

Echidna Giving Strategy Notes

Background Literature Review & Interview Findings

November 18, 2016

Introduction

Echidna Giving's work is focused on getting more girls into better schools to live better lives. In the next 40 years, Echidna Giving will invest at least \$500 million to advance girls' education in the developing world. We are interested identifying the highest and best use of our resources towards this end. We want to "create a revolution in girls' education."

In order to inform what role Echidna Giving might play in making this happen, over the last six months we have reviewed the literature related to girls' education and interviewed over 60 individuals with expertise related to the field, including economists, academic researchers, practitioners, and policymakers (key literature sources are outlined in Appendix A).

The remainder of this paper describes our findings from the process. The sections are organized as follows:

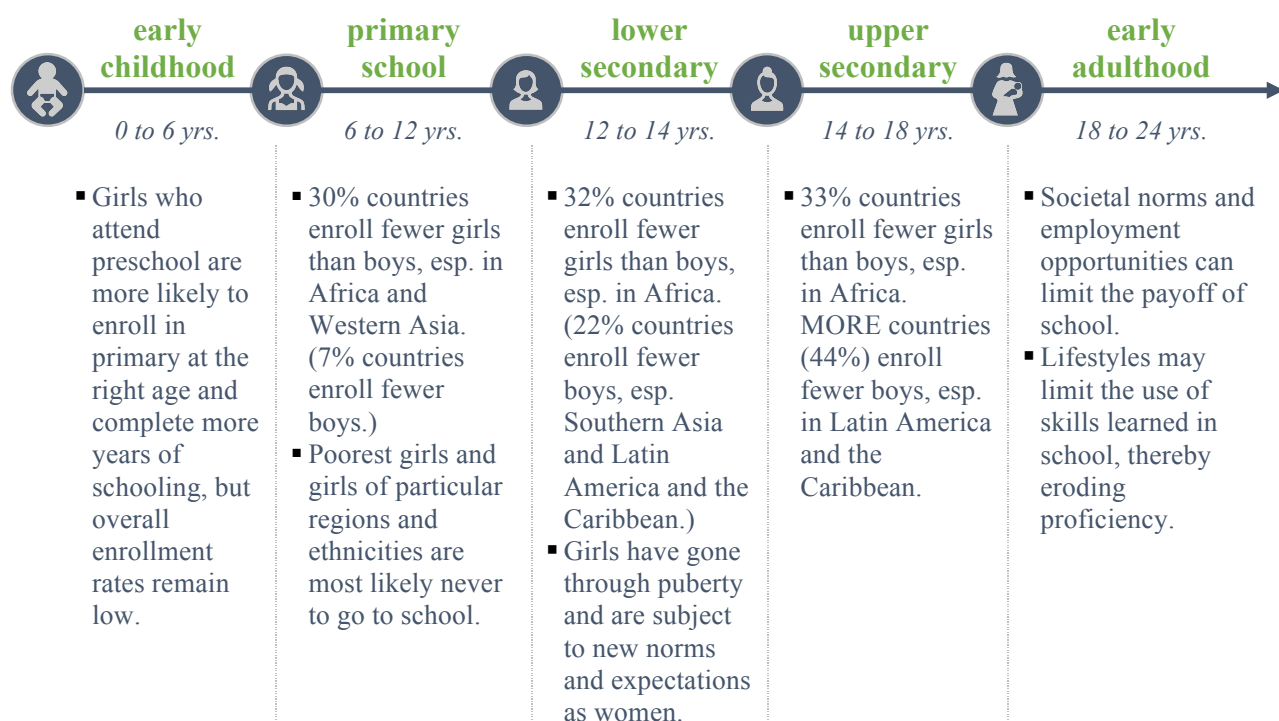
1. Our current understanding of the nature of the problems in girls' education.
2. The current evidence base around solutions in girls' education.
3. A discussion of trends in the field and more broadly that may aid and hinder girls' education in coming years.
4. Specific opportunities, gaps, and roles that Echidna Giving might play.

This paper is meant to capture the ideas heard by Echidna Giving during the interview process and in our analysis of the literature. It is **not** indicative of the strategies that Echidna Giving will pursue—decisions about our strategic direction will be made in the coming months alongside inputs from our trustees and advisory board.

1. The Problem(s)

In enumerating the problems related to girls' education, it is important to **be specific about the nature of gaps between girls and boys**. Although people tend to speak about these gaps in general, the reality is that gaps look very different in different contexts. For example, in Ethiopia there is almost no difference between girls' and boys' learning and completion in urban areas, whereas there is a 25% gap in some rural areas. Figure 1 and the text below summarize the nature of challenges faced by girls at different stages in their lives.

Figure 1: Challenges girls face at different life stages



Enrollment data drawn from the 2016 Global Education Monitoring Report.

Girls enroll in and complete education at lower rates than boys in certain regions, particularly Africa and Western Asia. (Boys are at a disadvantage in some countries, especially in secondary school.) Girls who come from the poorest households are most disadvantaged. Gaps in enrollment are slightly more pronounced in secondary education, but an analysis of long term trends across developing country regions shows that **among girls who have enrolled in school, they persist more than boys.**¹ The biggest gender gaps appear to be in terms of who enrolls to begin with, which typically has more to do with out-of-school factors than in-school factors: the most marginalized girls face a “double deficit” of being in poverty and being girls.

In some cases, girls are also learning less than boys, especially in math. That said, girls are more likely to outperform boys in reading and in many countries it’s girls who do better academically overall. In Vietnam, evidence suggests that this academic advantage stems from greater effort: girls spend more time on homework, reading at home, etc.

To complement the overall trends outlined above, we commissioned a study by the Population Council to examine gender gaps in education, literacy, use of skills, and employment using household survey data available in 64 countries from Demographic and Health Surveys and Multiple Indicator Cluster Surveys. The table below summarizes their findings, which suggest

¹ For example, Behrman and Grant, who argue that if girls enroll in school, their progression through is equal to or greater than that of boys. They believe the factor driving differences in education attainment is driven by the fact that girls are more likely never to enroll in the first place, not because they are more likely than boys to drop out (including at secondary). See *Gender Gaps in Educational Attainments in Less Developed Countries*, 2010.

that females are disadvantaged in enrollment, completion, or both in 19 of the 64 countries (Groups A through C). Although Echidna Giving's focus on secondary education has been predicated on gaps in enrollment that emerge in secondary education, only 11 countries fit this assumption (Groups B and C). Most of the countries in which Echidna Giving is currently working are countries where there is indeed low enrollment in secondary education for girls, but it is just as low for boys (Group D). Some are countries where boys are disadvantaged (Group F).

Figure 2: Country Gender Profiles²

	Description	Countries Included (#)
Group A	<ul style="list-style-type: none"> • <u>Female disadvantage</u> in primary enrollment • Gender gap remains the same size through secondary enrollment 	Benin, Burkina Faso, Cameroon, Guinea, Mali, Niger, Pakistan, Afghanistan (8)
Group B	<ul style="list-style-type: none"> • <u>Female disadvantage</u> in primary enrollment • Gender gap is wider at primary completion and/or secondary enrollment 	Cote d'Ivoire, India , Iraq (3)
Group C	<ul style="list-style-type: none"> • No gender gap in primary enrollment • <u>Female disadvantage</u> emerges at primary completion and/or secondary enrollment 	DRC, Liberia, Mozambique, Nepal , Nigeria, Sierra Leone, Togo, Lao PDR (8)
Group D	<ul style="list-style-type: none"> • No gender gap in primary enrollment • Low secondary enrollment/completion 	Burundi, Ethiopia, Gambia, Ghana , Guyana, Madagascar, Malawi , Senegal, Tanzania , Timor-Leste, Rwanda, Zambia , Zimbabwe , Algeria, Uruguay (15)
Group E	<ul style="list-style-type: none"> • No gender gap in primary enrollment • High secondary enrollment/completion 	Bolivia, Egypt, Indonesia, Jordan, Peru, Barbados, Cuba, Jamaica, Panama, St. Lucia (10)
Group F	<ul style="list-style-type: none"> • No gender gap in primary enrollment • <u>Male disadvantage</u> emerges 	Cambodia , Colombia, Comoros, Dominican Republic, Gabon, Haiti, Honduras, Kenya, Lesotho, Maldives, Namibia, Philippines, Sao Tome and Principe, Uganda , Argentina, Belize, Bhutan, Costa Rica, Suriname, Bangladesh (20)

Countries in **green** are countries where current Echidna Giving grantees are active. Table and data from Psaki, Stephanie R., Katharine McCarthy, Barbara S. Mensch. "Where are the gender gaps in education? Evidence from 64 low- and middle-income countries." PowerPoint slides. New York: Population Council.

² The discrepancies between data in this figure and those cited in Figure 1 stem from a different overall set of countries and datasets (ministry of education datasets vs. household surveys).

These categorizations are revealing in terms of how to focus investments on girls' education—e.g. the need to invest in getting young girls into primary school (Group A) vs. keeping adolescent girls in school (Group C). That said, the findings do mask any intra-country variations. For example, in countries without gaps between girls and boys overall, there could be significant gaps for rural girls and not urban girls, for poor girls and not wealthy, etc. We know intra-country variations can be significant. The data also do not pick-up on any gender gaps in grade-level completion—among students who have dropped out before completion, we don't know if boys have completed more grades than girls. Furthermore, even in countries where girls are not disadvantaged relative to boys, if their secondary enrollment levels are low (Group D) there is still a case for special investment in girls. The return on investing in girls' education is higher than the return on boys' education—for herself, for her family, and for her community. New and growing evidence suggests that impacts on girls' economic outcomes and empowerment are dependent on completing at least some portion of secondary education.

In contexts where girls are at a disadvantage relative to boys, the barriers to their participation are varied and wide ranging. The **high direct and indirect costs** of enrollment to school can be a deterrent. This is especially true when the opportunity costs of school participation are high and when the **returns to schooling for girls are low** because the labor market does not value educated girls as much as boys. Another frequent issue is proximity to school and **threats to girls' safety** on the way to, in, and on the way home from school. Challenges for girls are especially pronounced around adolescence when they begin to be seen by society and themselves as women rather than girls and are **subject to the norms and expectations that come along with being a woman**. These expectations may dampen a girl's aspirations for schooling and lead, at times, to girls fulfilling their traditional roles and dropping out of school to marry early and/or have children.

Even though girls who do access schooling may be more empowered, there are also ways in which **schooling, as an institution, can reproduce inequality**. Teachers can function as gatekeepers of the status quo, for example, by giving boys preferential treatment in class, assigning schoolyard chores to girls, and expressing gender-biased expectations for what girls and boys will do upon completion. Although we expect more education to engender more progressive gender views—e.g. on preferences for male offspring and views on domestic violence—household surveys in India and Nigeria suggest that schools may reinforce existing norms, not challenge them. In other words, **just giving girls education doesn't necessarily address the underlying reasons why they didn't have access to begin with**. Data on enrollment and completion are very narrow indicators for gender equality. Although the very simple message of getting girls into school is appealing, perpetuating the myth that education access alone is a panacea can make us blind to the disadvantages that girls face even when they are in school.

Similarly, **broader societal norms and employment opportunities for women confine the extent to which schooling pays off** for girls. The same study by Population Council cited above found large gender gaps in the proportion of young people working, even among those with the same level of education. This underscores the fact that education can't do it all. If legal and

social norms operate against women's engagement in the labor market (as in much of the Middle East, for example), it will be impossible to reap the full returns of education.

More generally, **school quality is severely lacking** for all students. An alarming number of students complete primary education without ever learning how to read or do basic math. The Population Council found that among boys and girls with the same level of education, boys are more likely to be able to read, especially in West/Central Africa, which suggests that quality may be especially of concern for girls in some places. Regardless of whether girls are relatively more disadvantaged in learning, school quality is a major problem for girls everywhere, as underscored by the fact that today in India there are more illiterate girls attending school than there are illiterate girls out of school. Employers complain that students who have graduated from secondary and even tertiary levels are not equipped with the skills they need to be good workers. Students are exiting school unprepared and the relevance of the curriculum has been questioned in many countries. This is in part because education quality has fallen victim to success in education access. With more students in the system—including students from more disadvantaged backgrounds—the system is struggling to provide sufficient support for learning.

Although quality of education is a critical concern, it is not primarily a gendered concern. Given that it is hard to program pedagogy *only* for girls, to some extent there is a tension between a focus on quality and a focus on gender. That said, there are some aspects of quality that especially affect girls (e.g. whether teachers call on girls in class), and there is some evidence that girls benefit more when pedagogy improves than boys do. But many of the central quality issues affect boys as much as girls. And for governments, it can be hard to justify doing something specific for girls when the system isn't doing well by boys either. In general, **gender isn't always the most important dimension of inequality in education.**

Under the Sustainable Development Goals, governments have committed to “Ensure inclusive and quality education for all and promote lifelong learning.” Among the ten specific targets are ambitions to “ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant...learning outcomes;” “ensure that all girls and boys have access to quality early childhood development, care and preprimary education;” “substantially increase the number of youth and adults who have relevant skills...for employment, decent jobs and entrepreneurship;” and “eliminate gender disparities in education.” The goals are critical and important, but mean that **governments and donors have increased pressures and demands on their limited resources** as they seek to reach more students and address pressing concerns about quality.

Added to the problems enumerated above, girls' education is becoming a victim of its own success in some contexts where an exclusive **focus on programming for girls has created a backlash**. For example, we heard about a scholarship program in West Africa in which top-performing girls who were eligible for scholarships were targeted by boys who sought to get them pregnant and threatened them with other violence to push them out of school. Room to Read similarly reported that financial support for girls has caused community resistance in many cases. Because of this type of backlash, many interviewees recommended **focusing on gender equity, rather than focusing exclusively on girls.**

2. Current Evidence on Solutions

Given the numerous challenges cited in section one, what solutions have proven effective in closing the gap between girls and boys? Figure 3 summarizes the current evidence around what it takes to get girls into school, learning, and advancing on to improvements in their lives and the lives of their families and communities. There have been a number of recent meta-analyses of the literature related to improving education and girls' education (see the section on "Synthesis Reviews" in Appendix A) and there is not consistent agreement across these reviews about the strength of evidence behind different interventions. In Figure 3 we have used our best judgement from our review of the evidence on how to classify interventions.

The most certain parts of the evidence suggest that **cost is a limiting factor** for girls going to school, and that when you eliminate this barrier—through cash transfers, scholarships, or eliminating fees entirely—more girls go to school. In regards to accessing schooling, the biggest unanswered questions are around how to reach the most marginalized girls. In particular, less is understood about why girls drop out at adolescence.

It also seems clear that **having mentors, role models, and support from other girls can make a difference**, although the specifics of what types of programs work best are not as clear. Mentoring (one-on-one interaction) is something Heckman and colleagues have identified as a common element in developing soft skills, or "personality traits," like conscientiousness, emotional stability, and agreeableness.

Research suggests that these same soft skills are strong predictors of success in life. Conscientiousness, for example, is just as predictive of educational attainment, health, and labor market outcomes as cognitive ability is. And these skills are likely more malleable in adolescence than cognitive achievement is.

There is an assumption (and some evidence) that **girls' benefit differentially from soft skills as compared to boys**. But although there are many efforts to develop these skills, there is no universal agreement on how to define or measure these skills (which are also sometimes also referred to as life skills, non-cognitive skills, or transferable skills). Lists of skills in this category include everything from social skills to communication skills, problem solving, critical thinking, decision-making, self-control, self-confidence, and self-esteem. Furthermore, there is little evidence on which of these skills matter specifically for girls. Similarly, there isn't much evidence on how best to develop them so that girls activate these skills in a range of different contexts (e.g. not only in the classroom, but also in the home when they are negotiating decision-making).

One particular question is whether a critical feminist approach to the teaching of soft skills is necessary in order for girls to fully reap the benefit of these skills. There is some evidence that you *do* need to explicitly address gender and power in sexual and reproductive health education for it to be effective.³ Similarly, for boys and men to change behavior around violence,

³ Nicole Haberland, "The Case for Addressing Gender and Power in Sexuality and HIV Education." 2015

it's necessary for them to reflect critically on gender and power. Is the same true more broadly for girls to develop and activate soft skills in a range of contexts?

Figure 3: Strength of evidence around solutions in girls' education



When it comes to education quality, there has been a blossoming of literature around what types of interventions improve learning outcomes for students in general. However, **surprisingly few evaluations report disaggregated results by gender**. In general, it seems that once girls are *in* a quality learning environment they tend to do well, and sometimes even *better* than boys.

Some of the interventions that have become popular among girls' education advocates may not be effective investments. For example, it is not clear that providing menstrual supplies and toilets improves girls' attendance.

More generally, **there are few interventions that have been shown to improve both participation in school and learning**. For example, cash transfers (including scholarships) increase participation but do not impact learning. Improving pedagogy has been proven to increase learning but not participation. Tackling both requires a holistic set of interventions.

Less discussed in the literature is whether solutions in early childhood education could be an effective route to closing gender gaps. We know that what happens at home and elsewhere in the early years, especially ages zero to three, has a big impact on outcomes for both boys and girls. The literature does suggest that **girls' schooling outcomes are more likely to benefit from early childhood interventions than boys'**. Some experts also hypothesize that it is better and easier to intervene at early childhood than in later years because there is less cultural resistance from parents for investing in girls at that young age, and because interventions earlier in the life of a child have a bigger benefit in changing attitudes.

Worryingly, new evidence indicates that **some of the impacts ascribed to girls' education like higher earnings⁴ and smaller families⁵ may not be accruing for girls**, at least in some contexts. For example, research from Malawi shows that even among girls who do attain greater education, it has not changed the age at which they first give birth. Another study in Malawi shows that the short term benefits of a two-year conditional cash transfer program do not sustain in the long run. And finally, longitudinal research from the Population Council in Malawi suggests that women do not retain as much learning as men, likely because men use literacy and numeracy skills more in their daily lives than women with their current traditional roles do.

These dampened education benefits could be because girls aren't learning skills in school that lead to these outcomes (for example, evidence suggests that the pathway through which schooling affects health competencies is literacy⁶). It could also be because of the limiting economic opportunities in certain contexts, which are often more narrow for girls than for boys. And as more and more girls complete secondary education, the benefit of achieving that level of education for a given student may also decline. In short, the **positive ripple effects of girls' education may be dampening** as more girls go to schools of increasingly poorer quality.

⁴ Sarah Baird, Craig McIntosh, and Berk Özler. "When the Money Runs Out: Evaluating the Longer-Term Impacts of a Two Year Cash Transfer Program." 2015

⁵ Monica Grant. "The Demographic Promise of Expanded Female Education: Trends in the Age at First Birth in Malawi." 2015

⁶ Robert LeVine, Sarah LeVine and Beatrice Schnell. "'Improve the Women': Mass Schooling, Female Literacy, and Worldwide Social Change." 2011

Alongside the evidence presented here, it's important to underscore the fact that taking a purely technocratic approach to solutions in education will not work. Education is deeply social and political, from what gets taught and why to who teaches it and how they are organized. These political influences can't be ignored.

3. Trends Influencing Girls' Education

Alongside the current research, we had hoped to capture the current level of effort in the field around the different domains related to girls' education in section 2. However, data on this are difficult to come by.⁷ What we do know is that girls' education has received significant international attention through widely advertised efforts like the Girl Effect and Girl Rising and from popular figures like Malala Yousafzai, Michelle Obama, and Nicholas Kristoff. As a result, there is **widespread and popular understanding of the importance of girls' education** and its potential ripple effects.

A number of large international efforts have been developed in support of girls' education: the United Nations Girls Education Initiative (UNGEI) was launched in at the World Education Forum in 2000; the Sustainable Development Goals mark gender equity as a key goal both within education and more broadly; donors like the World Bank and DFID have made substantial recent commitments to girls' education; and the Global Partnership for Education recently announced its Gender Equality Policy and Strategy. Encouragingly, thanks, in part, to institutions like these, **data on gender is becoming more and more mainstream** (the next generation challenge is how to ensure this data is used to inform policy).

International, regional, and national NGOs alike have taken up the cause of girls' education as well. In some countries there is an astounding amount of work on girls' education. For example, a list of efforts in Malawi includes 55 organizations operating programs related to girls' education in that country alone. A catalogue of girls' education interventions by the Center for Education Innovations reveals that the vast majority of these efforts are focused on directly supporting students or schools. Few are oriented towards research or policy, and surprisingly few of these interventions have been rigorously evaluated.

Also notable is how many of these programs are happening outside of formal school hours. Some are happening outside of formal schools all together, while others are programs that happen before or after school. Furthermore, when people think about girls' education, they often think about infrastructure and access to education, but that can only get you so far in terms of promoting meaningful outcomes for girls. As such, the **field of girls' education needs a more nuanced understanding of the problems and potential solutions**, not just in access but also in pedagogy, cultural norms, and policy.

⁷ Lloyd's New Lessons (2009), Ackerman's Innovation and Action in Funding Girls' Education, and Result for Development's Center for Education Innovations are useful starting points.

These observations lead us to more broadly conclude that although **the rhetoric around girls' education is high, it does not mean we are delivering.**⁸ In addition, there are a number of bigger picture trends that the field of girls' education will need to contend with over the next five to ten years:

- Population growth (in particular, a surge in youth populations) and expanded access to education means that governments will be under **economic strain** to deliver education to a larger population.
- **Job needs are changing rapidly** in the face of technological change. For workers to be successful in the long run, they will need to continue learning across their lifetime so they can adapt their skills to new opportunities. Learning *the ability to learn* is crucial.
- **Technological advancement** means that education doesn't just have to happen in the classroom with a teacher in front of the class. Pundits predict that this will open up multiple pathways for learning. Given that children spend more of their time outside of school than in, it may also enable opportunities for more time to be spent engaged in learning. The question is whether these changes will happen equally across socioeconomic status and gender; we know there are currently inequities in technology access and use.
- **Increasing displacement of populations** means that education will be disrupted and will need to be delivered in refugee camps, through arrangements with host communities, etc.; gender and fragility will increasingly be an issue.
- **Inequality is on the rise** and people are ever-more aware of it given globalization. Everyone's reference points have expanded for good (aspirations) and bad (disaffection). Some economists have suggested that technological change is slowing, and predict we won't have the same technological breakthroughs that can be an equalizing factor over time, which means there will have to be other mechanisms to address inequality.
- **Climate change** and the crises it will trigger means that communities need to be resilient and able to adapt. Girls and other marginalized populations are often last into school and the first to leave school in moments of strain or crisis, so they will be disproportionately impacted.
- **Urbanization** is happening at a fast clip, and means that services will increasingly be provided to urban dwellers. This presents opportunities for access to better services and opportunities—but could also lock populations in cycles of poverty if growth in urban areas outpaces economic opportunities.
- **Development aid will constitute an increasingly shrinking share of spending on services like education.** As a result, influence through external donors will be increasingly limited.

⁸ Nor does it mean that the funding required to deliver is forthcoming. Official development assistance to education has remained flat at \$12 billion annually since 2009 even as spending on health increased from \$18 billion to \$21 billion.

4. Opportunities, Gaps, & Roles Echidna Might Play:

Bearing in mind the broader trends influencing girls' education, interviewees offered a range of perspectives on specific strategies Echidna Giving might pursue. They also suggested several creative ideas for maximizing the strategy process itself:

- **Find ways to crowd source strategy ideas.** One way to do this would be by hiring a diverse set of consultants and tasking them with coming up with three innovative strategy or project ideas that could then be screened by a broader team.
- **Instead of coming up with a typical foundation strategy that defines specific outcomes we want to see, define a set of questions that we want our philanthropy to answer.** "Curiosity-driven philanthropy" instead of "outcome-focused philanthropy." Although in truth a lot of philanthropic strategies do have an embedded learning agenda, this would put that focus front and center.
- **Use the final strategic plan document and the dissemination thereof as a way to help shape the field.** A well-crafted strategy can help define work for Echidna *and* others.
- **Draw on insights from behavioral economics, human centered design, and social norm theories** to better understand issues and solutions for girls' education.

Taken as a whole, ideas around specific strategies that our organization might pursue suggest that **Echidna Giving has the opportunity to be a thought leader to make the girls' education movement more strategic and disciplined** by (1) driving innovation in the practice of girls' education; (2) expanding the frontier of knowledge about girls' education; and (3) using these ideas to influence the way other actors pursue girls' education.

1. DRIVING INNOVATION

Although the need for girls' education has been remarkably well-established, the field seems stuck on first generation problems of girls' education access and first generation solutions. There are certainly substantial access issues that still remain, but the field would be well served to think more holistically around access and quality issues and the relationships between these. Interviewees drew out a number of themes around which catalyzing innovative practices could drive substantial impact.

- **Focus on better pedagogy and better teaching, because they are not getting enough attention in the girls' education field despite the fact that they have an especially large impact on girls.** The girls' education movement is increasingly starting to talk about refugees and other spaces where girls are *not in school* instead of tackling the issues of what happens to girls who *are in school*. Access was the easier part of the work that needs to be done. Now we need to marry girls' education with the broader movement toward *learning*—and to put gender into the quality discussion so that it looks at who is systematically included and excluded in classroom pedagogy and why. This is about elevating the best of existing pedagogy into teacher practice, not developing new

pedagogy. It is an approach that carries less risk of a backlash than approaches that focus exclusively on girls. As one interviewee put it: “The best hope for girls might be a lot better schools and a lot better teachers”—especially given that most girls are now in school, not out of school.

- **Help teachers to adopt more supportive attitudes towards girls and the way they engage them in the classroom.** Tackling gender in schools requires breaking down the school door and looking at teachers and their attitudes towards students. Teachers must develop a feminist consciousness and increase their aspirations for their female students; teacher training institutions need to embed this in their approach. Standard teacher observation tools do not currently look at gender practices, but new indicators could be developed to examine implicit or explicit biases teachers exhibit. One interviewee told us, “gender-responsive pedagogy *is just good pedagogy*. It means you draw in all kids, not just those who are most aggressive.”
- **Address issues of gender and power explicitly with school leaders, with teachers, with girls, and with boys.** Research suggests that explicitly addressing gender and power is critical for enabling better reproductive health outcomes (like delayed first birth, lower STD transmission rates, etc.) and for reducing gender-based violence. It may similarly be critical for girls to activate other skills that they learn at school. What is clear is that presuming that simply going to school will help shift gender norms is not playing out in practice in many contexts.
- **Help advance the definition, measurement, language around, and advancement of life skills/non-cognitive skills/21st century skills/soft skills.** Research is clear that non-cognitive skills like perseverance, conscientiousness, emotional stability, and the like are key determinants of successful life outcomes. There is some evidence to suggest that these types of skills have a higher return for women than for men. In fact, they seem to especially matter for *any* population that suffers from structural disadvantage, and women are no exception. Furthermore, these skills are more malleable at later stages of life than traditional academic skills like reading and math, and have a positive reinforcing effect on those traditional skills—the more you persevere, for example, the more likely you are to learn new things. Although there is increasing action in the field of girls’ education on “life skills,” there is little agreement on what it means, which skills are most important for girls, how to measure them, and how to embed them in regular curriculum. There is space to help advance thinking on these issues, and to bridge work on life skills with the broader movement towards a breadth of learning that includes non-cognitive skills.
- **Innovate around how to expand access to high quality, gender sensitive, education at affordable costs.** Education systems need to expand to meet the new Sustainable Development Goals that governments have agreed to. Given that expansion must happen in constrained economic environments, success may depend on innovation. A private funder can take risks and experiment with leap frogging—thinking about learning-centered approaches that might be different than existing school systems, while at the same time ensuring that innovation doesn’t further disadvantage girls. Given that the biggest cost in education is HR, interviewees stressed the need to find labor-saving technologies that don’t dilute quality. A specific opportunity is to think differentially about how to classify teachers compared with other levels of education facilitators—so teachers become even more skilled and better paid, but supported by a larger number of

other levels of workers who can do other components of the job (more akin to how the medical system is structured with doctors, nurses, physician assistants, etc.).

- **Think about the interactions between girls' education and the labor market, including the ways in which education encourages (or not) girls to go into higher paying occupations.** The wage gap between men and women is often driven or exacerbated by the occupations that they choose. Mentors (especially fathers, uncles) can help women move into more male-dominated and higher paying jobs. Teachers are **not** currently moving girls in that direction and instead drive girls into traditional roles, like catering or child care. A big driver of education choices are the jobs available on the back end that make it worth parents sending kids to school, so tackling this issue either in schools or through nontraditional education (e.g. apprenticeships) could make a big difference. Information about economic opportunities for girls—making it salient that there are “appropriate” jobs for them—can also have a major impact.
- **Consider ways to engage with adolescent girls beyond school, including when they become mothers.** Given that mothers can accelerate learning for their children, providing mothers with support could be a path toward supporting both generations. School reintegration programs for teenage mothers that provide quality early childhood options for their children might also be a win-win investment.

In terms of specific tactical choices regarding innovations, interviewees raised several suggestions:

- **Focus on adolescent girls because this is the moment when society perceives them to be women and starts treating them differently.** Ages 10-14 are a critical stage when norms around what it means to become a girl come into play, teacher attitudes towards and perceptions of girls begin to change, and girls' decisions about their social affiliations shape their future path in life. Better health and nutrition means girls are menstruating earlier than they used to, which has pushed down the age at which they are viewed as women and take on the concomitant limiting societal expectations.
- **Early childhood development interventions can level the playing field for girls later on and are highly cost effective given their significant long term impact.** Research also suggests that there is less pushback and resistance if options are made available in the early years. That said, currently there is not a lot of research with a gender lens on early childhood development. People have been more focused on coverage and quality given that access to preschool opportunities is just 17% in developing countries.
- **Pave the way for consultation with women and girls to be done in a more cost-effective, systematic way.** Interviewees stressed the importance of programs on the ground being responsive to girls' needs. In order to enable this, creating better tools (e.g. interview questions and process guidelines) for effectively consulting girls could be valuable.
- **Encourage greater collaboration across NGOs, fighting against the current competitive environment that generates duplication of efforts.** One interviewee specifically suggested collaboration grants as a way to facilitate cross-organizational efforts.

- **Fund “boots on the ground,”** meaning organizations that are engaging with communities in meaningful, cutting edge ways. This may necessitate picking some specific countries in which to “go deep,” in order to be better placed to identify organizations and build a broader ecosystem in the portfolio for influencing systemic change. This type of funding could provide examples to document and surface learning for others and would likely generate greater legitimacy for engaging in global advocacy.
- **Focus on taking effective ideas from small implementation to greater scale.** Lots of good ideas never scale because few funders provide the support needed to take an idea from small scale experimentation to large scale implementation.
- **Work in neglected geographies,** including, for example, Francophone West Africa, where girls face large disadvantages and few funders are active.

2. EXPANDING KNOWLEDGE

An important complement to innovation is evidence. In this regard, interviewees reflected on a number of gaps in our knowledge around girls’ education. Their suggestions highlighted a need to better understand both the patterns and conditions surrounding girls’ education as well as the impact of specific interventions.

- **Invest in longitudinal research and data collection.** Analyze long-term trends to see whether academic gains translate into life outcomes. Is education changing gender dynamics? Capture change in education quality over time and whether the same returns to girls’ education hold up. High quality, longitudinal data is hard to find, and some work will be winding down soon (e.g. [Young Lives](#)). Work to mine the existing data to answer specific gender and education questions and consider embedding data on learning outcomes in longitudinal household surveys (e.g. [Demographic and Health Surveys](#)) so that we can track longitudinal data about relation between learning, household factors, and life outcomes.
- **Expand the body of evidence on effective interventions on girls’ education** beyond conditional cash transfers, which is the one area for which we have in-depth, multi-region evidence. Fund a systematic review for girls’ education that looks at which contexts particular interventions work in and why. Consider research with a system focus, e.g. building on the DFID-funded [RISE Program](#) to look at what it takes for systems to deliver more effectively for girls.
- **Analyze more education evaluations by gender.** Too few evaluations report disaggregated results by gender. Encourage more to do so, and ensure they are sufficiently powered to pick up on any differential impacts. Consider looking back at the most promising impact evaluations for learning (e.g. in 3ie’s recent [systematic review](#)) and getting gender disaggregated results. If the effects are significant for girls, it’s worth drawing out (even if those same interventions also happen to be what are best for boys).
- **Galvanize the field to agree on key data related to girls,** and to collect, analyze, and use data consistently. Consider creating a report card on girls’ education that pulls together data which meaningfully spotlights areas in girls’ education that are critical to tackle. Look into developing a means of verification for SDG target 4.7, which is about

the extent to which global citizenship education and education for sustainable development, including gender equality and human rights, are mainstreamed in national education policies, curricula, teacher education, and student assessment.

- **Encourage Ministries of Education to disaggregate *all* Education Management Information System data by sex** to get at the “what” in terms of gender gaps, and to extend beyond this data to establish institutionalized data that gets at the “why” behind gender disparities and can help set policies and strategies that meaningfully address them.
- **Help to synthesize and translate knowledge in girls’ education so that it is widely used in practice.** Interviewees stressed the need to package solutions in a way that’s accessible to practitioners and policymakers. They stressed a number of ideas to help move this forward, including: (a) creating a platform for up-to-date research on girls’ education that reports strength of evidence; (b) increasing high quality case studies on work in the field; and (c) supporting well-connected advocates at a country level (e.g. through an expanded and more globalized network of Echidna Scholars).
- **Use design thinking and anthropology to better understand girls’ experiences of education**—and to design systems and approaches that more effectively meet their needs.

3. INFLUENCING OTHERS

In relative terms, Echidna Giving is a small player in the field of girls’ education. Governments and bilateral donors spend much more money than Echidna Giving will ever have. That said, these players can be influenced. Using innovation, research, and strategic advocacy, Echidna Giving has the opportunity to shape how more than just its own money is spent. A pointed example of this is the success that the Gates Foundation has had using its voice and influence to increase and redirect overall funding for health. For instance, although the Gates Foundation spends about \$1 billion each year on global health, over the last seven years, official development assistance for health has increased by \$4 billion a year. (Unfortunately, some believe their success has hurt education, which does not have the same level of advocacy and official development funding for which has flat lined during the same period.) Echidna Giving can work to influence others directly by developing and using our own voice and/or indirectly through grantees and partners. Interviewees highlighted a number of opportunities in this regard.

- **Help shape the way the World Bank fulfills its \$2.5B commitment to girls’ education.** Although the World Bank’s commitment is genuine, the institution is constrained in resources for thoughtful project preparation and innovation. By supporting thoughtful project design and research, private funders can help get innovative content into World Bank projects. In addition, making noise that “names and shames” the World Bank might be another tactic for influence.
- **Push governments to adopt policies that are strongly supported by evidence.** Given the clear evidence that cost is a limiting factor for school enrollment, advocacy for free secondary school and/or well-designed scholarships for those that need them most could be an important policy “ask.” Interviewees cautioned that **getting governments to pay attention to issues that matter for girls’ education may require a new approach**

and/or new language. When education systems aren't doing well for boys, either, it's hard to justify doing something specific for girls.

- **Encourage bilateral donors (namely USAID and DFID) to expand their goals around girls' education.** These institutions are responsible for most funding for girls' education on the ground (e.g. in countries like Malawi) and focus largely on indicators of later marriage and longer schooling. This limits how projects can approach issues. One interviewee observed that it's caused projects to take a narrow focus on girls (rather than a broader focus on gender) that has fostered some of the types of backlash described earlier in the trends section. Beyond the backlash, a focus merely on girls may mean that governments will not be as receptive to making long term change since their mandate is to deliver education for both boys and girls. We could help to influence the scope of their work in order to avoid such unintended consequences.
- **Play a watch dog role in tracking whether commitments to girls' education are fulfilled in practice—and whether or not they adhere to the best available evidence.** A number of grand promises for girls' education have been made under [Let Girls Learn](#) and other initiatives. No one is tracking whether these promises are being fulfilled. The danger is that people will assume that the problem has been solved because there is a significant volume of talk, when in reality it is not backed up by action. Furthermore, many programs are designed based on what “feels” right, as opposed to nuanced and sophisticated thinking and evidence. Calling attention to where there are gaps—and highlighting solutions—could be a route to ensuring that well-meaning words are followed-up with meaningful actions.
- **Continue to advance girls' education leadership, through Echidna Global Scholars and potentially beyond, including with a more intensive focus on explicitly developing leadership skills.** The Echidna Global Scholars have yielded tremendous influence in their contexts, were highlighted as a powerful part of the current Echidna Giving portfolio, and have thus far been the most effective mechanism for ensuring Echidna Giving is developing a voice and has access. Leaders like these can be the drivers of bigger changes—particularly if they have not just the technical research skills but also the leadership skills they need to be successful in these roles.
- **Expand and diversify the set of champions around girls' education and bring the community together around a coherent set of messages.** Religious leaders and other community leaders that citizens listen to can help set new norms. Girls' education used to be more of an issue for the women's movement than it is now and there may be opportunities to bridge this gap. Civil society groups are already playing a role on gender equality, but their voice could be further strengthened. Teacher unions could also be a powerful voice. That said, the girls' education community needs to be rallied around a more unified set of “asks” (e.g. 12 years minimum for girls; measuring quality learning *and* universal participation in the new SDGs; safe spaces to and within education).
- In addition, there is an opportunity to **play a leadership role in coordinating work across sectors**—people's lives aren't organized by sectors and when they are pressed in one area (poverty) it will affect their decisions on other areas (schooling). There is not great cross-sector work happening and yet collaboration across education, health, and labor is needed to solve the root problems related to girls' education.

- **Inject information and data into the public sphere to influence discussion and debate.** One way to track whether promises are being fulfilled is to do it directly, as described under the watch dog role above. Another way is to enable citizens to play the watch dog role themselves since government work is influenced, in part, by the citizens it serves. Finding ways to galvanize greater public debate on issues surrounding girls' education could be a route to influencing better government practice.
- **Support governments to adopt more iterative approaches to its work on girls' education.** Historically, work that has been done on gender mainstreaming—the effort to enable governments to take a gender lens across their work—has been superficial and ineffective. Ministries of education are not confident working on gender issues and could be better supported in this work by girls' education leaders. Rather than shaming governments for their shortcomings, this strategy could involve helping them shore up a well-designed strategy. In particular, governments need support in setting specific goals on girls' education and implementing programs in a way that they can test their ideas against these goals, learn what works, and iterate and adapt their practice.

Conclusion

Echidna Giving was established to help ensure that more girls can attend schools of high quality that enable them to live better lives. In this document we've described the number of ways in which girls remain disadvantaged in education—especially girls from poorer households. Gaps between girls and boys do not look the same everywhere. In some contexts, it's boys who are more disadvantaged, especially given that once girls attend school, they tend to persist more than boys. That said, girls face disadvantages that go well beyond attendance. Schooling itself can reproduce gender norms and is not an antidote to underlying gender inequities. This is especially true when education does not deliver on the skills that lead to better lives. The number of girls who are attending schools that are not delivering is at least as big of a concern as the number of girls who are not attending school at all.

The current evidence base suggests interventions that are well poised to address participation in school (especially cash transfers, scholarships, or other mechanisms for alleviating the costs of education) and interventions that are well poised to address low learning outcomes (especially improved pedagogy), but few interventions that successfully improve both participation *and* learning. In the domain of learning, soft skills (also referred to as life skills, noncognitive skills, and transferable skills) are increasingly of interest given their strong impacts on long term outcomes and the fact that they may be especially beneficial to girls. The most worrying trend in the current evidence is that the ripple effects of girls' education may be dampening as more girls go to schools of increasingly poorer quality.

On the one hand, current awareness of issues in girls' education is quite high given the attention it receives from high profile figures like Michelle Obama and big donors like DFID. On the other hand, the high volume of rhetoric is not always matched by a high volume of on-the-ground work, or by a nuanced understanding of the issues related to both access and learning. In addition, in the next several years, girls' education will have to respond to trends like economic strain, displacement of populations, growing inequality, and climate change that will put pressure

on progress. Some of these constraints, alongside technological advancement, may also open up space for innovation.

There are few private funders able to commit as significantly to girls' education as Echidna is, so we have a tremendous opportunity to help shape and inform the field's response to these trends. Our interviews underscored a range of opportunities for having a significant impact on the field by driving innovation in critical domains, by expanding knowledge, and by influencing the way others deploy larger amounts of money than Echidna Giving has at its disposal. The number of opportunities highlighted outstrip our resources and we will need to make judgements about how to further narrow and define our work. This will be done jointly with our trustees and advisory board over the coming months.

Appendix A: Key Literature Sources

source	synopsis
SYNTHESIS REVIEWS	
Banerjee, Abhijit, Paul Glewwe, Shawn Powers, and Melanie Wasserman. 2013. " Expanding Access and Increasing Student Learning in Post-Primary Education in Developing Countries: A Review of the Evidence ."	Reviews the evidence to date on post-primary education and highlights the gaps in the literature, with a focus on identifying policies that should be given the highest priority for future research.
Lloyd, Cynthia and J. Young. 2009. New Lessons: The Power of Educating Adolescent Girls—A Girls Count Report on Adolescent Girls .	Provides data and analysis from more than 300 past and current programs in girls' education. Offers evidence on how proven practices can increase the number of adolescent girls attending school and highlights the pedagogical approaches that enhance learning and employment.
Marcus, Rachel and Ella Page. 2016. " Girls' Learning and Empowerment – The Role of School Environments ."	Reviews 150 studies to determine which kinds of school environment and pedagogical approaches make the greatest contribution to girls' learning in low- and middle-income countries (LMICs) and synthesises the evidence on the impacts of education on girls' and women's lives.
Snilstveit, Birte et al. 2015. " Interventions for Improving Learning Outcomes and Access to Education in Low- and Middle-Income Countries: a Systematic Review ."	Looks at 420 papers to "identify, assess and synthesise evidence on the effects of education interventions on children's access to education and learning in L&MICs." The authors tried to assess differential effects for girls, but found too few studies disaggregated findings at this level to provide any useful conclusions.
Sperling, Gene B., Rebecca Winthrop, Christina Kwauk. 2016. What Works in Girls' Education: Evidence for the World's Best Investment .	Consolidates hundreds of studies on girls' education to easily and accessibly make the case for why girls' education is important, describe progress in girls' education and remaining gaps, synthesize evidence on what works to address girls' education needs, and lay out the key challenges for the next decade.
Unterhalter, Elaine, Amy North, Madeleine Arnot, Cynthia Lloyd, Lebo Moletsane, Erin Murphy-Graham, Jenny Parkes, and Mioko Saito. 2014. " Interventions to Enhance Girls' Education and Gender Equality ." Education rigorous literature review, DFID.	A rigorous literature review that investigates the kind of interventions that research evidence suggests can lead to an expansion and improvement in girls' education, and the relationship between an expansion and improvement in girls' education and a deepening of gender equality.
2016 Global Education Monitoring Report and Gender Review	Provides an overview of current data and trends related to the Sustainable Developments goals on education.

TRENDS IN & IMPACTS OF GIRLS' EDUCATION

King, Elizabeth and Rebecca Winthrop. 2015. <u>Today's Challenges for Girls' Education.</u>	Reviews in detail the progress in girls' education, the work that remains to be done, and strategies for success.
Murphy-Graham, Erin and Cynthia Lloyd. 2015. <u>"Empowering adolescent girls in developing countries: The potential role of education."</u>	Proposes a conceptual framework for how education can promote adolescent girls' empowerment and highlights promising examples of empowering education programs.
Grant, Monica J. 2015. <u>"The Demographic Promise of Expanded Female Education: Trends in the Age at First Birth in Malawi."</u>	Looks at whether the expansion of secondary education in Malawi has led to a later age at first birth and finds that despite increases in female grade attainment it has not change, likely due to a deterioration of school quality and a shift in age patterns of enrollment.
Baird, Sarah, Craig McIntosh, and Berk Özler. 2015. <u>"When the Money Runs Out: Evaluating the Longer-Term Impacts of a Two Year Cash Transfer Program."</u>	Looks at the long term impact of a two year cash transfer program for adolescents in Malawi. Finds impacts during the program on delayed marriage, fertility, and HIV infection that do not hold when the program ends. Also finds no increase in employment rates, wages, or real-life capabilities.
Grant, Monica and Jere Behrman. 2010. <u>"Gender Gaps in Educational Attainment in Less Developed Countries."</u>	Examines gender gaps in schooling in the developing world. Finds that among those children who have attended school at some stage in their lives, girls complete an equal or greater number of grades than boys.
LeVine, Robert, Sarah LeVine, and Beatrice Schnell. 2001. <u>"Improve the Women's: Mass Schooling, Female Literacy, and Worldwide Social Change."</u>	Tests a model for how women's schooling might contribute to social and demographic change. Show how a mother's literacy and language provide a pathway to better health care for her children.
Chismaya, Grace et al. 2012. "Gender and Education for All: Progress and problems in achieving gender equity."	Explores the impact that rapid increases in gender parity in Malawi and Bangladesh have had on gender inequities in schools and communities. Finds limited evidence that educational initiatives have led to a transformation in the inequitable gender relations that girls face.
Kazianga, Harounan, Dan Levy, Leigh L. Linden, and Matt Sloan. 2012. <u>"The Effects of "Girl-Friendly" Schools: Evidence from the BRIGHT School Construction Program in Burkina Faso"</u>	This study evaluates a "girl-friendly" primary school program in Burkina Faso using a regression discontinuity design.

ADOLESCENT HEALTH

Mensch, Barbara, Stephani Psaki, and Cynthia Lloyd. "Menstruation and Girls' Schooling: Do Menstrual Hygiene Management Programs Improve Girls' Educational Outcomes in Poor Countries?" (forthcoming)	Summarizes the current state of knowledge on menstrual hygiene management as it relates to girls' current educational challenges. Does not find strong evidence that difficulties managing menstruation are an important cause of school dropout or absenteeism.
--	--

Haberland, Nicole. 2015. <u>"The Case for Addressing Gender and Power in Sexuality and HIV Education: A Comprehensive Review of Evaluation Studies."</u>	Explores whether the inclusion of content on gender and power matters for the efficacy of sexuality and HIV education by examining 22 interventions with rigorous evaluations published between 1990 and 2012. Finds that programs that addressed gender or power were five times as likely to be effective as those that did not.
ASPIRATIONS	
Appadurai, Arjun. 2004. <u>"The Capacity to Aspire: Culture and the Terms of Recognition"</u>	This book chapter from Stanford University Press argues that strengthening the capacity to aspire could help the poor to contest and alter the conditions of their poverty.
Ibrahim, Solava. 2011. <u>"Poverty, aspirations and wellbeing: afraid to aspire and unable to reach a better life – voices from Egypt"</u>	The aim of the paper is to present a conceptual framework for analyzing aspirations based on the capability approach and to apply a new methodology to articulate these aspirations.
Dalton, P.S., Ghosal, S., Mani, A. 2011. <u>Poverty and Aspirations Failure.</u>	Develops a theoretical framework to study the psychology of poverty and aspirations failure, in which the rich and the poor share the same preferences and also a behavioral bias in setting aspirations.
EARLY CHILDHOOD EDUCATION	
Harkness, Sara and Charles M. Super. 2010. <u>Culture and gender in early childhood development.</u>	A collection of brief updates in the focus area of gender and early childhood care and development, highlighting relevant theoretical frameworks, policy recommendations, and successful programs.
Tanner, Jeffery C., Tara Candland, and Whitney S. Odden. 2015. <u>Later Impacts of Early Childhood Interventions: A Systematic Review.</u>	A systematic review that examines the long-term effects of early childhood interventions drawing on 55 studies. Includes an analysis on long term benefits for girls as compared to boys.
UNESCO. 2007. <u>Strong Foundations for Gender Equality in Early Childhood Care and Education - Advocacy Brief.</u>	This brief focuses on the gender issues in the services provided for children who are three years of age or older in the Asia-Pacific region. Its scope is informed by UNESCO's commitment to holistic pre-primary services for this age group.
REFUGEE EDUCATION	
Tyrer RA, Fazel M. 2014. <u>School and Community-Based Interventions for Refugee and Asylum Seeking Children: A Systematic Review.</u>	Reviews the literature on school and community-based interventions aimed at reducing psychological disorders in refugee and asylum-seeking children.
Watkins, Kevin. 2016. <u>No lost generation – holding to the promise of education for all Syrian refugees.</u>	This report looks at the challenges facing two countries on the front-line of the global refugee crisis – Lebanon and Turkey. In both cases the level of need vastly outstrips the resources available. This report focuses on financing to deliver on the London Conference pledge.

Sinclair, Margaret. 2007. <i>Education in Emergencies.</i>	Reviews the rationale for education in situations of emergency and crisis, and the basic principles for emergency education. Examines how these principles were reflected in recent emergencies.
SOCIAL AND EMOTIONAL SKILLS	
Heckman, James and Tim Kautz. 2012. “ Hard Evidence on Soft Skills. ”	Summarizes evidence on the types of skills that are captured and not captured on typical achievement tests. In particular, makes the case for a causal relationship between soft skills (goals, motivations, preferences) and success in life.
Lippman, Laura, et all. 2015. Key ‘Soft Skills that Foster Youth Workforce Success: Toward a Consensus across Fields.	Recommends a research-based set of soft skills that increase the likelihood that youth will be successful in the workforce.
GENDER	
KIT Gender. 2016. “A Conceptual Model of Empowerment of Women and Girls.” (Unpublished White Paper developed for the Gates Foundation.)	Presents a conceptual model to “unpack the outcomes and processes of empowerment of women and girls” and to outline how these in turn relate to other development outcomes.
World Bank. 2012. World Development Report 212: Gender Equality and Development.	Makes the case for how gender equality matters for development and outlines areas where there has been progress and where gaps remain.
Miske, Shirley, Margaret Meagher, and Joan DeJaeghere. 2010. “ Gender mainstreaming in education at the level of field operations: the case of CARE USA’s indicator framework. ”	This paper contends that gender analysis in education – especially at the level of operations for development agencies – could be enhanced through the use of robust education and gender analysis frameworks that integrate dimensions of educational quality and attainment with equality and empowerment. The idea is explored by examining CARE USA’s comprehensive Common Indicator Framework (CIF).
Subrahmanian, Ramya. 2006. “ Mainstreaming Gender for Better Girls’ Education: Policy and Institutional Issues ”	One of a series of papers aimed at promoting better education in South Asia. This paper raises several key points in moving the gender agenda forward in education. These policy lessons need then to be mainstreamed, so that they permeate all aspects of educational policy and implementation.