make up the capability approach are those of capabilities and "functionings" (Sen, 2003). Functionings are a person's "beings and doings" (Robeyns, 2006a, p. 351), for example to be alive, to be healthy, to be well fed, to go to school, to take part in the community (Robeyns, 2006a; Sen, 2003). Capabilities are the various combinations of functionings that people have the actual ability to achieve; as Sen (1999) puts it, "Capability is thus a kind of freedom: the substantive freedom to achieve alternative functioning combinations (or, less formally put, the freedom to achieve various lifestyles)" (p. 75). Put another way, functionings are the things a person does, while capabilities are the things a person is free to do, whether she actually does them or not (Sen, 1999). Therefore, it is possible for people to have identical capabilities, and to end up with different achieved functionings, because they have made different choices.

Amartya Sen devised the capability approach in order to address shortcomings that he contended were inherent in other conceptions of development and social justice. The most commonly used approaches to development have tended to focus on easily quantifiable data such as GDP per capita. Sen asserted that individuals' capabilities deserve at least as much attention as economic indicators; therefore, the capabilities approach examines development in broader terms, considering what it means for individuals' freedom and agency. Capabilities are the things that a person is able to be and do given all of his or her life circumstances, or as Sen (1999)

puts it, “the substantive freedoms he or she enjoys to lead the kind of life he or she has reason to value” (p. 87).

Freedom is a crucial component of development, according to Sen. His capability approach accounts for this by examining not only what people have and what they make, but also what they are able to be and do. He asserts that “the capability approach gives a better account of the freedoms actually enjoyed by different people than can be obtained from looking merely at the holdings of primary goods. Primary goods are means to freedoms, whereas capabilities are expressions of freedoms themselves” (Sen, 2003, p. 48).

Sen’s capability approach has gained some followers over the years since he first introduced it, most notably Martha Nussbaum. Sen comes from a background in economics and international development, whereas “Nussbaum enters the capability approach from a perspective of moral-legal-political philosophy with the specific aim to argue for political principles that a government should guarantee all its citizens through its constitution” (Robeyns, 2003, p. 24). Nussbaum views the capability approach as a way to assert what people can and should demand from their governments, while Sen’s view of capabilities is wider and not focused on government interventions (Robeyns, 2003).

While both Sen and Nussbaum assert the importance of human capabilities, there are some differences in each scholar’s conception of the capabilities approach. One of the most notable differences between the two is their respective positions on whether or not there should exist a comprehensive list of core capabilities. Sen does not endorse a list of essential capabilities, believing that, “a fixed forever list of capabilities would deny the

possibility of progress in social understanding and also go against the productive role of public discussion, social agitation, and open debates” (Sen, 2008, p. 80). Nussbaum, on the other hand, not only believes that there can be a list of core capabilities, but has created one. The list consists of ten “Central Human Capabilities:”

1. Life—being able to live a normal-length life with some measure of quality.
2. Bodily health—being able to have good health, including adequate food and shelter.
3. Bodily integrity—being free from violence, free to move about at will, and free to choose one’s own sexual and reproductive options.
4. Senses, imagination, and thought—being able to imagine, think, and reason; having sufficient education, including literacy, numeracy, and basic science; having freedom of artistic and political expression, freedom of religion, and the freedom to enjoy one’s life experiences.
5. Emotions— being able to experience the full range of emotions and being free to develop emotional attachments to people and things.
6. Practical reason—being capable of critical thought and of deciding for oneself what constitutes a good life.
7. Affiliation—being free to interact with others in social or other contexts; being able to experience empathy; being treated with respect and dignity regardless of one’s gender, race, ethnicity,

national origin, caste, religion, or sexual orientation.

8. Other species—being able to have a healthy relationship with animals, plants, and nature.
9. Play—being able to take part in and enjoy recreational activities.
10. Control over one’s environment—being free to participate in political activities and make political choices; having equal property rights as others and being free from unwarranted intrusion into one’s property; and being free to work and be treated as a human being (Nussbaum, 2003, pp. 40-42).

Nussbaum (2003) considers these to be “central requirements of a life with dignity” (p. 40), and contends that “a society that does not guarantee these to all its citizens, at some appropriate threshold level, falls short of being a fully just society” (p. 40). Although she notes that her list is open to modification, she believes that there is value in specifying these core capabilities, for the purposes of measuring people’s quality of life and of guaranteeing political rights (Nussbaum, 2003).

These capabilities are important, and there are clearly capabilities in this list that are applicable to education. However, this perspective has not been employed by very many people to explain the importance of girls’ education. Development agencies, international organizations, governments, and others have tended to employ a much more common viewpoint, that of human capital. What are the primary tenets underlying these two approaches, and how do they explain the importance of girls’ education?

## **Two Different Development Approaches to Education**

Education is seen as important for numerous reasons, and it is considered to have both pragmatic and intrinsic value. Better-educated people can find better-paying jobs, which can also help them to improve their own lives and the lives of their family members, as well as playing a part in improving the economic positions of their countries. Education also empowers people to accomplish the things they hope to achieve in their lives, and it is considered a human right.

The most common view of why education is important is the human capital perspective; however, this approach is limited in how it assesses the importance of education, particularly for girls. The human capital approach regards the importance of education to be purely pragmatic; its value lies in what it allows people to do with it— for example, get a better job. The capabilities approach provides a more comprehensive perspective on the value of education, considering both the instrumental and intrinsic benefits of education. Comparing the capabilities approach with the human capital approach to development leads to different views of what should be accomplished with development activities, and why these activities are being undertaken. In this section, I will compare the capabilities approach to the human capital approach, and discuss how these approaches can be applied to (girls') education.

## **The Human Capital Approach**

One dominant view on why education is important to development is the human capital approach, which sees education as a means to an end. According to the human capital perspective, education is valuable because it helps people acquire skills and knowledge that can make them better workers, and can help improve the economic position of countries. This view is very common, providing the impetus for countries and international organizations to work to improve educational systems around the world. For example, the UN Millennium Development Goals were implemented largely because of the effect they would have on human capital in the developing world. According to the Millennium Project report, which was created to provide a concrete plan for achieving the MDGs, “The [Millennium Development] Goals are ends in themselves, but... they are also capital inputs—the means to a productive life, to economic growth, and to further development” (UN Millennium Project, 2005, p. 4).

According to Robeyns (2006b), viewing education through the lens of the human capital approach has some advantages. This perspective focuses on *people*, rather than solely on macroeconomic development and technology. Acquiring knowledge through education can aid people in improving their own personal financial situations, which can help them to survive and perhaps to have more comfortable lives. However, this model has a very narrow view of education, seeing it as valuable solely for the practical economic benefits that it can provide. “In human capital theory, as in the other parts of mainstream economics, human beings act for economic reasons *only*. That people might act for social, religious, moral, emotional, or other non-

economic reasons, cannot be accounted for by this theory” (Robeyns, 2006b, pp. 72-73).

Additionally, the human capital approach leads people to weigh the relative return on investment of different activities, which might lead to the conclusion that some educational investments would not yield a high enough “rate of return” to be worth investing in. For example, some might place a lower value on educating girls as compared to boys, because girls in many cultures are thought to be less likely than boys to realize significant economic benefits from education. This may lead people to see money spent on education as better spent on boys than girls. Nussbaum (2004) asserts that “... promoting economic growth is not a sufficient way to promote education for women. Development theorists who focus only on maximizing economic growth, assuming that growth alone will provide for other central human needs, are very likely to shortchange female education” (p. 328). In other cases, education might be considered less valuable an investment than other activities that lead to greater economic dividends. For example, Robeyns (2006b) cites one study of an NGO project in Pakistan that involved setting up women’s literacy classes. She comments that “[s]uch a female literacy project is a prime example of a project that would not be funded if it were evaluated... as a human capital investment only,” because it had “hardly any effects on women’s earnings because there is no local market for female employment” (p. 74). However, the project did have “fundamental transformative effects on the students” (p. 74) that would not have been achieved had economic benefit been the sole criterion used to decide whether or not to implement the project.

## **The Capabilities Approach**

The capabilities approach views education as both instrumentally and intrinsically important (Robeyns, 2006b), and so provides a valuable alternative to the human capital approach. According to the capabilities perspective, education is worthwhile because there is inherent value in learning things and becoming educated. It also has utilitarian value, because more education can provide practical benefits: it can lead to better opportunities for employment, increased knowledge about health, and access to information that is helpful in civic and legal matters. These things can, in turn, improve people's capabilities. Sen (1999) stresses that education is valuable for more than just its effect on human capital, writing,

If education makes a person more efficient in commodity production, then this is clearly an enhancement of human capital. This can add to the value of production in the economy and also to the income of the person who has been educated. But even with the same level of income, a person may benefit from education— in reading, communicating, arguing, in being able to choose in a more informed way, in being taken more seriously by others and so on. The benefits of education, thus, exceed its role as human capital in commodity production. The human-capability perspective would note— and value— these additional roles as well. (pp. 293-294)

Unlike with the human capital approach, a person applying the capabilities approach would find value in the women's literacy project mentioned above, because economic gains are not the only benefit that such education can impart. In cultures where girls and women are unlikely to ever hold paid

employment, or where they are routinely paid much less than men, taking a capabilities approach to the issue of education would still lead one to conclude that access to quality education for girls (and boys) must be a high priority because of education's inherent value.

### **Applying the Capabilities Approach to Girls' Education**

As has already been noted, educating girls is important for many different reasons. Girls' education is a worthwhile investment because of its beneficial effects on poverty, fertility rates, and health. However, looking at this issue specifically from a capabilities perspective yields some alternative views on why educating girls is important. Girls can develop a sense of agency and be personally empowered by education, in addition to realizing the pragmatic effects. Considering Nussbaum's list of ten essential human capabilities, which of these capabilities can improvements in girls' education promote?

Nearly all of Nussbaum's ten essential capabilities are applicable to education in some way or another. However, there are several that I believe are the most affected by improvements in girls' education, and these are the capabilities on which I intend to focus in this paper. They are:

- Senses, imagination, and thought
- Practical reason
- Control over one's environment
- Life
- Bodily health
- Bodily integrity

For many of these, the literacy skills that come from education play a part in

achieving the capability. There is also knowledge about many of these that can be learned in school—for example, how to eat in a healthy manner or how to access the political system. Finally, quality education leads people to develop critical thinking and reasoning skills, which are essential to several of these capabilities.

Before I elaborate on why I have chosen to discuss these six particular capabilities, I want to acknowledge that there are criticisms to be made about endorsing a single list of capabilities that is meant to be universally applied. Sen (2005, 2008) has expressed that he would prefer not to create such a list, instead asserting that each community should be able to create its own list through public dialog and debate, and even Nussbaum (2003) concedes that her list should be open to discussion and alteration by each community.

Although I am sensitive to the assertion that there should not be one universal list for everyone, I have chosen to make use of six of the capabilities from Nussbaum's list. I contend that each of the capabilities that I present here is applicable, at least in part if not entirely, within different cultural contexts.

Nussbaum (2003) argues (and proclaims that Sen does, as well) that “capabilities have intrinsic importance” (p. 47), and even Sen (2008) acknowledges that it is reasonable to delineate capabilities for specific purposes. If girls and women are to be treated equally to boys and men, with as much of a right to become educated and define their own lives, then these particular capabilities are fundamental.

The capability of senses, imagination, and thought is probably the most affected by education, as it is very much about being educated. Nussbaum (2003) describes this capability, in part, as “[b]eing able to use the senses, to

imagine, think, and reason—and to do these things in... a way informed and cultivated by an adequate education, including but by no means limited to, literacy and basic mathematical and scientific training” (p. 41). A person does not necessarily need to be educated in order to use their senses or their imagination, but learning about different things, learning how to engage in critical thought, and being able to read all open up doors to imagination and thoughts that might not otherwise happen. Along these same lines are the capabilities of practical reason and control over one’s environment. Nussbaum (2003) defines practical reason as “[b]eing able to form a conception of the good and to engage in critical reflection about the planning of one’s life” (p. 41). Without knowledge of different ideas about what might be considered “good,” it is difficult to form one’s own ideas about such things, and to reflect on how one’s own life fits into these notions. The capability of control over one’s environment includes both political and material (i.e. property and employment) rights and options. In order to realize this capability, one must possess knowledge of these rights and how to exercise them.

The capabilities of life and of bodily health can be influenced by education in several ways. First, the more someone knows about how to achieve good health, the better she may be able to make practical use of this knowledge, thereby living a healthier and potentially longer life. Reproductive health is part of bodily health, and again, schooling can be very beneficial in informing girls about their reproductive options and how to be healthy. Better education for girls is associated with improvements in both mothers’ and children’s health and mortality rates, as well as with improved reproductive choices (UNFPA, n.d.). Finally, better-educated people often have access to

better-paying jobs, which can, in turn, allow them to access better healthcare, nutrition, and housing, all of which comprise the capability of bodily health.

There are two different aspects of the bodily integrity capability that are related to education. The first is whether the education itself respects girls' bodily integrity; i.e. whether girls are safe and free from violence while attending school and while traveling to and from school. Violence against girls is not uncommon in many places, and as such, one of the barriers to girls' education is the concern for their safety, both during the journey between home and school and while at school. Addressing these safety issues may improve girls' enrollment rates in schools, not to mention their perceptions about the experience of education. Additionally, schools can directly address the topic of violence against women and educate girls (and boys) about their rights in relation to this subject. This kind of education approaches the bodily integrity capability from the other side, providing girls with information they need in order for them to have the capability of attending to their own bodily integrity.

Indeed, Nussbaum (2004) asserts that education and literacy allow girls and women to realize these different capabilities by accessing a whole host of skills and freedoms. Literacy, attained through education, gives women the ability to be independent and take care of themselves should the need arise (for example, if they want to leave an abusive relationship), to bargain within their families for better food and medical care, and to make informed decisions about their own health and reproduction. It allows women to participate more fully in the political process and be more knowledgeable about political issues and choices. The abilities to meet and join forces with

other women in order to work for political or labor rights, and to form social relationships, are greatly expanded for those who are literate, since information about such activities and groups is often disseminated through mail or e-mail. Literacy gives women access to the legal system without having to rely on help from others—for example, it is often necessary to fill out some paperwork in order to file a criminal complaint, and women who are not literate are not able to do this without assistance from someone who is. And finally, education can help girls and women to achieve self-respect. Nussbaum (2004) writes that education “is important... to mobility (through access to jobs and the political process), to health and life (through the connection to bodily integrity and exit options)—in short, to more or less all of the ‘capabilities’ that [she has] argued for as central political entitlements” (p. 335). Without education, girls and women are being left behind, excluded from activities and lacking many freedoms. Access to a quality education can enable women to achieve the capabilities that will help them to live meaningful, satisfying lives.

### **Conclusion**

While most people concerned with development agree that education is vital, there are competing views about why. The human capital perspective stresses the instrumental value of education and pragmatic outcomes. Because of its focus on maximizing economic growth through education, this approach would regard the education of people who are not likely to make a significant economic contribution to society, such as girls and women, or the disabled, as a waste of valuable resources.

The capabilities approach deems both the utilitarian and inherent

values of education important, and focuses on how education helps people to realize their capabilities (Robeyns, 2006b). Social justice is a key aspiration of the capabilities approach, and personal agency and freedom are essential components of this goal. Applying the capabilities approach to education requires that we consider the many levels of inequality that exist in society, and how to best address them to achieve similar levels of functionings for everyone (Unterhalter, 2003). Sen (2003) asserts the importance of education in providing people with the best opportunities to enhance their capabilities, stating “the ability to exercise freedom may, to a considerable extent, be directly dependent on the education we have received, and thus the development of the educational sector may have a foundational connection with the capability-based approach” (p. 55). Unterhalter, et al (2007) seem to agree, professing that “...at the heart of the notion of a capability is a conception that a person is able to develop a reasoned understanding of valued beings and doings... If an important normative goal is capability expansion, then developing education is a part of expanding the capacity to make valued choices in other spheres of life ” (p. 3).

## CHAPTER III

### DATA: STRATEGIES AND OUTCOMES

As I have already discussed, there is a wide variety of different barriers to girls' education. These impediments can be financial, linked to concerns about girls' safety, quality related, or about other issues. In the course of trying to get more girls into school and improve their educational experiences, many different strategies have been employed in order to address these barriers, with varying degrees of success. Some interventions have been designed to help girls in general, while others have been specifically targeted at girls from poorer families, and still others have been implemented with the intention of improving educational opportunities for both girls and boys. In this chapter, data from reports, scholarly papers, and other sources are examined in order to learn about the different strategies that have been utilized to try to improve girls' education and what effects those interventions have had. In addition to this literature, I collected a modest amount of first-hand data from six different contacts that I made in Uganda and Rwanda. All of these contacts work in some aspect of education, either in schools or at NGOs that are working to improve education in these countries.

It is very rare for a specific strategy to be the only one employed in a particular geographical area at any given time; generally, multiple actions are undertaken at the same time. Therefore, it is not reasonably possible to evaluate any particular strategy in isolation; rather, the data about how different strategies have been applied in different combinations must be analyzed to see what conclusions can be drawn from the available information. In addition, although I am focusing on how to improve girls'

*secondary* education, many, if not most, of the available data come from programs that have been implemented in *primary* schools, since that has been the focus of the majority of the international efforts to improve education thus far. I believe that it is generally possible to take this available information and apply it to secondary education, as much of it will still be relevant.

Since many of the barriers to girls' schooling are related in some way, I have grouped the strategies into categories. To address the financial barriers to girls' education, we have interventions such as eliminating school fees; offering cash transfers or scholarships; providing free books, uniforms, and school supplies; and providing free school-based meals and healthcare. Opportunity costs can also be considered a type of financial barrier, and strategies such as offering alternative class times or child care for the younger siblings and children of schoolgirls are discussed. Other barriers that must be addressed pertain to concerns regarding health and safety. The strategies that may be used to address these range from building schools closer to neighborhoods and villages, which improves safety by reducing the distance that girls must travel to school; addressing issues with safety in schools; building or improving schools' sanitary facilities; and menstrual hygiene management (MHM) activities for girls who have reached puberty. In addition, there are often cultural and religious issues that present as barriers to girls' education, and these can be addressed with interventions such as hiring more female teachers; providing separate classrooms or school times for girls only; and addressing such issues with parents and community leaders and members. Finally, poor quality can be a barrier to girls' school attendance,

and the strategies that can be employed to address this include improved training for teachers and administrators, and improved educational materials and curricula.

### **Addressing financial barriers**

Financial barriers are some of the most oft-cited reasons why parents aren't sending their children, girls in particular, to school. The cost of school tuition is prohibitive for some families, and even when tuition is affordable, or even free, there are often other fees that can put school out of reach financially for many girls. In addition to these direct costs, there are also opportunity costs that must be considered. The time that girls spend in school is time that they cannot be doing other work, such as fetching water, gathering wood, preparing food, caring for younger siblings, or working for wages. These opportunity costs can create more of a burden than the family can absorb without some kind of financial assistance. In order to address these financial barriers to girls' education, countries and organizations have come up with numerous interventions, from eliminating or helping with school fees to providing school-based feeding and healthcare programs.

#### **Eliminate school fees**

School fees are considered to be a significant barrier to school attendance that must be addressed, and I found this mentioned in the literature and also by many of the people from whom I personally collected data as well, who pointed out that fees were a considerable burden for many families trying to send their girls to school. In the push for universal primary education that has taken place over the past couple of decades, according to UNESCO (2015), most countries have worked to make primary schooling free for all students,

and many governments have eliminated fees for lower secondary schools as well. The abolition of school fees has been extremely effective at getting more students into school, particularly girls (UNESCO, 2015; Unterhalter et al., 2014). Countries such as Ethiopia, Ghana, Sri Lanka, and China have realized significant increases in enrollments by eliminating fees (Herz & Sperling, 2004; UNESCO, 2015), and in Burundi, eliminating fees “was associated with a sharp reduction in the percentage of children of primary school age that had never been to school” (UNESCO, 2015, p. 87). Uganda saw a 70% increase in enrollments in the years immediately following the implementation of free primary schools throughout the country (Herz & Sperling, 2004, p. 9), as well as decreases in dropouts. These results were especially strong for girls, and for poorer girls in particular, whose enrollment rates went from 46% to 82% (Herz & Sperling, 2004, p. 9), as well as for children living in rural areas of the country (UNESCO, 2015). In Benin, combining two interventions— the elimination of school fees for girls attending public primary schools, and community engagement activities— improved primary school GPI from 0.64 in 1999 to 0.89 in 2012 (UNESCO, 2015, p. 168). And girls’ enrollments in particular have improved in such places as Kenya, Malawi, Zambia, Tanzania, Uganda, and Timor-Leste (UNESCO, 2015).

Making schools more accessible to all by eliminating tuition fees is certainly a good start towards getting more girls into school and thus improving the GPI. However, such actions need to be implemented thoughtfully in order to achieve the intended results. While some countries were successful in increasing girls’ enrollments after these types of policies were enacted, others encountered some difficulties. For instance, the fee

eliminations were implemented quickly and with little advance preparation in Ethiopia, Kenya, and Malawi, which initially resulted in increasing boys' enrollments more than girls' (Unterhalter et al., 2014).

This strategy also comes with certain downsides. One common concern is that doing away with school fees often causes a sudden large increase in the number of students in schools, and school systems are rarely prepared for the influx. Average pupil-to-teacher ratios have increased dramatically; in Uganda, for example, they went from 35 students per class in 1995, before primary school fees were abolished, to 53 students per class in 1998, after the abolition of fees (Wiener, 2010, p. 1). In many places, this has resulted in huge classes, the hiring of (more) unqualified teachers, and a reduction in the quality of education.

### **Cash transfers, other financial incentives**

Another way of addressing the financial barriers to girls' education is through cash transfers or similar incentives. These generally take the form of conditional or unconditional cash transfers— money, typically modest amounts, that is paid to students or their families, and which is often targeted to girls. Conditional cash transfers (CCTs) involve payments that are made to girls or their families when certain specified conditions are met— generally maintaining good school attendance. Unconditional cash transfers (UCTs) work in a similar fashion, except without the attendance requirements or any other conditions. These cash payments can be used by the girls or their families to offset some of the costs of school, such as supplies, textbooks, transportation, or the opportunity costs incurred because the girls are in school instead of helping to earn income for the family.

There is a great deal of data to show that cash transfers are quite effective in increasing girls' school enrollments and attendance, particularly when they are targeted well, and they are considered by many to be an important strategy for getting more children into schools (UNESCO, 2015). CCT and UCT programs that have been in effect for a considerable period of time "are encouraging in that they show, with high-quality evidence, significant impacts on the accumulation of grades attained" (Unterhalter et al., 2014). Other research has concluded that cash transfers are generally effective at increasing enrollment and retention, particularly for poorer girls, and may even delay marriage for some (Bolton, 2014; Raynor & Wesson, 2006). As might be expected, much of the existing data indicate that conditional cash transfers seem to be more effective at producing the desired effects than unconditional cash transfers (UNESCO, 2015; Unterhalter et al., 2014).

Some examples of countries where cash transfers have been executed with some success are Kenya, Mexico, Brazil, Colombia, Nicaragua, Bangladesh, and Pakistan (Herz & Sperling, 2004). According to Haq and Haq (1998), a pilot program that was implemented in Bangladesh in the early 1990s yielded positive results, increasing girls' secondary enrollments from 7.9% to 14%, and decreasing dropout rates from 14.7% to 3.5% (as cited in Raynor & Wesson, 2006, p. 1). This CCT program involved modest monthly stipends that increased with each grade level attained, and were conditional upon minimum attendance rates and exam scores, and upon the girls remaining unmarried (Raynor & Wesson, 2006). Another CCT scheme in Cambodia that was targeted at all middle-school-age children yielded increases in enrollments of 22% for boys and 20% for girls, and decreased these children's probability of

working for pay by 12% and 9% for boys and girls respectively (Ferreira, Filmer, & Schady, 2009, p. 19). Further CCT programs increased enrollments among targeted girls in grades 6 through 8 by 11 to 32% in the Punjab province of Pakistan (Independent Evaluation Group, as cited in UNESCO, 2015, p. 168), and were even associated with improved reading comprehension in Malawi (Unterhalter et al., 2014).

## **Scholarships**

Providing scholarships for girls is yet another way to incentivize girls' school enrollment and offset the costs that families incur in sending girls to school. While many studies noted that scholarships were often effective ways to increase enrollments, there were also numerous complications cited. Scholarship and CCTs were both mentioned as helpful strategies for improving girls' enrollment and attendance in a variety of countries (Bolton, 2014; Herz & Sperling, 2004). Unterhalter et al (2014) noted that merit scholarships for grade 7 and 8 girls in Kenya improved attendance and learning outcomes, while Gambia used scholarship programs along with other interventions to reach parity for girls' primary school enrollments, and get much closer to parity in secondary schools, where the GPI is 0.91, according to the Ministry of Basic and Secondary Education, in collaboration with the Gambia National Commission for UNESCO (2014, p. 8). Cambodia helped to increase girls' enrollment by between 22% and 33% by utilizing scholarships aimed at easing the transition from primary to secondary school (Filmer & Schady, 2008; UNESCO, 2015), and a USAID-funded scholarship program in Sierra Leone "contributed to improved attendance, motivated girls to attend school the following year, and allowed parents of the older children to put off early marriage for some daughters" (Chapman & Mushlin, 2008, p. 465). However, another paper, which examined a variety of studies, asserted that "[e]vidence on the effectiveness and impact [of scholarship, stipend, and cash transfer programs] is mixed. Most programmes increase enrolments but the impact on learning is less clear" (Bolton, 2014, p. 1).

Although scholarship programs seem to be fairly effective at increasing the

numbers of girls in school, they are sometimes criticized for not being well-executed. In a Nepal program, the scholarships were too small to get the poorest families to send their daughters to school, as they were not enough to even cover costs (UNESCO, 2015), and that scholarship program in Sierra Leone was criticized for creating a “mini-system of ‘haves’ and ‘have-nots’ within the school” (Chapman & Mushlin, 2008, p. 466), because only some eligible girls were able to receive scholarships, while other, equally-deserving girls, did not, because there was not enough money to fund everyone (Chapman & Mushlin, 2008).

Other scholarship schemes have been criticized for failing to reach the neediest students, or for causing other inequities even as they helped some girls. Programs that are conditional upon superior performance in school can actually serve to decrease poorer girls’ opportunities, because often the high-performing girls come from the wealthier families. One study pointed out that, because of the way in which a particular scholarship program in Kenya was administered, recipients tended to be from more educated, advantaged households, rather than those who were the neediest, and asserted that merit-based scholarships seldom reached the students who probably needed them the most (Bolton, 2014). Elsewhere, it was pointed out that scholarships that help pay for girls’ fees at government schools can actually put them at a disadvantage by causing some families to send their sons to (better) private schools while their daughters received a lower-quality education at those government schools (UNESCO, 2015).

Further criticisms of scholarship programs relate to their expense and lack of sustainability, as well as their effect on non-recipients and on educational

quality. The program in Sierra Leone lasted for only for a few years, because once the funding from USAID ended, there was no way for the communities to generate the hundreds of thousands of dollars that were necessary to continue to support the scholarships. In addition, parents expressed the opinion that the long-term benefits of the program would be very limited, since only primary schooling was funded, and those girls would not be likely to continue on to attend secondary school (Chapman & Mushlin, 2008). That same program also had detrimental effects on the attendance and persistence of the girls who were not chosen to receive the scholarships, and even caused an increase in dropouts at one school (Chapman & Mushlin, 2008). A different program that was only for primary school students had a negative impact on grade progression, because the students would lose the scholarships if they advanced into secondary school (Bolton, 2014).

### **Free books, supplies, uniforms**

Tuition fees are not the only costs associated with school attendance. Even where fees have been abolished, there are usually still books, uniforms, and school supplies that families must purchase. These costs can add up quickly, and can be prohibitively expensive for many families. In places where textbooks are supplied by schools, there are often not enough to go around. This means that children have to share, and schools even lock the books up sometimes, causing parents to decide not to send their children to school at all (Herz & Sperling, 2004).

It is possible to address these barriers by offering free books and supplies to children in need. A study done in Peru learned that girls' enrollment rates were improved when textbooks were provided (Herz & Sperling, 2004), and

other research has shown that children's attendance and grade progression can be boosted, and their likelihood of dropping out reduced, by providing them with free school uniforms (UNESCO, 2015). Providing textbooks and other supplies can be combined with additional strategies to improve both school access and quality, as evidenced by studies in India and Burkina Faso (UNESCO, 2015; Unterhalter et al., 2014), though which interventions had the most impact cannot be determined. However, it is clear that providing free textbooks, uniforms, and supplies to girls can certainly have a positive impact on enrollment rates and GPI, and possibly even on learning outcomes.

### **School-based meals, healthcare**

Many girls, particularly those from poorer families, are not well-nourished. When meals are not provided by schools, it can be expensive and difficult for families to supply meals for their children to eat during school times. Some children have very long distances to travel to get to school, and will therefore go very long periods of time between meals if they have no food at school.

School-based feeding (often referred to as FFE, or food for education) programs address these problems by providing nutritious meals during school hours and/or food rations for children to take home. In addition to FFE schemes, some interventions involve dispensing healthcare in schools. These types of programs can improve attendance, since the children will not receive these benefits if they are not present in school.

School-based health and FFE programs can serve to counteract some of the indirect costs of education, thereby increasing enrollment and attendance rates (Herz & Sperling, 2004; UNESCO, 2015). Studies show that school FFE programs have increased enrollment by 6 to 26% in countries such as

Bangladesh, Burkina Faso, Chile, Jamaica, Laos, Peru, Philippines, and Uganda, and the effects were greater for girls. Other evidence “suggests that school feeding programme participants have consistently better enrolment and attendance than non-participants” (UNESCO, 2015, p. 89). Even take-home ration (THR) programs, in which students are sent home with several days’ or weeks’ worth of staple foods at one time, can be effective at improving the school attendance of participants. THR programs implemented in Burkina Faso and Bangladesh saw significant increases in enrollments and attendance, for girls or for all students (Alderman, Gilligan, & Lehrer, 2012), and a set of measures that included take-home rations was carried out in Burkina Faso, increasing enrollments by 20% for all children, and improving test scores as well (Unterhalter et al., 2014). As this research demonstrated, learning outcomes can also be enhanced by such programs; when undernourished students receive nutritious food at school, those students’ learning and cognitive development can be improved (Alderman et al., 2012). Research that examined both types of FFE initiatives found that they improved school participation, lowered the average age of entry to primary school, and for boys at least, reduced grade repetition (Alderman et al., 2012). Positive impacts on both achievement and attendance can also be achieved with in-school healthcare initiatives, such as providing deworming pills (Unterhalter et al., 2014).

Although the benefits of these kinds of interventions are clear, there can also be some disadvantages to them. School feeding programs may not be very cost-effective (UNESCO, 2015). Overall average learning outcomes can be negatively affected by school feeding programs, because they can attract

students to schools who were not previously attending, causing classes to become more crowded. The new children often achieve lower test scores as well (Unterhalter et al., 2014). And while some of these programs have achieved significant improvements in girls' enrollment rates, others have not had much of an effect at all (Unterhalter et al., 2014). Finally, a study in Uganda showed that children who were in the last grades of primary school when the first data was collected were more likely to still be in primary school two years later, even though, by then, they should have advanced to secondary school. The authors concluded that the FFE program may have effectively discouraged these students from moving up to secondary school because doing so would mean they would lose the food benefits. It was suggested that FFE programs could be offered in secondary schools as well, in order to counter this outcome (Alderman et al., 2012).

### **Alternative class times**

Many girls are unable to attend school because they are needed to do other work at home— caring for younger siblings, fetching wood and water, cooking, even working for wages. These chores can take up many hours of the day, not leaving them with enough time to attend school. Alternative class times are one way to combat these kinds of opportunity costs associated with education. By starting very early in the morning and finishing classes while the day is still young, or alternately by holding classes later in the day, some girls who otherwise would not be able to attend may be able to do so. Although children who have to work before or after school may have difficulty finding time to study (Herz & Sperling, 2004), this strategy at least allows them to go to school, an opportunity that may otherwise not be open to them.

This tactic is being employed in both formal and informal school settings, with some success. India, Colombia, China, and Bangladesh, for example, have utilized flexible school schedules in different ways to increase enrollment and participation by girls. The program in Bangladesh, which was employed experimentally on a very small scale, was able to achieve even greater participation than expected. Sixty-three percent of the students at these schools were girls, and less than 1% of the students dropped out (Herz & Sperling, 2004).

Flexible scheduling can also be used to operate separate classes for girls and boys in cultures where it is not acceptable for them to be in classes together. When there is only one local school, girls may be excluded from education altogether. In parts of Pakistan, girls were able to attend school for the first time because this strategy was implemented at the request of parents. Boys attended school during morning sessions that ended at 2 p.m., and girls attended after the boys' classes ended. Combining alternative class times with the employment of female teachers increased the number of girls attending schools in the area (Herz & Sperling, 2004).

### **Child care**

Another opportunity cost associated with girls' going to school is child care. Many girls are needed at home to care for younger siblings; older girls, particularly those who are old enough to be in secondary school, may also have children of their own to look after. This presents a real barrier to these girls if they are trying to care for small children and go to school, as there may be nobody else who can take care of the children during school hours. By providing onsite child care for their young siblings and children, schools make

it possible for girls who have the responsibility of looking after young children to still attend school.

This particular intervention has not been researched as thoroughly as many of the others. However, there is some evidence pointing to the possibility that inexpensive or free child care may help some girls' ability to attend school. Studies in Kenya, India, and Nepal affirm this claim, finding that improvements in child care options boosted girls' enrollment and attendance rates, and, conversely, that increases in the cost of child care decreased girls' school attendance (Herz & Sperling, 2004). In the course of my own research in Uganda, providing daycare and preschool was suggested by an education NGO staffer as one useful strategy for improving girls' education there.

### **Addressing health and safety issues**

A lack of resources is not the only thing that is keeping girls from getting a good education. There are issues related to health and safety that pose additional barriers to girls' education. The distance to the nearest school, particularly when it comes to secondary schools, can be very long, sometimes even 10 miles or more (Hinton, 2010), and not all families have the ability to send their children to boarding schools. In some cultures, parents are unwilling to allow their daughters to travel more than a short distance from home, even to attend school, because of fears for the girls' safety or for their reputations within their community. Girls who are old enough to attend secondary school have reached the age in many countries where they are likely to attract unwanted attention from men, up to and including sexual violence. This can cause girls and their parents to avoid the risk by forgoing school for

the girls altogether. Even when girls make it to school, they are often confronted with a lack of available sanitation. Many schools need sufficient bathroom facilities for girls, which also need to be separate from boys' bathrooms.

### **Build schools closer to home**

Many schools, particularly secondary schools, are very far from where children live, sometimes an hour's walk or more. Parents are often much more reluctant to allow their daughters to travel long distances to school than they are to let their sons travel, for many reasons. Girls' safety, the possible appearance of some impropriety that can arise when girls travel far away by themselves for school, and the large amounts of time that girls are taken away from labor that they must do are all reasons why they often stop attending school. These issues are intensified when the journey to school is particularly long, because of the distance itself, and the amount of time that must be spent in transit, which increases the opportunity costs for families (UNICEF, 2014b).

Building more schools closer to where girls live is a common strategy that can address all of the facets of this hurdle. The proximity of schools to home has been shown to be more important for girls than boys (Unterhalter et al., 2014), and only a half-kilometer of additional travel can decrease a girl's likelihood of enrolling in school by 20% (UNICEF, 2014b). A UNESCO study in 2012 (cited in UNICEF, 2014b) looked at data from Nigeria, Malawi, Uganda, and Zambia, and found that distance to school is a considerable obstacle to girls' education, especially for girls in secondary school. The graphed results show that in general, gross attendance rates got lower the longer the distance

that girls had to travel, and dropped well below 20% once the distance exceeded about 5 km (UNICEF, 2014b, see graph, p. 4). Other evidence from Bangladesh, Burkina Faso, Egypt, Malaysia, India, and Indonesia, as well as multi-country studies, show that building schools close to home increases girls' enrollments (Dejaeghere & Lee, 2011; Herz & Sperling, 2004; Unterhalter et al., 2014). Studies in Afghanistan have shown that adding community schools in underserved areas can have a remarkable impact on enrollment and academic performance for all children, especially for girls (UNESCO, 2015; UNICEF, 2014b; Unterhalter et al., 2014). One program in northwestern Afghanistan that located formal schools in 31 villages recorded a 52% surge in enrollments, virtually eliminating the gender gap, and also increased test scores substantially. This study demonstrated that parents wanted both their sons and their daughters to receive an education, but conservative cultural norms prevented them from allowing girls to travel outside their villages for school (UNICEF, 2014b).

### **Provide adequate sanitation facilities**

Constructing sufficient sanitation facilities in schools so that girls (and female teachers) can have access to adequate bathrooms, separate from boys, may be a beneficial strategy for improving girls' school attendance. Girls may not feel comfortable using the same toilets that boys use, particularly when they are menstruating. Many schools do not have sufficient toilets to accommodate the number of children in school, and need to build not only more facilities, but separate bathrooms for boys and girls. However, the data regarding the effectiveness of this strategy is mixed. Some studies have indicated that it improves girls' school attendance, while others have not

found a statistically significant difference in the numbers after girls' toilets were constructed (UNESCO, 2015; Unterhalter et al., 2014).

Despite the lack of evidence to support the idea that providing separate bathrooms for girls is an effective intervention, some studies have asserted that this strategy *can* make a difference, and several of my contacts in Uganda and Rwanda echoed this view. When adding girls' bathrooms to schools is combined with other actions, they can help to make schools more girl-friendly, and this availability of safe, private latrines for girls and women can improve the retention of girl students, and of female teachers as well (UNICEF, 2014b). Herz and Sperling (2004) contend that girls' bathrooms are important, writing, "It appears that, especially as girls get older, having private latrine facilities in schools is critical, not just nice" (p. 63), and cite studies done across 30 African countries, as well as Pakistan, that show what a difference this can make. The research from Pakistan found that parents considered latrines for girls essential, and the inquiry that covered many countries in Africa revealed that most girls will skip school during menses unless there are private toilet facilities available for them to use (Herz & Sperling, 2004). In addition, two of the people that I contacted mentioned separate washrooms for girls as being important. One of my contacts, a school director in Rwanda, commented that without separate bathroom facilities, girls would often miss school during their periods, causing them to fall behind in their work, and possibly even contributing to their dropping out of school.

In India, schools that constructed latrines in the early 2000s found that girls' enrollment increased more so than boys', and the difference among adolescent girls was substantial (UNESCO, 2015). The BRIGHT Program in

Burkina Faso utilized numerous strategies, including providing separate latrines for girls and boys. While this program was successful in increasing girls' enrollments and test scores, it is impossible to determine which of the interventions may have had the most impact (Unterhalter et al., 2014). One valid point that was made in the literature noted that separate bathrooms were an important aspect of the overall quality of girls' educational experience, and were therefore beneficial, regardless of their impact on girls' achievement (UNESCO, 2015).

## **Menstrual hygiene management**

Menstrual hygiene management (MHM) consists of providing sanitary supplies for adolescent girls, as well as related health education. This has been a popular intervention, though the data is unclear as to whether it has a significant effect on girls' enrollment and attainment in school (Unterhalter et al., 2014). Like the provision of girls' bathrooms, however, many consider this to be an important activity. One UNGEI discussion paper contends that, “[a]lthough the literature is divided on the effect of menstruation on girls' absenteeism, there is no doubt that MHM remains a challenge for girls especially in the absence of adequate facilities” (UNICEF, 2014b, p. 5). This assertion was repeated by several of the contacts with whom I spoke in Uganda and Rwanda, including the head administrators at two different schools, and staff members at two NGOs that focus on improving education in Uganda. The provision of sanitary supplies, girls' washrooms, or health education was each mentioned by at least one of these women as being an important strategy in the overall quest to improve girls' education in developing countries.

Supplying girls with sanitary pads is often done in tandem with other activities as part of a larger overall program. For example, initiatives conducted in Gambia and in Ethiopia included the provision of sanitary supplies, along with other actions. Both programs achieved increased girls' enrollments, as well as other positive outcomes (Method et al., 2010; Ministry of Basic and Secondary Education in collaboration with the Gambia National Commission for UNESCO, 2014). In Ghana, researchers conducted a study with the specific intention of learning more about this type of intervention.

They found that girls who did not have access to sanitary pads generally chose to stay home during their periods, missing about three to five days of school per month on average. The girls who received sanitary pads and puberty education, as well as the girls who received only the education component, had significantly better school attendance than the control group, which received neither. However, this study was very small, and failed to determine whether the differences could be attributed to the sanitary pads, or if the education component was the sole cause of the improvements, since there was no group that received only pads (Montgomery, Ryus, Dolan, Dopson, & Scott, 2012). Because of this lack of definitive research in this area, it is uncertain how much impact interventions related to MHM actually have.

### **Addressing cultural and religious issues**

There are ways to make substantial improvements to girls' education while respecting local customs. Some of the interventions that have been devised to address cultural conventions and religious customs may also deliver additional benefits for girls, and for other people as well. By hiring more female teachers in areas where girls are not generally permitted to have male instructors, those girls can continue to attend school. They also get to know female role models who show them by example that women can have careers if they want to, and those women get to earn money to support themselves and their families. Getting parents and communities involved in school activities and decisions about school policies can help get women and men in the community on board with policies and programs that benefit girls (and boys), and this can have a ripple effect on how women in these communities are viewed. Community groups can also help to address local safety issues and

even combat some customs that are detrimental for girls, such as child marriage.

### **More female teachers**

There is considerable agreement among researchers, organizations working to improve education, and even educators themselves that female teachers are important to the educational landscape for a variety of reasons. In some conservative cultures, girls would not be allowed to attend school without them, as they are not allowed to have male teachers (Herz & Sperling, 2004; UNESCO, 2015). When the people in such cultures also happen to live in more rural or isolated areas, the barriers to girls' schooling can be even greater, because there may be only one school anywhere nearby. If there are no (or not enough) female teachers at the school, girls can lose out on any chance of attending. In countries where sexual harassment and even assault by male teachers is common, the presence of female teachers can also assuage parents' and girls' fears about safety in school (Herz & Sperling, 2004).

When schools hire women teachers, the number of girls enrolling in school will likely increase, and girls' academic performance may improve as well. There is evidence from a variety of studies done in countries in Africa, South Asia, and the Middle East that indicates that employing female teachers can boost girls' enrollments and attendance, improve their learning outcomes, and increase girls' progression into secondary schools (Herz & Sperling, 2004; UNESCO, 2015; Unterhalter et al., 2014), although other research indicates that student achievement may be influenced more by teachers' training than by their gender (UNESCO, 2015). One example where female teachers have likely had positive effects on girls' school performance can be found in

Tunisia. As female teachers have become more prevalent there in recent years, girls have raised both their average grades in school and their scores on primary school leaving examinations (UNESCO, 2015).

Finally, women teachers are needed to serve as role models for girls. This assertion comes up in the research, and I was told the same thing by several of my contacts. Herz and Sperling (2004) assert that “hiring female teachers... offers real advantages. Women teachers may encourage girls more, and they are often inspiring role models, especially where few other women work in the labor force” (p. 67). A woman working for an education NGO in Kampala with whom I spoke commented that female teachers can offer words of encouragement for girls, and serve as mentors and people to emulate. Both of the school directors that I contacted said things similar to this, underscoring the importance of girls having female teachers to look up to as role models, and seeing firsthand that there are career options that are open to women. One wrote a long and impassioned e-mail in which she emphasized that more women educators are needed, and the reasons why she thought so. Female teachers can act as role models to girl students, helping the girls to gain knowledge and self-confidence and to discover their own potential, and also reducing dropouts.

### **Parental and community involvement**

Outreach to parents and communities to raise awareness about the importance of girls' education, and to get their support and help with school-related projects, is one of the most cited strategies for improving girls' schooling, and may also be one of the most effective. This community engagement takes a variety of forms, such as disseminating information about

the merits of girls' education, forming mothers' clubs designed to accomplish a variety of endeavors, and combatting child marriage and gender-based violence. When adults in the community become invested in the neighborhood schools in these ways, and see how valuable they are for girls and for everyone, much can be accomplished.

UNESCO (2015) considers community outreach an important strategy in the quest to improve girls' education, and asserts that “[n]ational advocacy and community mobilization campaigns have been used... to change parental attitudes and build a groundswell of support for girls' education” (p. 167). One reason why such efforts are necessary is because in many communities, girls' education is not perceived as important, and can even be actively discouraged by some. Often it is seen as having one purpose: to prepare girls to be better wives (Dejaeghere & Lee, 2011). Community outreach efforts have been employed in order to counter these ideas, and to publicize the reasons why girls' schooling is valuable. Campaigns of this variety have been utilized in places such as Burkina Faso, Burundi, Ethiopia, Malawi, Tajikistan, Turkey, and Yemen to strengthen community support for, and involvement in, local education, and have been quite effective at building support for girls' education (Mizuno & Kobayashi, 2011; UNESCO, 2015). In Turkey, outreach efforts even included visits by state officials and teachers to girls' homes to persuade their families to send them to school (UNESCO, 2015).

An extensive program by the name of BRIDGE— Broadening Regional Initiative for Developing Girls' Education— was employed in selected communities in Yemen. The purpose of BRIDGE was to improve communities' dedication to their local schools and their girls' education.

Activities centered on getting parents, local leaders, and other community members actively involved in committees that then worked to improve their schools and to increase how many girls were attending school. Mothers were encouraged to participate in the committees, which then developed and implemented school improvement plans. The program seemed to have a significant positive impact on principals', teachers', and parents' attitudes towards issues of gender equality, and also resulted in a substantial increase in girls' enrollments (Mizuno & Kobayashi, 2011).

In Ethiopia, a similar effort was employed whereby Girls' Education Advisory Committees (GEACs) were organized. Training was provided to committee members, which included teachers, parents, and other stakeholders, on how to address girls' needs. The GEACs then held meetings with parents and community leaders to encourage girls' schooling and to develop plans to improve girls' participation. They dispensed supplies, which they funded by finding ways to generate income, to needy girls, and they also provided counseling, tutoring, and additional community services to help schoolgirls. The activities carried out by the GEACs resulted in improved girls' enrollment and retention, as well as their academic outcomes. They also reduced early marriages and marriage abductions, and generally galvanized community support for girls and women, and have since been implemented on a wider scale around Ethiopia (Method et al., 2010).

Mothers' clubs are another means of getting parents and community members more invested in girls' education. They are, in some ways, similar to the BRIDGE and GEAC models described above. In Gambia, UNICEF has provided the initial seed money for a number of these clubs, which are

comprised of women who have gotten together to tackle barriers to girls' schooling. The clubs generally carry out a variety of initiatives that are designed to help improve, and help them pay for, girls' education. The women who participate in the mothers' clubs get together to decide what is most needed in their communities in order to make sure their daughters can enjoy productive school experiences, and then try to find ways to meet their own needs. One of the primary activities of these clubs is generating income, usually by producing items that they can sell for a profit, in order to help pay for their daughters' school-related needs. The money they earn is then used to provide school uniforms and supplies, and sometimes even food when necessary, for all of their daughters. The money-making ventures are combined with other strategies such as counseling, group discussions, and community outreach and mobilization. These mothers' clubs have helped to substantially improve enrollment and retention rates of the girls at their schools, and reduced dropout rates. Some of them have also managed to make considerable profits from their small business ventures, which help the clubs to be self-sustaining. Finally, they have empowered these women to see that they are quite capable of providing for their families in a substantial and valuable way (UNICEF Gambia Country Office, 2009).

The educators and education-related NGO staffers with whom I was in contact also discussed community and parental involvement quite a bit— this was one of the strategies that was mentioned the most as being essential. They asserted the need for activities to inform parents and communities about the importance of girls' education. Several contended that it was crucial to demonstrate the value and long-term benefits of education for their

daughters, particularly to parents who are themselves uneducated, and parents who might be inclined to just marry their daughters off rather than worrying about their schooling. Parents need to treat their sons and daughters the same, “not use girls just for labor at home,” as one said, and encourage all of their children to go to school. One woman in particular, who works very closely with Ugandan mothers in helping to educate their children, wrote that parents need to be “stakeholders who share in the desire for their children to learn,” and that they are essential to improving education for girls and for all children.

### **Addressing issues regarding quality**

Most of the strategies discussed above have been implemented with the intention of getting more girls to enroll in and attend school; a few of them also have beneficial effects on the quality of the girls’ education once they get there. However, quality is an extremely important part of the picture, because if girls are not receiving a good-quality education in school, they are not likely to realize all of the benefits of education. Additionally, some girls avoid going to school, or their parents refuse to send them, because of concerns about quality.

Actions such as hiring female teachers, building and improving school facilities and safety, and providing MHM supplies and education do have an effect, hopefully a positive one, on the quality of the educational experience. There are additional measures that can be implemented that further enhance the standard of the school experience, with regard to gender sensitivity and the overall caliber of the education. According to UNESCO (2015), “The 2008 GMR [Global Monitoring Report] identified three sets of provisions essential

to improving the quality of learning in schools in general, but for girls in particular: enhancing the number and quality of teachers, including female teachers; reforming curricula and textbooks to remove gender bias; and making classroom practices more gender-sensitive through training” (p. 174). Providing more and better training for teachers, improving curricula and textbooks, and acting to ensure that girls are safe while they are in school are all critical actions that, when executed well, should increase instructional excellence, make girls feel safe and welcome in their schools, and boost the caliber of girls’ overall experience. Such enhancements could also very well persuade more families to send their girls to school, thus multiplying the power of their impact.

### **Training for teachers, administrators**

The amount and quality of the training that teachers in developing countries receive varies from one area to another. Even trained teachers often use outdated instructional methods, and many also deliver very different classroom experiences to girls than to boys. Furthermore, girls are sometimes being taught by people with insufficient knowledge and training to do the job well, as they are more likely than boys to have unqualified or less experienced instructors (UNESCO, 2014). In order to improve girls’ learning experiences, as well as their rates of enrollment, retention, and advancement, teachers need to be trained in effective teaching methodologies, subject matter, and gender-inclusive classroom practices (Unterhalter et al., 2014).

Hiring female teachers is a valuable strategy in the quest to improve girls’ education. However, studies show that a teacher’s training may well be more important than gender when it comes to fostering girls’ achievement and

increasing their enrollment and participation in school (UNESCO, 2015; Unterhalter et al., 2014). Good training is paramount when undereducated, unqualified people become teachers, as is occurring in the more rural and remote areas in some countries. When the only option for girls to be able to attend school is if they can have female teachers, some places have turned to recruiting local young women to do the job. Although they are generally undereducated and are not qualified teachers, studies have actually shown that, with good training, these women have been able to effectively teach primary school. This may not be the ideal situation, but it is better than not having any schooling options at all for the girls in these locales (Herz & Sperling, 2004).

In order to be as effective as possible, teachers must have sufficient knowledge in their subject area, and they need initial and ongoing training in pedagogy, with emphasis on active learning and child-centered approaches. Mastery in one's own subject area is fundamental, yet some teachers are not proficient in the subjects they teach. One study done in Pakistan learned that a significant proportion of teachers could not pass a primary school mathematics test (Herz & Sperling, 2004). Well-trained teachers, on the other hand, make a big difference, as can be seen in Swaziland, Ethiopia, and Egypt, for example, where studies have shown that better-trained and more experienced teachers correlate with girls' enrollments, learning, persistence, and completion (Herz & Sperling, 2004; Unterhalter et al., 2014).

Training in gender sensitivity is also critical for teachers in these countries; teachers of both genders "need training to understand and recognize their own attitudes, perceptions and expectations regarding gender, so that their

interactions with pupils do not harm girls' and boys' learning experiences and achievement" (UNESCO, 2014, p. 1). Learning how to practice gender inclusivity in their classrooms is vital in order for teachers to provide girls with a quality educational experience that is equal to boys', and just to keep them coming to school— an investigation in Kenya found that girls were more likely to drop out of school when they perceived their teachers (male or female) as less supportive of girls (Unterhalter et al., 2014). One effort to improve this situation has taken place in Ethiopia, where teacher training colleges have employed several different strategies to increase teachers' awareness of gender issues. They have formed "gender clubs" to discuss common issues, implemented course modules that address gender sensitization and other gender issues, and have created networks made up of female students from different teacher training colleges, as well as practicing teachers. These and other efforts have corresponded with girls' enrollment rates that are approaching parity, improved persistence and completion rates for girls, and learning outcomes that are comparable to boys'. However, the Ministry of Education there notes that more teacher training and better texts and materials are still needed, and that more changes must take place in schools, where cultures continue to be unsupportive of women and girls, and curricula are not relevant enough to girls' lives (UNESCO, 2015).

### **Safety in school**

We may think of school as being a safe place for children, but that is not always the case. Addressing girls' safety while in school is an issue that falls under the category of health and safety, of course, but it also concerns quality, and can be addressed with training, along with some other measures. There

are risks posed by outsiders who can get onto school grounds, and many schools need boundary walls to be built, or other safety measures put in place, in order to keep the children and teachers who are inside safe (Herz & Sperling, 2004). A more difficult problem to solve, however, is stopping the harassment that is perpetrated on girls at school by teachers and other students. Training teachers and administrators is an important strategy for addressing this problem.

Gender-based violence (GBV) and sexual harassment in schools occurs all too often. There are male teachers and older male students who assault girls in school, and sometimes girls are pressured into trading sex for passing grades. These practices are widespread, even commonplace, in countries such as Cameroon, Malawi, Sierra Leone, and others (UNESCO, 2015), and it is quite understandable that girls and their parents would decide to avoid school rather than be faced with the possibility of being assaulted there. In order to try to stem this kind of activity, countries and administrators have implemented policies to combat GBV in schools (UNESCO, 2015), and have also tried other interventions.

There is some research that suggests that a combination of interventions can be fairly effective at combatting GBV in schools. The strategies included forming girls' clubs, organizing community outreach and education efforts, and conducting training for teachers and school management (Unterhalter et al., 2014). Girls' clubs may hold discussions about intimacy, reproductive health, sexual violence, and other topics, and also engage with parents, teachers, and other members of the school and community (UNESCO, 2015). When combined, activities like these have been shown to help change people's

views on GBV and related issues, and learn about how to report incidents of violence, but have not always led to better reporting of incidents that still occurred (Unterhalter et al., 2014), and there is little evidence that the increased awareness is actually changing people's behaviors (UNESCO, 2015). More research is still needed in order to better understand how to reduce sexual harassment and violence in schools (UNESCO, 2015), and so that teachers and administrators can learn how to ensure a healthy school experience for girls, and to protect the health and safety of all students.

### **Educational materials, curricula**

There is agreement among various reports, as well as the sources I personally consulted, that it is important to improve school curricula and textbooks, and there are some common themes to be found in the suggestions that have been given. For one thing, curricula, textbooks, and other school materials need to be free of sexist stereotypes. Rather than promoting gender biases, curricula can be developed in such a way as to downplay gender stereotypes and encourage children to question the standard, clichéd views of gender roles. Showing females and males as being limited to certain, prescribed roles within society “can damage children’s self-esteem, lower their engagement and limit their expectations” (UNESCO, 2015, p. 178). Gender bias in textbooks is pervasive in many countries. The World Bank and UNESCO have both funded audits of textbooks in a variety of countries, including Bangladesh, Chad, Ghana, Guinea, Nepal, Jordan, Pakistan, and China (UNESCO, 2015). An analysis of textbooks in the Punjab region of Pakistan found that women and girls were, by and large, left out of textbooks, and in the rare instances when they appeared, the depictions were

discriminatory (UNESCO, 2014). Other surveys found that in China, textbooks portrayed all of the scientists as men, and Spanish-language texts depicted twice as many men as women overall (UNESCO, 2015).

Although there is a great deal of agreement that these gender biases in curricula and textbooks need to be addressed, there have been relatively few efforts to make substantial changes. However, the few interventions that have been documented show promising results. Lessons to promote gender equity have been incorporated into curricula in some countries, including Tanzania, India, and Honduras (UNESCO, 2015). The program in India, which was added to grades 6 and 7, included lessons about sexual and reproductive health, gender roles, and GBV. In a two-year assessment of the intervention, the children's views with respect to a variety of gender-related issues were compared with those of girls and boys in schools that were not utilizing this curriculum. The participants' responses showed that they "tended to oppose early marriage and domestic violence and believed girls should continue to higher education" (UNESCO, 2014, p. 47). In Honduras, some secondary schools implemented interactive lessons in which gender stereotypes and dominant power structures were called into question, and children in the villages where this was done had better test scores than children in other villages (UNESCO, 2014).

The published research and the people whom I personally consulted all agree that the quality and content of school curricula and textbooks are important components of the plan to improve girls' education. Textbooks need to be more balanced in their depictions of males and females, and curricula must be inclusive and should include lessons that address sexual and

reproductive health, gender-based violence, and the wide range of roles open to men and women in society today. As UNESCO asserts, “To improve learning for all children, teachers need the support of innovative and inclusive curriculum and assessment strategies that can reduce disparities in school achievement and offer all children and young people the opportunity to acquire vital transferable skills” (UNESCO, 2014, p. 47).

### **Conclusion**

All of these interventions, and others that have not been considered as extensively, may help to improve girls’ enrollment and attendance rates in secondary schools; these kinds of metrics have been the primary focus of the data that has been collected thus far. With the emphasis on reaching gender parity in schools, many different strategies have been tried in different places in order to get more girls into schools. Access is important; however, schools need to not only serve *more* girls, they also need to be places that are safe and sensitive to the issues that girls and women face. Some of the interventions that have been discussed here do a better job of improving the quality of girls’ educational experiences, and their capabilities, than others. Those that specifically address different aspects of quality— such as improving facilities, teacher training, textbooks, and curricula, and working to reduce gender-based violence in schools and get parents and communities on board and involved in the educational lives of their girls— are likely to have the most beneficial effects on girls’ capabilities.

## CHAPTER IV

### DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

In this paper, I have investigated a variety of strategies that have been used to try to improve girls' secondary education in developing countries. Many actions have been taken to try to remove or minimize different obstacles to girls' education, including a lack of financial resources, health and safety considerations, cultural and religious issues, and quality concerns. While it is challenging to accurately determine the outcomes of any one intervention, because they have rarely been implemented in isolation, there are data that show correlations between different strategies and certain outcomes. The majority of the data about the results of these interventions address the effects on rates of girls' enrollment, attendance, persistence, and completion. There is considerably less research, thus far, into the impacts on learning outcomes and other results relevant to educational quality, in part because quality is difficult to define specifically, and even more difficult to then measure.

Given the information that is available, in this chapter I will evaluate the ramifications of the different strategies for girls' capabilities, and then I will use all of this information to evaluate the interventions and make recommendations about which I think are the most beneficial and worth pursuing. Specifically, I intend to consider how the different strategies might enhance the capabilities of senses, imagination, and thought; practical reason; control over one's environment; life; bodily health; and bodily integrity. Whereas education is generally considered to be a positive thing, it might, in some situations, actually have negative effects on a girl's capabilities— for example, by reproducing and reinforcing negative stereotypes about girls'

abilities or place in the world. On the other hand, many aspects of education can have beneficial effects on girls' capabilities, such as when a girl learns by having a female teacher that there are career options open to her as well.

Considering all of this, and keeping capabilities in mind, which strategies are the most efficacious in the mission to advance girls' secondary education in developing countries? What should be done if we want girls to not only have access to schools, but to also learn valuable information and skills, and to be empowered by their educational experiences?

### **Interventions, outcomes, and capabilities**

We have some idea of the different strategies' effects on enrollment rates, gender parity indices, and similar measures. But how do the different strategies, and the actual or potential outcomes, affect girls' capabilities? It is important to consider how the various interventions, and their consequences, affect girls' critical thinking skills, because these are such a key component of capabilities. Nussbaum (2006) stresses the importance of encouraging critical thinking in the course of education, particularly for girls and women, "who are so often encouraged to be passive followers of tradition" (p. 389). Will the strategies and outcomes result in girls' being able to decide for themselves what is important and what they value, or will they simply reproduce the traditional views that people have come to accept? While it is not imperative that girls reject customary expectations and blaze new trails, they must come away from their educational experiences with the ability to decide for themselves what path would be their own best choice. How can the different interventions impact this potential, as well as girls' other capabilities?

The capabilities that are being considered here can be divided fairly

neatly into two categories. The first includes capabilities that are related to health and wellness— which include life, bodily health, and bodily integrity. The second category includes capabilities that have to do with fundamental critical thinking skills, including acquiring, processing, and utilizing information for creative expression, critical deliberation, and the enhancement of personal agency— these are the capabilities of senses, imagination, and thought; practical reason; and control over one’s environment.

### **Increased enrollment**

Although the various strategies can produce different results, one common impact across all interventions is their effect on girls’ enrollment and participation in school. All of the strategies discussed are intended, at least in part, to increase the number of girls enrolling in and attending school, and they have all appeared to do this, at least to some extent. This upsurge in the number of girls in school can have both beneficial and detrimental effects on girls’ capabilities. On the negative side, greater enrollments can mean larger class sizes, as well as (additional) unqualified teachers being employed to teach some classes. Both of these outcomes can result in all of the students in the affected schools receiving a lower-quality education, thus potentially diminishing those critical thinking-related capabilities.

However, the girls who would not have been attending school, were it not for the implementation of these strategies, can also experience an improvement in these same capabilities, because even a relatively poor education may be better than no education at all. Many capabilities are increased with improved literacy skills that come from education; critical

thinking and reasoning skills, and their associated capabilities, are also likely enhanced. Whether girls realize enhanced or diminished capabilities related to the expansion in enrollments and attendance, and the extent of these consequences, will vary greatly from one school to the next, and even from one girl to the next, depending on a lot of different variables.

One further benefit that many of these strategies could have for some girls is the ability to remain in school as they get older, reducing the chances that their parents will marry them off at a young age. Child marriage is a substantial problem in much of the developing world, but in some countries, if parents can keep their daughters in school, they can delay the girls' marriage. Girls who marry young can suffer real and lasting consequences that relate to each of the capabilities being discussed here. Having children at a young age increases the chances of suffering medical injuries and even death (Williamson, 2013), diminishing their capabilities of life and bodily health. In such situations, it is unlikely that the girls have any choice about getting married, nor any significant social, political, or economic rights, which means they are lacking the capability of control over their environment. And if they have not had any meaningful education, they likely never had the opportunity to substantially develop the capabilities of practical reason or senses, imagination, and thought.

Increases in enrollment can also impact the health-related capabilities, though these effects could be considered somewhat indirect. In general, the capabilities of life, bodily health, and bodily integrity can be enhanced by education, and so girls who are added to schools as a result of any of the strategies discussed will likely enjoy at least *some* positive effects of being in

school. Many studies have shown improvements in mortality and morbidity when more people are educated, which would correlate to strengthened life and bodily health capabilities. On the other hand, if increases in the number of girls in schools were to result in an uptick in incidents of violence and harassment against these girls, then bodily integrity could actually be diminished.

### **Health and wellness**

In addition to the effects of greater numbers of girls in school, the interventions and their consequences can also impact capabilities in other ways. The capabilities related to health and wellness can be enhanced by quite a few of the different strategies. For instance, food for education and school-based healthcare programs can have positive impacts on the capabilities related to bodily health and even life. School feeding and take-home ration programs can help to improve girls' health and nutrition, and healthcare programs in schools may not only improve the capability of bodily health, but possibly even that of life, if girls receive treatments in school, such as immunizations, that improve their morbidity and mortality rates. Menstrual health management activities, if they include education about menstruation and reproductive health, can also impact the bodily health capability in a positive way by endowing girls with knowledge that they need to better care for their own health.

Actions taken to improve school safety, and to prevent gender-based violence in particular, can also positively affect bodily health, as well as bodily integrity. Being sexually harassed or assaulted in school diminishes girls' bodily integrity and potentially their health and their life, and so if these kinds

of abusive behaviors can be stopped, then girls' capabilities would no longer be eroded in this manner. Bodily integrity can be enhanced, or can stop being undermined, with strategies such as building girls' bathrooms and outreach to parents and communities. Some of the research asserts that having separate toilets can make girls feel safer and more comfortable during their time at school, and possibly reduce GBV as well. Parental and community outreach can enrich girls' bodily integrity when it includes activities that educate community members about matters like child marriage and GBV. Such strategies can spur support for girls' education and for girls' and women's empowerment in general, and thereby help to combat assaults on girls and women.

Finally, building schools closer to where people live, thus making girls' trip to school shorter and possibly much safer, can strengthen all three of the wellness-related capabilities. In places where violence against women is pervasive, nearby schools can mean that girls have more freedom to move between school and home with far less fear of being assaulted or harassed, which improves bodily integrity. Where there is instability and a significant danger of being harmed simply by walking on the wrong road at the wrong time, or where the journey to school is particularly long and exhausting, not having to go so far can lessen or nearly eliminate the detrimental impacts on bodily health and possibly even life.

### **Rights and critical thinking**

In addition to having beneficial effects on the health-related capabilities, numerous interventions can also have significant ramifications for the capabilities of practical reason; senses, imagination, and thought; and

control over one's environment. Strategies that have been shown to improve learning outcomes— such as CCTs, scholarships, free textbooks and supplies, building schools nearby, hiring more female teachers, and improving teacher training, school curricula, and textbooks— can strengthen all three of these knowledge-related capabilities. Cash transfers and scholarships, particularly those that are conditional upon set attendance or performance goals, have been correlated with achievement gains, as have building neighborhood schools and providing free textbooks and in-school meals. If girls are actually learning more in school— if they are achieving improved literacy and math skills, or enriching their creativity and critical thinking skills, or learning about the political processes in their countries— then they are also going to realize enhanced capabilities that relate to these skills.

Other strategies can enrich these types of capabilities as well.

Improvements in school curricula, textbooks, and teacher training can result in considerable improvements in senses, imagination, and thought, as well as in practical reason. Simply put, better teachers and academic resources can help girls develop greater intellectual skills. Currently, instruction in some places is so poor that relatively few students can actually pass achievement tests, attesting to the fact that they have not acquired even basic skills such as literacy. Additionally, if teachers and the materials they are using in class serve to reinforce constricting gender stereotypes, this can also diminish girls' capabilities. Training teachers in more effective pedagogical methods and developing improved texts should serve to remedy this problem and enhance all of the cognitive capabilities.

Hiring more female teachers can also enrich these capabilities,

especially practical reason. Having female teachers has been correlated with better learning outcomes for girls, which can enhance all three of these capabilities. Perhaps even more importantly, female teachers can serve as valuable role models for girls, to allow them to see, up close, what education can enable them to achieve. Such expanded ideas can enable girls to critically reflect on their future potential, and make plans about their lives utilizing this knowledge.

Finally, conducting activities designed to enhance parental and community support for girls' education can have myriad positive effects on girls' capabilities. The impacts on bodily integrity have already been discussed; in addition, these types of interventions can enhance girls' control over their environment, by strengthening support for girls' education and empowerment. This capability relates to social, political, and economic rights, including the ability to participate in political choices, to own property, and to secure employment. Because community outreach efforts can improve community members' views about girls and the importance of girls' education, and get people involved in improving their local schools, such activities can build advocacy for girls and their overall well-being. Such strategies have been associated with not only improving girls' education, but also reducing early marriages and other positive outcomes. All of these endeavors and their results can have beneficial repercussions for girls' capabilities.

### **Recommendations**

The interventions that have been employed have generally addressed issues pertaining to school access and quality. Because of the international targets for achieving gender parity in secondary education, the focus has been

primarily on getting girls into school. Improving access for girls is a promising start, but gender equality, not just parity, is the true objective. Gender equality in education “...requires moving beyond counting the numbers of boys and girls in school to exploring the quality of girls’ and boys’ experiences in the classroom and school community, their achievements in education institutions and their aspirations for the future” (UNESCO, 2015, p. 155). Although many scholars have asserted that improving education quality is essential to achieving equality, there is not enough research examining the best ways to do this. In order to make real and substantive improvements, matters of quality must be confronted.

Strategies that address quality and cultural issues seem to be the most beneficial for girls’ capabilities overall— because they can make a substantive difference not only in the number of girls in school, but also in the caliber of their educational experiences. While all of the strategies that have been discussed here have some merits, some are much more beneficial in terms of improving girls’ school experiences and the quality of the education that they are receiving, thus enhancing their capabilities. Generally speaking, the strategies that I would most strongly recommend pursuing are those that seem to be the most effective at strengthening girls’ capabilities. That said, I also think that there are some interventions that are crucial to ensuring that all girls have access to secondary school— because the effects of improving quality will be limited if substantial numbers of girls can’t even make it in the door.

In order to make education affordable for all families, secondary school fees must be eliminated wherever this has not already been done— all fees,

since currently, even though nearly all countries have abolished fees for primary schools, they are far from being free. Additional financial support, in the form of scholarships or CCTs, are also valuable, though they must be well-targeted to help the students (primarily, but not entirely, girls) and families who are the most in need of such assistance. Providing valuable financial incentives to girls who would have gone to school anyway is not really the most effective way to help; the neediest girls should be receiving the most help. And of course, in order to prepare for the influx of students that will likely result, governments need to plan for the increase by recruiting and training more teachers, and building and supplying more schools.

All of that said, I believe that the most valuable strategies for improving girls' secondary education and enhancing their capabilities are those that have the most significant impact on quality issues. These strategies are:

- Hiring and training more female teachers,
- Implementing improvements in teacher training and in curricula,
- Revising textbooks to remove gender biases and raise the overall quality of the materials, and
- Conducting extensive parent and community outreach activities.

Teacher training is crucial, in order to increase the number of skilled teachers in schools, and especially to improve the quality of the education they are delivering. Teachers must be trained in more effective and child-friendly pedagogical methods, and in how to deliver equitable instruction to both boys and girls, in order to foster gender equality in their classrooms. Finding and training more female teachers is also key, especially for the example they can set for girls. Having such role models is important in order for girls to see that

there are valuable and rewarding career paths open to them in the future if they continue with their schooling. Also, while it is not mentioned in the research as much as other strategies, increasing teachers' salaries in order to attract and retain the best people for the job is another tactic that should be considered, especially in places where teachers are paid relatively little compared to others with similar training and responsibilities.

In addition to training teachers in order to improve the quality of instruction, textbooks and materials must also be upgraded to more equitably reflect men's and women's roles in society. If girls and women are to realize their full capabilities, they must be able to see what options exist for women in society. In order for this to happen, schools must start to address the inequities that are prevalent in teaching materials in order to make them better for all students. This involves portraying more women, showing them performing a wider variety of activities, and just generally challenging long-held ideas about what activities are "appropriate" for girls and women to engage in.

I also think that addressing issues with parents and communities is crucial. Research has shown that parental and community involvement and connection are helpful in improving girls' education, and they can also serve to enrich other aspects of family and community life as well. The different types of community activities that have been tried thus far— reaching out to parents and neighbors to inform them about the many benefits of girls' education; creating community-based school advisory boards to help determine and address the most critical local needs; establishing mothers' clubs to help women in the community take an active role in enriching their

daughters' educational opportunities (as well as experiencing their own empowerment); and other related activities— seem, to me, to be powerful ways of improving not only girls' education, but girls' and women's lives in their communities. These activities can serve to not only improve girls' educational opportunities and experiences, but also start to erode the barriers that all women face in a highly gendered society. As one of my contacts in Uganda, a woman who runs an NGO that focuses on education, wrote to me, “[b]y empowering girls on a daily basis, creating strong role models, and allowing them to see the importance of education, and others in their areas graduating, they begin to value education more. It isn't only about empowering the girls, it is about speaking with their parents, and having them understand the importance of girls” (personal communication, August 21, 2015). Getting communities actively engaged in their schools and in girls' education enhances their sense of ownership of the schools and their concern for the success of the children within those schools. It can also, over time, effect other, larger changes in society that can have real and lasting positive impacts for everyone.

Although I have recommended these strategies for use in all locations and cultures, research is needed to determine which strategies may be more or less effective within different contexts. It is important to consider cultural norms and listen to everyone's voices when determining how best to proceed in this work. That said, a balance must be struck between respecting local norms and refusing to leave girls behind when it comes to education.

Substantive and enduring change will take some time, but it can be accomplished. As greater numbers of children receive more and better

schooling, and more people are lifted out of poverty as a result of these and other development activities, cultural shifts will take place. Within just a couple of generations, real differences can be achieved. We can also help to speed some of these processes along with the right actions, such as continuing to work for equal rights and opportunities as well as better education for all children, especially girls.

### **Further research**

Although there is a wealth of research that has been done on this topic, there is still much more than can be accomplished. Most of the existing research is quantitative, and primarily concerned with the best ways to get more girls into schools. There seems to be relatively little substantive research into improving the quality of girls' education, though plenty of assertions of its importance. It would be valuable to gather results about the effects of all of these different strategies, and other strategies that have not been implemented very widely, on not just enrollment numbers and gender parity, but also on different facets of educational quality. These could include test scores and completion rates, and also other measures, perhaps surveys of different stakeholders, additional outcomes of education such as employment, or other criteria.

I will also echo others' calls for improved data collection. There is often a lack of sex-disaggregated data, as well as data that gets at these issues of quality education and gender equality in education. Without more substantial data and more qualitative research, it is going to continue to be difficult to determine what kinds of strategies are triggering genuine improvements in all aspects of girls' education.

## **Conclusion**

In asserting the importance of girls' education and the reasons for working to improve it, the perspective of many governments, agencies, and researchers has been that of improving human capital— that is, education is important because it allows people to be more productive, to make more money, to improve countries' economic positions. The intrinsic value of education, its effect on personal empowerment and agency, has not garnered the same kind of attention. In my view, in considering the issues involved in improving girls' secondary education in developing countries through the lens of the capabilities approach, we can capture the best of both worlds, if you will. Focusing on people's capabilities allows us to see and appreciate both the pragmatic and inherent value of education. People need to be educated because it can allow them to live longer, healthier, more productive lives, and because this can enable them to live lives that they truly value.

The many different strategies that have been employed in order to advance girls' education can have positive impacts on girls' capabilities, and possibly negative effects as well. All of these interventions may help to improve girls' enrollment and attendance rates in secondary schools. However, some do a better job than others of improving the quality of girls' educational experiences, and their capabilities. Those that specifically address issues of quality— such as improving teacher training, creating better textbooks and curricula, hiring more female teachers, and getting communities actively involved— seem likely to have the most beneficial effects on girls' capabilities.

We must continue working to build an equitable society for all people,

including girls and women. As UNESCO (2015) asserts in its most recent Global Monitoring Report, “[a]ttempts to increase access to school for girls will be thwarted if social institutions, norms and practices continue to be discriminatory” (p. 24). Women and girls make up half of the people on this earth, and it makes no logical sense to deny half of the world’s people access to education and the opportunities that it can afford them. In order for girls and women to realize enhanced capabilities, we need to continue striving to improve girls’ education, and we have to do more. We must also continue to provoke societal changes that will result in greater opportunities for women, so that women’s contributions to society will be valued as much as are men’s.

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## APPENDIX A

**Table 1: Secondary School Gender Parity Index (GPI) and Gross Enrollment Rate (GER) for Least Developed Countries**

Country	GPI (ratio of girls/boys)			GER (%)		
	Earliest	Mid-point	Most recent	Earliest	Mid-point	Most recent
Afghanistan	0.51	0	0.55	11.3	12.8	54.3
Angola	0.78	0.78	0.65	11.4	16.8	31.5
Bangladesh	0.51	1.09	1.14	20.2	49.0	53.6
Benin	0.45	0.46	0.66	20.8	23.4	54.2
Bhutan	0.76	0.83	1.07	24.1	33.5	77.7
Burkina Faso	0.56	0.83	0.85	6.9	10.6	28.4
Burundi	0.61	0.76	0.78	5.2	9.7	33.1
Cambodia	0.54	0.57	0.85	28.2	18.7	45.0
Central African Republic	0.4	0.52	0.51	11.4	11.9	17.8
Chad	0.22	0.31	0.46	6.6	12.5	22.8
Comoros	0.81	0.84	1.04	24.4	37.9	63.9
Dem. Rep. of the Congo	0.48	0.61	0.62	22.8	36.2	43.4
Djibouti	0.67	0.63	0.81	10.2	15.9	47.7
Equatorial Guinea	0.44	0.44	0.72	42.3	27.6	28.2
Eritrea	nd	nd	nd	nd	nd	nd
Ethiopia	0.77	0.66	0.63	13.9	16.6	29.0
Gambia	0.47	0.61	0.95	17.2	22.2	57.5
Guinea	0.32	0.39	0.63	11.2	17.9	38.1
Guinea-Bissau	nd	0.55	nd	nd	17.9	34.5
Haiti	nd	nd	nd	nd	nd	nd
Kiribati	0.96	1.19	1.11	38.0	81.2	86.4
Lao PDR	0.69	0.71	0.89	23.3	36.0	50.5
Lesotho	1.57	1.31	1.4	25.3	34.3	53.3
Liberia	0.65	0.73	0.78	31.5	35.2	37.9
Madagascar	0.94	0.96	0.96	18.3	21.1	38.4
Malawi	0.58	0.78	0.91	16.1	32.8	36.6
Mali	0.5	0.57	0.8	7.3	18.5	44.9
Mauritania	0.46	0.77	0.94	13.4	20.5	29.5
Mozambique	0.57	0.63	0.91	6.9	6.8	26.0
Myanmar	0.92	0.94	1.05	19.3	37.0	50.2
Nepal	0.43	0.67	1.05	34.6	40.2	67.0
Niger	0.37	0.6	0.69	6.4	6.9	18.3
Rwanda	0.81	0.94	1.07	16.2	10.8	32.6
Sao Tome and Principe	nd	1.17	1.11	nd	35.8	80.4
Senegal	0.51	0.66	0.91	15.2	16.1	41.0
Sierra Leone	0.52	0.71	0.87	16.1	26.4	44.7
Solomon Islands	0.62	0.81	0.94	13.9	24.5	48.4
Somalia	nd	0.46	nd	nd	7.4	nd
South Sudan	nd	nd	nd	nd	nd	nd
Sudan	0.81	0.81	0.91	33.8	33.8	40.7
Timor-Leste	nd	0.96	1.02	nd	36.5	56.6
Togo	0.34	0.46	0.53	21.5	34.9	54.9
Tuvalu	nd	1.1	1.25	nd	79.5	95.0
Uganda	0.58	0.77	0.87	11.4	16.5	26.9
United Rep. of Tanzania	0.75	0.8	0.92	5.4	5.6	33.0
Vanuatu	0.81	0.91	1	17.7	35.7	59.5
Yemen	0.37	0.41	0.69	41.4	46.1	49.2
Zambia	nd	nd	nd	21	20.5	nd

nd = no data available

Earliest year is 1990, or closest year for which data was available

Mid-point year is 2001 or closest year for which data was available

Most recent year is 2014 or most recent year for which data was available

Sources:

GPI data from United Nations Statistics Division

GER data from The World Bank

List of Least Developed Countries from United Nations Development Policy and Analysis Division