

Endline Evaluation Report Innovation Window

Final Report (December 2017)

Evaluation Manager Girls' Education Challenge (GEC) Fund



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This document has been approved for submission by Coffey's Project Director, based on a review of satisfactory adherence to our policies on:

- Quality management
- HSSE and risk management
- Financial management and Value for Money (VfM)
- Personnel recruitment and management
- Performance Management and Monitoring and Evaluation (M&E)

Ben Ward, Project Director

Signature:

Abbreviations and Acronyms

ALP	Accelerated Learning Programmes
ASER	Annual Status of Education Report
DFID	UK Department for International Development
EFA	Education For All
EGMA	Early Grade Math Assessment
EGRA	Early Grade Reading Assessment
EM	Evaluation Manager
EMIS	Education Management Information System
FGD	Focus Group Discussion
FM	Fund Manager
GAP	Gender Action Plans
GEC-T	GEC Transitions
GNI	Gross National Income
GPE	Global Partnership for Education
ICT	Information and Communications Technologies
IW	Innovation Window
LSBE	Life Skills Based Education
M&E	Monitoring and Evaluation
MICS	Multiple Indicator Cluster Surveys
ODA	Overseas Development Aid
PbR	Payment by Results
PPP	Public Private Partnership
RAG	Red Amber Green rating system
SD	Standard Deviations
SDG	Sustainable Development Goals
ToC	Theory of Change
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGEI	United Nations Girls' Education Initiative

UNICEF United Nations International Children's Emergency Fund

USAID US Agency for International Development

USE Universal Secondary Education

Project Abbreviations

The following abbreviations are used for project organisations in tables in this report:

BRAC	BRAC
Camfd	Campaign for Female Education
ChFnd	ChildFund
CSU	Cheshire Services Uganda
Eco	Eco Fuel
HPA	Health Poverty Action
ICL	I Choose Life
LCDK	Leonard Cheshire Development Kenya
Link	Link Community Development International
Mercy	Mercy Corps
Oppty	Opportunity International
PEAS	Promoting Equality in African Schools
RV	Raising Voices
ReK	Red een Kind
TfAC	Theatre for a Change
Varkey	Varkey Foundation
VSO	Voluntary Services Organisation

Country Abbreviations

The following abbreviations are used for countries in tables in this report:

Afg	Afghanistan
Eth	Ethiopia
Gha	Ghana
Mal	Malawi
Moz	Mozambique
Rwa	Rwanda
Sou	South Sudan
Tan	Tanzania
Zam	Zambia

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Executive Summary

Introduction to the GEC

The Department for International Development (DFID) launched the £355 million Girls' Education Challenge Fund (GEC) in 2012, setting an ambitious target of reaching one million marginalised girls by March 2017¹. The Innovation Window (IW) is one of three funding windows of the GEC, the others being the Step Change Window (SCW) and Strategic Partnerships Window (SPW).

The Business Case² for the GEC recognised that there was a lack of robust evidence of the causes of girls' marginalisation from education. This was the reason why DFID challenged organisations to identify the root causes of educational marginalisation and rigorously collect evidence of projects' performance to learn what worked well, why it works, for whom and under what circumstances.

DFID appointed Coffey, in partnership with RTI International and ORB, as the Evaluation Manager (EM), with responsibility for independently evaluating the overall effectiveness and impact of the programme. To do this, the EM closely collaborated with the GEC Fund Manager (FM) to support projects to collect data and report results consistently across the programme.

In July 2016, DFID announced it would provide a further £100 million through the GEC Transitions (GEC-T) Window³ to continue supporting the GEC's one million marginalised girls to transition through school phases and complete a cycle of education. DFID will support an additional 175,000 of the poorest and most marginalised girls through the 'Leave No Girl Behind' Window⁴.

The Innovation Window

IW projects operated in 12 countries: Afghanistan, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nepal, Rwanda, South Sudan, Tanzania, Uganda and Zambia. DFID awarded funding of up to £2 million per project to 19 projects, which set out to test new approaches enabling marginalised girls to achieve education outcomes. Seventeen IW projects were operating at the time of the endline evaluation, aiming to address multiple barriers to girls' education affecting individual girls, their households, communities, and schools.

Purpose of the endline evaluation report

The purpose of this endline evaluation report is to provide useful and reliable evidence of the programme's effectiveness, sustainability, value for money (VfM), and impact of interventions on girls' education outcomes. This evidence will be used by DFID, the FM and projects to further develop existing activities in the next phase through GEC-T. This report follows the IW Baseline Report published in January 2015 and the IW Midline Report published in March 2017, and covers the first three-year phase of the GEC programme period. This report should also generate transferable learning for a wider audience, including donor agencies, governments of GEC countries, and other policy-makers.

Evaluation approach

As the EM for the IW, we assess the overall impact of projects on targeted girls in treatment communities. In contrast with the Step Change Window evaluation design, the IW evaluation design relies solely on evidence collected and reported by projects themselves and their external evaluators, validated by the Fund Manager (such as reports, datasets and outcome spreadsheets). We carried out an overarching analysis and synthesis of this

¹ Girls' Education Challenge: <http://devtracker.dfid.gov.uk/projects/GB-1-202372>

² GEC Business Case v.3, September 2011

³ For more details see DFID's press release on the extension of the GEC, at: <https://www.gov.uk/government/news/britain-to-help-175000-girls-in-worlds-poorest-countries-get-an-education>.

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/559123/leave-no-girl-behind.pdf.

evidence, aiming to report evaluation findings at the window level. Our approach also involved drawing on relevant secondary data and literature to help triangulate our analysis and explore findings in depth.

Key findings

Reach and equity

Our findings suggest that projects targeted girls who are disadvantaged across a variety of dimensions that differ across project areas, with most IW projects reaching their target number of beneficiaries at endline. This reflects DFID's approach to allowing projects themselves to define how their target girls were marginalised from education according to the contexts in which they lived, which is consistent with the findings from the GEC Process Review.⁵

Some projects targeted all girls living in their intervention areas or school catchments, considering everyone in these areas to be marginalised. Conversely, some projects applied a more detailed range of eligibility criteria to select girls in communities or within schools who they considered more marginalised compared to others. Conflict and natural disasters sometimes prevented projects from reaching their target girls. In general, the sheer diversity of factors that contributed to marginalisation meant that it was not always possible for projects to implement interventions that benefited all girls in their target group equally. Some girls needed more support than others, a factor that projects had not always fully anticipated requiring projects to adapt their programmes to accommodate a broader spectrum of needs.

We also found that some aspects of educational marginalisation are not gender-specific and preclude both boys as well as girls from achieving learning outcomes. Some projects therefore implemented activities that address barriers to education that are common to girls and boys.

Impact on learning outcomes

The FM reports⁶ that the IW 'substantially met' its learning outcome target by reaching and benefiting 153,352 girls with improved learning outcomes⁷, a 98 percent achievement against the endline target. While this is a substantial number, several projects did not have enough of an effect on girls' learning to achieve their targets.

Achievement against target

The FM defined IW learning targets as an improvement of 0.5 standard deviation (SD) over the three-year implementation period of the GEC, from baseline to endline. Projects' achievements take into account girls' progression in control areas and the specific learning distributions among their target populations. At endline, five out of sixteen projects achieved their literacy targets, and two projects achieved their numeracy targets. However, it is possible that since projects aimed to target marginalised girls in some very challenging contexts, learning improvements for this specific population were more difficult to secure and may take more than three years to materialise.

Increase in words per minute (EGRA) and percentage points (EGMA)

Nine out of sixteen projects reported reading fluency in words per minute using the EGRA test and provided data for baseline, midline and endline. Among these projects, treatment group scores have improved, on average, by two words per minute more than the control group between baseline and endline. Across the ten projects using EGMA, treatment group scores have improved, on average, by four percentage-points more than the control group between baseline and endline. Contrary to our findings from midline, projects that implemented interventions with both in-school and out-of-school girls did not find evidence of greater improvement in literacy or numeracy scores for out-of-school girls' compared to in-school girls at endline.

Impact on attendance

Projects observed a small increase in attendance rates based on their endline evaluation findings. This moderate improvement may be explained by the relatively high attendance rates found at baseline, as well as the difficulties

⁵ Coffey (2015), GEC Process Review Report

⁶ PwC (August 2017) "Girls' Education Challenge Programme Completion Report – Reporting Period 16 April 2012 – 30 April 2017"

⁷ Defined by PwC for logframe reporting purposes as *improvements in literacy and numeracy by GEC-supported girls that exceed improvements by non-GEC supported girls, to an agreed target.*

in measuring attendance accurately. Attendance rates at endline are above national averages for a majority of projects.

Poor quality attendance data makes it difficult to produce reliable findings at endline. Poor quality school-based measures led to inconsistencies in attendance data, largely due to the unreliability of school records and registers, and restrictions to spot checks in some schools.

Effectiveness of IW projects' activities

Through the challenge fund design, the GEC encouraged organisations to develop their own theories of change and intervention mechanisms to address barriers to education in specific contexts and for specific populations of marginalised girls.

We found strong evidence that addressing the cost of schooling improved attendance, but did not immediately influence girls' learning. Learning did not improve without a functioning schooling system staffed by sufficiently qualified and capable teachers. Teacher training in literacy and numeracy were crucial to improving the quality of teaching and eventually girls' learning. Linked to this, improved facilitation skills and use of participatory methods helped ensure that students understood what they were being taught.

Girls' self-confidence and aspirations also improved since baseline, although the evidence is unclear whether this contributed to improvements in attendance or learning. Support from mentors, female community members and other (older) girls have improved girls' aspirations and self-confidence. Similarly, tutorial classes helped girls increase their confidence in their ability to learn. Girls valued tutorial classes because they involved smaller groups of children, provided a greater amount of help on an individual basis, and girls were able to ask questions that they may not have been confident to ask in front of boys or the whole class.

Community-based activities such as gatherings and meetings to raise awareness about girls' education had a positive impact on parents' attitudes and beliefs, leading to improved attendance for girls. Visits to households also changed attitudes towards girls' education and helped develop direct and regular contacts between parents and the school. However, although there is evidence of a positive attitudinal change, community-based interventions alone do not seem to have systematically improved learning.

Many projects inadvertently caused jealousy and backlash among non-beneficiary groups, including both boys and girls. This led some projects to adapt their intervention models and involve boys in their activities.

Innovation

IW projects have been innovative in two ways: (1) by using existing resources in an innovative manner (e.g. forming partnerships with local and international organisations; utilising community structures; and partnering with government); and (2) by providing new products or establishing new systems (e.g. developing new technologies; providing new structures; and introducing methods used elsewhere to a new context).

Positive results, better designed interventions and increased sustainability has stemmed from collaborative work with local organisations, buy-in from national governments, and the expertise of specialised organisations. The implementation of new structures using innovative pedagogical skills to interact with marginalised girls generally showed positive effects on learning. By contrast, introducing new technologies as a way of enhancing educational outcomes has had mixed effects, mainly related to the extent to which technology-based solutions were adapted to specific learning needs, conditions and contexts. The impact of education technology was limited by a lack of ongoing support and maintenance, as well as limited access to well-trained and committed in-person facilitators.

Sustainability

At the outset, projects were asked to report on the mechanisms they had put in place to enable marginalised girls to complete a full cycle of education. The FM reports that all projects have put these mechanisms in place. Projects' endline evaluation reports focused on the extent to which these mechanisms could continue to support girls without further support through the GEC. At this stage, projects are widely reliant on schools and communities to continue delivering activities by providing long-term voluntary support, maintaining facilities and rolling out new teaching and management practices on an ongoing basis. While projects have helped change attitudes towards girls' education, it is hard to establish from the evidence whether households and communities can sustain these changes in the absence of continued support. Although school management and teachers expressed support for projects and changes in teaching practices, there is little evidence of plans to ensure that schools will be able to retain the knowledge and skills gained because of high teacher mobility and a severe lack of resources. Projects have successfully aligned their activities with government policy and had some success in influencing policy change. This is evident in the IW exceeding its match-funding target by 145 percent. However, this has not yet translated into concrete plans for government to continue funding projects' activities or to take them over.

Given the three-year implementation timeframe, sustaining projects' activities in these contexts was a challenge from the outset. There is some evidence of projects securing new funds to continue activities beyond the life of the GEC. However, projects are working in contexts where communities, schools and government education services severely lack the resources needed to fund additional activities for a sustained period, particularly activities that are relatively new or mechanisms that are at relatively early stages in their development. This requires more planning and time for projects to identify which activities communities, school and government can feasibly sustain.

Value for Money

Our analysis suggests that at the window level, extra-curricular activities and non-formal education were the most cost-effective types of intervention, after taking into account the number of girls benefiting from improvements in their learning. In broad terms, school-related interventions and poverty-related interventions appear to have had the greatest effect and benefited the greatest number of girls. However, our assessment across the IW suggests there are significant issues in sustaining these activities, which potentially constrains the long-term or lifetime benefits and value for money that could be realised from these interventions.

Key conclusions

The IW has resulted in a substantial number of marginalised girls living in very challenging areas benefiting from improvements in their literacy and numeracy.

The IW has 'substantially met' its learning outcome target by reaching and benefiting 153,352 girls with improved learning outcomes⁸, a 98 percent achievement against the endline target. Despite this, several projects were not able to achieve their targets. The results from projects using EGRA and EGMA tests showed that gains in beneficiary girls' literacy and numeracy were very modest over the three-year implementation period. Reading fluency among targeted girls improved, on average, by two words per minute more than the improvements shown in the control groups, and numeracy improved by four percentage-points more than those in the control groups, between baseline and endline.

Projects had difficulties improving learning outcomes for girls during the lifetime of the programme.

Projects were not always prepared for the challenges in reaching particularly marginalised subgroups who required additional support to attend school and learn effectively, such as girls living with disability or out-of-school girls. This suggests that projects could not always reach and benefit the intended range of marginalised girls, possibly due to the variety of barriers to education different subgroups of girls were facing. This reflects the difficulties in targeting and designing projects tailored to the needs of heterogeneous populations.

Consequently, the effects of IW projects on specific subgroups of girls within their target populations are unclear. Although most projects' identification methods used to select marginalised girls created a better understanding of

⁸ Defined by PwC for logframe reporting purposes as *improvements in literacy and numeracy by GEC-supported girls that exceed improvements by non-GEC supported girls, to an agreed target.*

those most in need, this does not appear to have translated into better learning gains for these girls. Overall, projects do not seem to have had a greater impact on the poorest among their target communities. Subgroup analysis also revealed that the learning improvements of out-of-school girls did not significantly differ from the learning improvements of in-school girls, contrary to the trend that emerged at midline.

Projects did not seem to anticipate which barriers were most critical in preventing girls from improving their learning.

Projects that clearly identified the most important barriers to girls' *learning*, delivered interventions that proved more successful at improving learning. As projects deepened their understanding of the environment in which they operated, they understood that some of the barriers they had been trying to improve were not always the most crucial barriers to tackle within the timeframes given.

Projects occasionally overlooked the importance of supply-side barriers, such as poor school and classroom infrastructure or the limited availability of qualified teachers. Similarly, across the IW, we found that while increasing income through loans, savings and income-generating activities did sometimes increase household income, this did not always increase access to education or improve learning results, at least within the timeframe of the programme. Finally, girls' self-confidence and aspirations also improved since baseline because of IW projects' interventions, but it is unclear whether this effectively improved girls' attendance or learning.

Interventions at the school level improved both attendance and learning. Those designed to directly improve the quality of teaching were particularly effective in helping girls learn more.

Interventions at the school level addressing the quality of teaching were particularly effective. Better teaching practices led to learning improvements and created a classroom environment that proved more conducive to learning. Regular teacher training involving on-the-job feedback and a focus on engaging in constructive interactions with students also had a positive impact on learning. Schools working with parents improved their engagement with education and increased girls' attendance, and teachers actively following up on girls' performance were able to advise parents and discuss the reasons behind girls not regularly attending school.

Over the course of the programme, projects realised that interventions which included boys should be part of the solution to address gender inequalities.

Relationships between boys and girls were both positively and negatively affected by projects' interventions. While this could be expected from a programme that primarily focuses on girls, the extent to which projects considered gender dynamics in their activities appears to have been limited at the design stage. Several projects concluded at endline that they should include interventions to target boys in the future.

There is strong evidence that boys also face their own specific barriers to education. Some of the projects recognised that boys face gender-specific issues which cause them to drop out or perform poorly in school. In target communities, boys from marginalised families are often similarly disadvantaged to girls. This suggests that despite the focus on improving girls' education in programmes such as the GEC, a more systematic approach to including boys in the design of interventions should be considered.

The fact that projects' evaluation design focussed on demonstrating changes in outcomes, coupled with limitations in evaluation implementation, hindered our capacity to evaluate what worked well or less well in improving girls' learning outcomes.

A number of factors affected the data quality of a large number of IW projects, including the difficulty in collecting data in challenging contexts, and in some cases the lack of qualified external evaluation firms to conduct sound analysis and reporting. Furthermore, projects' external evaluators did not always sufficiently assess and discuss in their reports the effects of attrition and contamination on measuring the impact and effectiveness of activities. As a result, the reliability of project evaluation data remains questionable in a number of cases.

Generally, projects provided little qualitative evidence of the links between changes in a particular barrier (at the output level) and the contribution this specifically made to improving education outcomes, in particular literacy and numeracy. A large number of reports failed to present a coherent narrative concerning the specific effects of interventions on learning outcomes. Projects were not required to quantitatively assess which specific interventions had an effect on learning. This would not have been practical or feasible to do in many cases. However, projects

need to more systematically capture and present qualitative data and analysis in their reports that show how, why and to what extent their activities contributed to reducing barriers to girls' education, and how changes in these barriers link to learning outcomes, especially referencing the *intermediate steps* between outputs and outcomes.

A key learning point that emerges from our review of projects' evidence throughout the evaluation is the importance of rigorous qualitative research to establish the intermediate links between outputs and outcomes. Few projects managed to produce strong qualitative analysis and findings in their project evaluation reports.

There is little evidence that many activities would have continued without further support – a combination of poverty and severely under-resourced education systems made this difficult for projects to achieve.

Without the support of the successor to the GEC programme, GEC-T, it is highly unlikely that many IW activities would have continued as they stand now and very few would have continued beyond the immediate short term. This is perhaps unsurprising, as many IW projects work in extremely challenging situations. Girls and their households face severe poverty, while government education systems are woefully under-resourced. In these conditions, projects have had to work very closely with schools, communities, government officials and agencies to focus on getting their activities off the ground and deliver results within three years.

At midline, we reported that projects planned, mobilised, and implemented their sustainability strategies too late in their implementation periods, and the evidence suggests that this conclusion holds true at endline. However, projects first needed to prove to communities and government officials that their activities worked. Without 'proof of concept' it would have been difficult to get buy-in beyond the end of the projects' lifetime. This has taken time. At endline there is little evidence of these plans being in place at any level. As a consequence, projects are overly reliant on communities, schools or government ministries to take responsibility for continuing activities without much further support or funding. It is important to note that the full incorporation of project activities into national systems was not realistic within the timeframe of the GEC. Even if projects had planned and implemented their sustainability strategies earlier, it is clear now that some barriers to girls' education are extremely difficult to address in sustainable ways and may need much larger investments over longer time periods.

Projects need to refocus their interventions to have a more intensive impact on girls' learning.

IW projects have reached and benefited a substantial number of girls who are marginalised from education for a wide range of different reasons in challenging contexts. The lack of resources in education systems and severe poverty characterising many of these contexts have significantly constrained the sustainability of the benefits that projects have delivered. However, after three years, our analysis of the impact of the IW as a whole suggests that projects have not had the level of impact needed to enable their target girls to progress through the school phases with the literacy and numeracy skills that they need. It may be that projects require more time for some of their interventions to deliver the necessary increase in girls' literacy and numeracy. Overall, we conclude that in the next phase of the GEC many projects need to reflect on the challenges and opportunities of the contexts in which they are working, and refocus their activities to increase the intensity of their impact on girls' learning levels, to enable them to catch up and progress with their education effectively.

1 Introduction

1.1 Background to the GEC Innovation Window

1.1.1 Context and rationale

Changes in the global problems affecting the education of marginalised girls

Every child has the right to basic education. Educating girls, especially to secondary level, delivers significant economic, health and social benefits to the girls themselves, their families and the wider community. Girls who complete secondary school tend to have fewer children over the course of their lives, higher wages, and a higher life expectancy compared with girls who have only completed primary school.⁹ A recent report by the Education Commission suggests that one US dollar invested in an additional year of schooling in low-income countries, particularly for girls, creates earnings and health benefits of USD 10, and around one-third of the decrease in adult mortality since 1970 comes from improvements in the education of girls and young women.¹⁰

From the outset of the Girls' Education Challenge (GEC) Fund in 2012, DFID was working towards the Millennium Development Goals (MDGs) and international targets agreed by the United Nations (UN) to halve world poverty by 2015. Progress on girls' education was critical to the achievement of MDGs 2¹¹ and 3¹², which specifically relate to universal primary education and gender equality. By the time that the final Education for All (EFA) Global Monitoring Report (2000-2015) was published more girls were in school, stayed there longer, and learned more while they were there¹³.

The last decade has seen the world approaching universal primary education coverage with a majority of children, both boys and girls, entering primary education in most countries around the world. Although primary school enrolments for girls have improved along with boys, school completion rates remain equally low for both boys and girls. Around 264 million children and young people were estimated as being out of school by the end of 2015 – this includes 61 million children (9%) of children of primary school age (6-11 years), 62 million (16%) adolescent children of lower secondary school age (12-14 years) and 141 million (37%) children of upper secondary school age (15-17 years)¹⁴. In secondary school, the differences between boys' and girls' participation rates are significant. While global averages may suggest that gender inequalities are small, at regional and national levels, large disparities exist within countries, with poor rural girls experiencing worse educational outcomes, even at the primary school level. Girls are more likely to remain completely excluded from the formal education system than boys. Across Sub-Saharan Africa, 9 million girls will never have the opportunity to learn to read or write in school (compared to 6 million boys), and in South Asia, four out of five out-of-school girls will never attend school (compared to two out of five out-of-school boys).

Improved access to education has not resulted in improvements in learning for many children. Levels of learning remain extremely low, even for those enrolled in school¹⁵ - approximately 250 million children cannot read, write or do basic maths, including more than 130 million children who do not have basic literacy skills despite being enrolled in primary school. While significant challenges persist in terms of access to education, global development organisations recognise that improvements in the quality of learning in schools are urgently needed. The

⁹ United Nations Girls' Education Initiative (2014): *Accelerating Transition of Girls to Secondary Education: A Call for Action*. Discussion Paper, United Nations Children's Fund (UNICEF), New York, published online at: <http://www.ungei.org/resources/files/2014-04-GPE-UNGEI-Accelerating-Secondary-Education-Girls.pdf>.

¹⁰ The International Commission on Financing Global Education Opportunity (2016): *The Learning Generation. Investing in education for a changing world*. Available at: http://report.educationcommission.org/wp-content/uploads/2016/09/Learning_Generation_Full_Report.pdf.

¹¹ Goal 2: *Achieve universal primary education*; Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

¹² Goal 3: *Promote gender equality and empower women*; Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.

¹³ EFA (2015), 'Global Monitoring Report: Education for All 2000-2015, Achievements and Challenges', UNESCO.

¹⁴ UIS and GEM (2017), 'Reducing global poverty through universal primary and secondary education'. Policy paper 32 /Fact Sheet 44. Paris: Global Education Monitoring Report'. Available at: <http://unesdoc.unesco.org/images/0025/002503/250392E.pdf>

¹⁵ UNESCO (2014), 'Teaching and Learning: achieving quality for all'. EFA Global Monitoring Report, Paris: UNESCO.

Sustainable Development Goals (SDGs) explicitly recognise the need to address not only persisting gaps in access, but also gaps in the equity, inclusivity and quality of education worldwide¹⁶.

In 2015 it was estimated¹⁷ that children in conflict affected countries, who make up 20 percent of the world's primary school aged children, account for around 50 percent of primary aged children who are out of school and 36 percent of all children not in schooling¹⁸. In fragile and conflict-affected states and in crisis situations the provision of basic education services becomes difficult or impossible. Sub-Saharan Africa is the region with the highest out-of-school rates for all age groups, with three regions home to nine of out ten out-of-school adolescents: Sub-Saharan Africa (26 million), Central Asia and Southern Asia (20 million), and South-east Asia (8.5 million).¹⁹

Persistent under-investment in education

A key rationale²⁰ in 2011-2012 for DFID's investment in the GEC was that traditional Overseas Development Aid (ODA) to education had stagnated and, given the global financial situation and shifting development priorities, may even decline.

Now, in 2017, under-investment in education persists and ODA to education is yet to return to 2010 levels. In 2013 aid data released by the OECD's Development Assistance Committee (DAC) showed a decline in education aid for the third consecutive year, with basic education (primary and lower secondary) suffering the greatest decline. While total ODA rose by 11 percent in 2013, aid to basic education declined by 7 percent,²¹ and the overall volume of aid to education fell by about US\$600 million between 2013 and 2014²². The UN Educational Scientific and Cultural Organisation (UNESCO) says ODA for education is now 4% less than in 2010. UNESCO also reports²³ that:

- there will be an annual finance gap of US\$39 billion in low income countries to achieve the SDG Education 2030 targets; and
- the education finance gap can be filled if select donors give 0.7% of GNI to aid, and 10% of that to basic and secondary education.

UNESCO estimates that more than double the current levels of spending would be required to achieve the SDG education targets by 2030. Education in humanitarian and conflict-affected settings continues to receive a relatively small proportion of the humanitarian budget (less than 2 percent), which prevents those children who are most marginalised from accessing a quality education.

UNESCO also highlighted the need for civil society and the private sector to play important roles in financing, implementing and ensuring mutual accountability to achieve the education targets set out in the SDGs. This particularly resonates with DFID's rationale for establishing strategic partnerships through the GEC. The need for diverse funding sources for education is also emphasised in the Education Commission's report²⁴, which calls for increased funding for education including ODA, emerging donors, non-concessional loans, and funding from the private sector. The commission estimates that total financing for education needs to rise by around 11 percent a year to US\$89 billion by 2030.

Changes in the global policy response to education

DFID published the GEC Innovation Window Baseline Report²⁵ in 2015, which is also the year that marked the end of the MDGs and the adoption of the SDGs. Goal 4 of the SDGs seeks to 'ensure inclusive and quality education for all and promote lifelong learning'. This goal recognises that major progress has been made towards increasing access to education at all levels and increasing enrolment rates in schools, particularly for women and girls, but a

¹⁶ United Nations Economic and Social Council (2016): Progress towards the sustainable development goals. Report of the secretary-general. E/2016/75, available at http://www.un.org/ga/search/view_doc.asp?symbol=E/2016/75&Lang=E.

¹⁷ UNESCO (2015) 'Fixing the broken promise of Education for All. Findings from the Global Initiative on Out-of-School Children.' UNESCO.

¹⁸ UNESCO (2015) 'Education for All 2000-2015, Achievements and Challenges.' UNESCO

¹⁹ UIS and GEM (2017), 'Reducing global poverty through universal primary and secondary education? Policy paper 32 /Fact Sheet 44. Paris: Global Education Monitoring Report'.

²⁰ DFID (2012), Girls' Education Challenge, Business Case Version 4; London: DFID.

²¹ Steer and Smith (2015): "It's time to Reverse Declining ODA to Education", Brookings, published online at: <https://www.brookings.edu/2015/01/12/its-time-to-reverse-declining-oda-to-education>.

²² UNESCO (2016) 'Global Education Monitoring Report – Education for people and planet: creating sustainable futures for all'

²³ UNESCO (2016) 'Global Education Monitoring Report – Education for people and planet: creating sustainable futures for all'

²⁴ The Education Commission (2016) The Learning Generation. Investing in education for a changing world. Education Commission

²⁵ Coffey (2015) 'Baseline Report – Innovation Window'

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/425338/innovation-window-Baseline-Report-fulla2.pdf.

greater focus is needed on the quality of education provided to enable effective learning outcomes to be achieved. Goal 5 aims to ‘achieve gender equality and empower all women and girls’. This entails tackling discrimination against women and girls, including issues of: violence and sexual violence; early and forced child marriage; female genital mutilation/cutting (FGM/C); effective participation and equal opportunities for leadership at all levels of decision-making; and access to health services, in particular reproductive health services.

As well as changes in the global policy response to education, there have also been changes in global funding for education – for example, the Education Cannot Wait Fund. As the Fund’s host, UNICEF launched the Fund in 2015. The Fund responds directly to the SDG commitment of achieving a quality education that leaves nobody behind. This was the second global fund to prioritise education in humanitarian settings, following on from UNICEF’s Education in Emergencies and Post-Crisis Transition Fund 2007 – 2009.²⁶ In 2016, the Education Commission also proposed an International Finance Facility for Education (IFFEd)²⁷ that could mobilise an additional US\$10 billion annually for education by 2020. The model brings together public and private donors, alongside international financial institutions like the World Bank and the regional development banks to create low-interest finance packages for lower-middle-income countries linked to countries increasing their own investment in education.

Extending DFID’s Girls’ Education Challenge Fund

In 2012, the Department for International Development (DFID) launched the £355 million Girls’ Education Challenge Fund (GEC). The GEC intends to support up to a million of the world’s most marginalised girls to improve their lives through education. The GEC has provided this support through three separate funding windows:

- the Step Change Window (SCW);
- the Innovation Window (IW); and
- the Strategic Partnerships Window (SPW).

All GEC projects work towards the same high-level GEC outcomes of improved enrolment, retention, attendance and learning for marginalised girls. However, each window has distinctive features and a specific focus.

The GEC programme ended in March 2017, with individual projects’ contracts ending at various points between early 2017 and March 2017. At the Girls’ Education Forum in London in July 2016, DFID announced it would provide a further £100 million of funding to the GEC²⁸. This funding will continue its support for: the one million marginalised girls supported by the GEC - enabling them to progress, transition through school phases and complete a cycle of education; and to help an additional 175,000 of the poorest and most marginalised girls receive a quality education – the Leave No Girl Behind initiative²⁹. This new initiative will support:

- interventions providing literacy, numeracy and skills relevant for life and work to adolescent girls aged between 10 and 19 who have never attended or have already dropped out of school; and
- girls who are located in one of the countries where DFID works and who are highly marginalised – girls who experience complex marginalisation because of their circumstances, including orphans, married or young mothers, girls with a disability, nomadic girls, refugees, those from the poorest communities and those with no access to education.

1.1.2 GEC theory of change and assumptions

The EM produced a high level Theory of Change (ToC) for the GEC as part of the GEC Evaluation Strategy³⁰ produced in 2013. This theory of change and DFID’s Business Case for the GEC assumes that there are educational barriers that affect boys and girls, but that girls face a number of additional, gender-specific challenges, which put them at a disadvantage in comparison with boys. The ToC for the GEC Evaluation Strategy in [Annex A.2](#) shows the links between different types of barriers and the GEC’s outcomes.

²⁶ https://www.unicef.org/emergencies/files/FINAL_PUBLIC_Consolidated_Netherlands_Donor_Report_2009.pdf

²⁷ The Education Commission (2016) The Learning Generation. Investing in education for a changing world. Education Commission

²⁸ For more details see DFID’s press release on the extension of the GEC, at: <https://www.gov.uk/government/news/britain-to-help-175000-girls-in-worlds-poorest-countries-get-an-education>.

²⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/559123/leave-no-girl-behind.pdf.

³⁰ Coffey (March 2013), Annex A in the ‘GEC Evaluation Strategy’.

The overarching ToC sets out the problems and barriers that hinder girls from enrolling, attending and learning in school. Problems identified include: economic barriers such as school fees, opportunity costs, and the cost of school materials; social and cultural barriers such as restrictive views about girls' education and the role of women and girls; educational barriers such as a lack of female teachers and poor teaching; logistical barriers such as lack of appropriate school facilities and distance to school; and institutional or political barriers such as lack of equity in public service provision, or a lack of influence of and accountability to marginalised groups.

Through the challenge fund design, the GEC encouraged organisations to develop their own theories of change and intervention mechanisms to address (some of) these barriers in specific contexts and for specific populations of marginalised girls.

The ToC assumes that by tackling these barriers, projects will help to improve girls' enrolment, attendance, retention and learning in school and contribute to an overall impact of improved life chances for marginalised girls.

1.1.3 Summary of IW projects and interventions

DFID awarded funding of up to £2 million per project to nineteen projects through the GEC Innovation Window (IW), which aimed at testing and piloting new approaches to enabling marginalised girls to achieve education outcomes that improve their life chances. Projects operate in Afghanistan, Ethiopia, Ghana, Kenya, Malawi, Mozambique, Nepal, Rwanda, South Sudan, Tanzania, Uganda, and Zambia.

At design stage, all 19 projects developed holistic theories of change for their interventions. Those interventions aimed to address multiple barriers to girls' education at the level of the individual girl, the household, the community, and the school. Some projects also aimed to improve school governance aspects related to girls' education.

Two of the projects that were initially part of the IW, VSO in Mozambique and Raising Voices in Uganda, were closed at midline, and are therefore not referenced in this report. Please refer to the [EM IW Midline Evaluation Report](#) for more information on these two projects.

Projects tackled barriers through a wide range of interventions. As shown in [Table 1](#), **projects carried out economic interventions** to offset the cost of education (e.g. income-generating activities, in-kind support or loans); **ran activities to improve school infrastructure and resources** (e.g. improving classrooms, providing textbooks and materials, improving sanitation facilities, incorporating technology into the classroom, etc.); **provided teacher training and support** (e.g. in literacy and numeracy, inclusive classroom strategies, or gender-sensitive pedagogy); **worked with communities** (e.g. through media campaigns, cooperation with parent and women's groups, engagement of faith leaders, etc.); **provided extra-curricular or non-formal education** (e.g. tutoring clubs, vocational training, mentoring, etc.); and **strengthened school governance and management structures**.

In addition, some projects carried out additional activities to empower girls and raise their self-esteem (e.g. creating safe spaces for girls to express themselves, running role model or mentoring programmes, and promoting girls' participation), tackled marginalisation (e.g. by addressing barriers related to disability, or issues of cultural or linguistic exclusion), and tried to reduce violence in school or the community (e.g. by addressing barriers related to peer violence, corporal punishment, or girls' safety going to school).

An overview of the activities that each project was delivering is provided in [Annex C](#). A discussion of each project's target group(s) and the extent to which these have been reached at endline can be found in [Section 3.1.1](#).

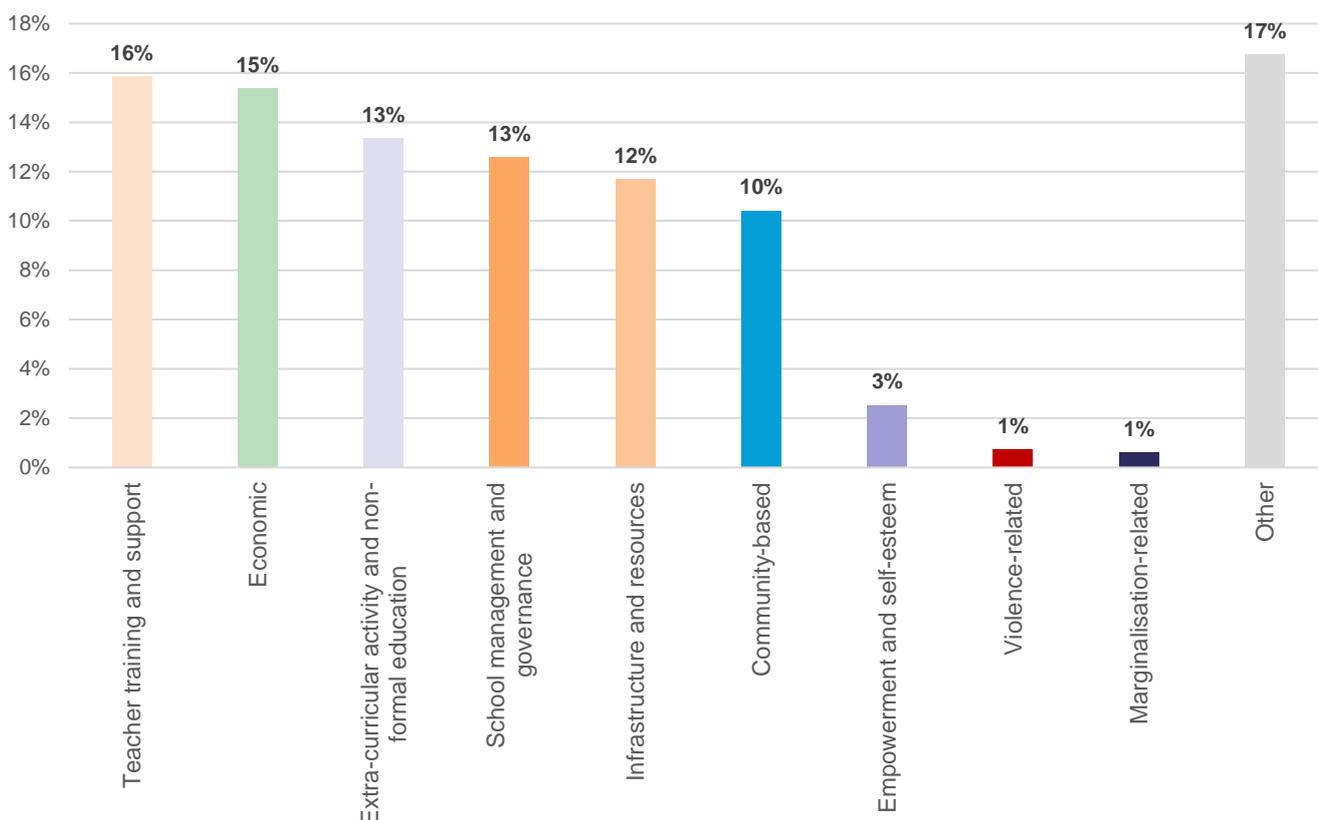
Table 1: Overview of IW project interventions

	Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd	
	Uganda					Kenya		Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh	
 <p>ECONOMIC</p>	<p>Economic interventions offsetting the cost of education: Bursaries, Cash Transfers, Income-generating activities, In-kind support (school kits, menstrual supplies), Loans and savings.</p>																	
	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✦		✓	✓	✓	
 <p>INFRASTRUCTURE & RESOURCES</p>	<p>Infrastructure and resources for schooling: School and classroom building/ improvement; Technology in classroom; Textbooks & Learning materials; Toilets & WASH facilities.</p>																	
		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		✓		
 <p>TEACHER TRAINING</p>	<p>Teacher training and support: Formal pre-service teacher training; Gender responsive pedagogy; Inclusive classroom strategies; Literacy and numeracy; Peer support and mentoring; Skills training.</p>																	
		✓		✓	✓	✓	✓	✓		✦	✓	✓	✓	✓	✓		✓	
 <p>COMMUNITY BASED</p>	<p>Community-based interventions: Adult literacy; Community gatherings; Household-level visits and support; Media (radio, TV, advertising); Parents' and women's groups; Working with faith groups and traditional leaders; Working with men and boys.</p>																	
		✓		✓	✓	✓	✓	✓	✓	✓	✓		✓		✦	✓	✓	
 <p>EXTRA-CURRICULAR & NON-FORMAL EDUCATION</p>	<p>Extra-curricular activity & non-formal education: Life skills (incl. SRH); mentoring (e.g. peer support); mixed sex or boys' clubs; non-formal / alternative education; tutoring (e.g. homework clubs); vocational training & economic empowerment.</p>																	
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
 <p>SCHOOL MANAGEMENT & GOVERNANCE</p>	<p>School management and governance interventions: Community and private schooling provision; Technology for school management; Working with local or national education authorities; Working with SMCs, PTAs and other stakeholders.</p>																	
		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	
 <p>EMPOWERMENT & SELF-ESTEEM</p>	<p>Empowerment and self-esteem: Activities that promote girls' voice and participation; Mentoring; Role models (older girls, female teachers, parents); Safe spaces.</p>																	
		✓	✓	✓	✓			✦		✓	✓		✓	✓	✓	✦	✓	
 <p>MARGINALISATION-RELATED</p>	<p>Marginalisation-related interventions: Interventions in remote or nomadic locations; Interventions addressing cultural/ linguistic exclusion; Interventions addressing disability Interventions with other marginalised groups.</p>																	
	✦	✓		✓	✓	✓	✓			✓	✦		✓			✓	✓	
 <p>VIOLENCE-RELATED</p>	<p>Violence-related interventions: Addressing abuse from adults in charge; Addressing child marriage and FGM; Addressing corporal punishment; Addressing peer violence Child protection policies development in schools.</p>																	
		✓		✦				✓		✓		✓	✓	✦	✦		✓	

Note: ✓ indicates that an intervention of this type is at the core of the project's intervention strategy. ✦ indicates that an intervention of this type is used by the project, but is not a core activity.

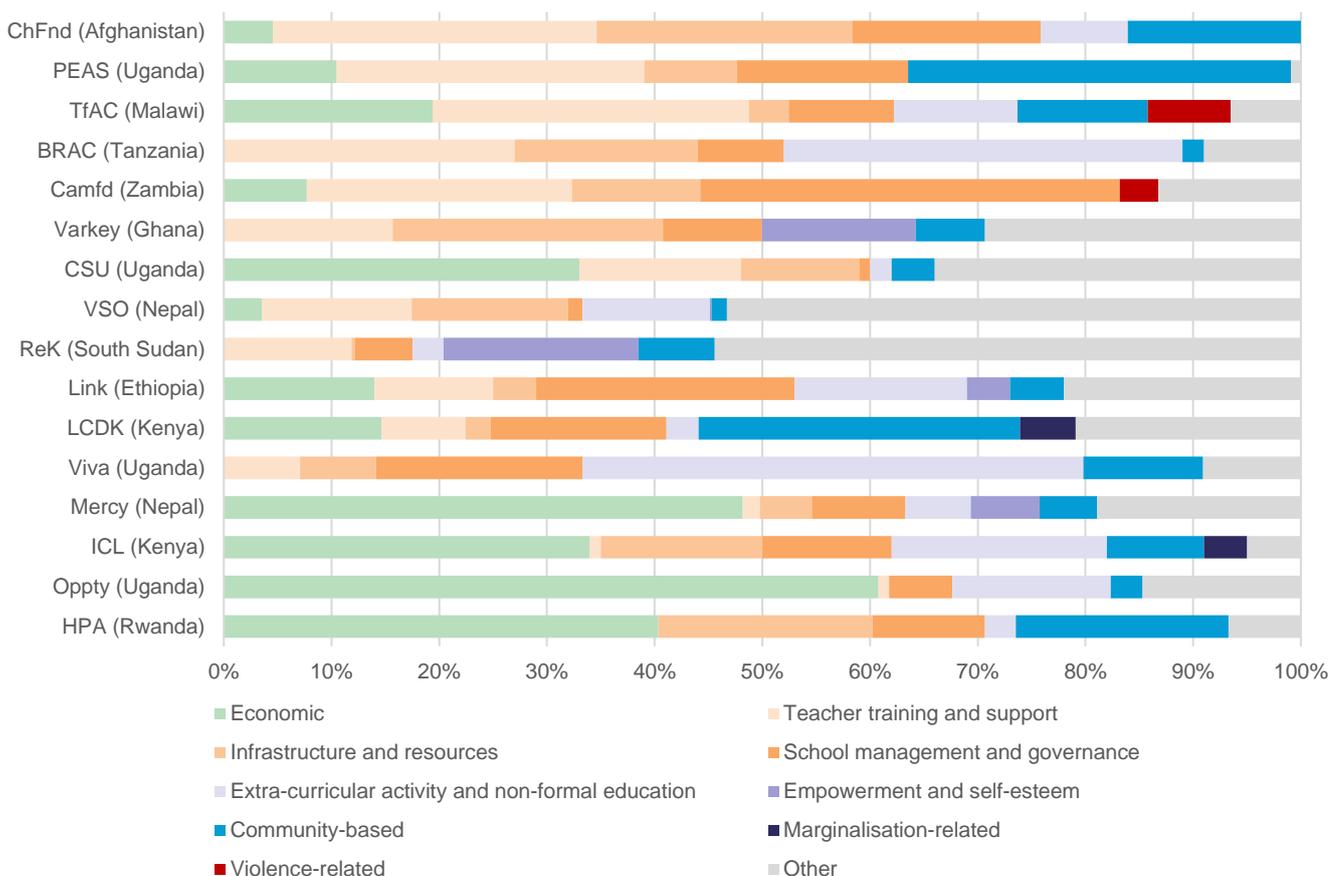
As part of the challenge fund design, each project delivered its own project and maintains relationships with local, regional and national education authorities. Cooperation between projects working in the same country or region was not an inherent component in the GEC. As demonstrated in Table 1, most IW projects combined a range of intervention types, all taking a ‘holistic’ approach. Differences in intervention approaches do not show at this high level, but only emerge when looking at the specific activities that projects ran (see Figure 1 in Annex C). Figure 1 and Figure 2 show the budget by intervention type across the window and by project, reflecting the diversity of interventions within each project. The total budget across the IW amounted to £42.5m, with *Teacher training and support*, *Other* (operational and overhead expenses) and *Economic* interventions representing the highest shares of project budgets. The *Other* category represents operational and overhead expenses, human resource costs, salaries and administrative costs, and M&E costs.

Figure 1: Relative expenditure by intervention type (IW projects)



Notes: Camfed (Zambia) data to Q12 (midline). *Other* = operation and overhead expenses, HR, salaries & admin costs, M&E activities, ‘other’.

Figure 2: IW relative project expenditure by type of intervention



Notes: Camfed (Zambia) data to Q12 (midline). no data from Eco Fuel (Uganda). *Other* = operation and overhead expenses, HR, salaries & admin costs, M&E activities, 'other'. It is worth noting that some of the budget categories shown here may be overestimated or underestimated compared to the types of intervention actually run by the project because this classification involved some subjectivity, especially in cases of overlaps between two categories.

1.2 Governance, purpose and scope of this evaluation

1.2.1 Governance of this evaluation

In 2012, DFID appointed Coffey, in partnership with RTI International and ORB as the Evaluation Manager (EM) of the GEC. We are responsible for designing and implementing the GEC monitoring and evaluation (M&E) framework to assess the effectiveness and impact of the programme as a whole. We also generate and share lessons learned to inform the ongoing design and development of the GEC programme and wider DFID programming. [Annex B](#) gives an overview of the roles and responsibilities of the different EM consortium partners.

We closely collaborate with the GEC Fund Manager (FM) (a consortium led by PwC) to support projects in collecting data in line with the evaluation requirements, and in reporting results with a maximum level of consistency across the fund. The FM has played a key role in developing M&E processes and requirements at the project level, and in managing relationships with projects. [Annex B](#) shows the M&E activities carried out by the FM in the GEC.

Projects funded through the IW have been **responsible for developing their own project-level M&E frameworks**. They have each been required to contract an external evaluator who collects data and assesses their progress and performance independently at project level. The FM and EM reviewed and quality assured the research instruments and reports produced by projects and their external evaluators.

Our intention, as the EM for the GEC, was to aggregate project datasets for meta-analysis. Unfortunately, due to the variable quality of project data and the insufficient level of consistency, this has not been possible either at baseline, midline or endline. We expand on the issues with the quality of project data in Section 2, and explain in our conclusions and recommendations what this means for the GEC and what could be done to improve this situation.

1.2.2 Purpose of the GEC evaluation

The overarching purpose of the GEC Evaluation Strategy is to produce reliable evidence of the programme's effectiveness and impacts that DFID, the FM and projects can use to inform improvements during the programme's lifetime, as well as future programme design. In particular, we assume that DFID, the FM and projects will use the findings and lessons learned from this evaluation to inform the successor programme to the GEC and its new Leave No Girl Behind window that DFID announced in July 2016.

DFID always envisaged that the programme evaluation should generate transferable lessons about what works, what does not, where and why in delivering girls' education outcomes for a wider audience including its partners, governments of GEC countries, and other policy-makers. We developed a communication plan with DFID after we completed the Midline Evaluation Reports for the SCW and IW. We will continue to support DFID in delivering that plan as far as possible.

This endline evaluation also serves an important accountability purpose by providing reliable information about the effectiveness and impact of the IW projects at the end of their implementation. It follows the baseline research that was conducted in 2013/14, and the midline evaluation, which was completed in 2016/17.

1.2.3 Communication plan

The GEC programme ended in March 2017. The GEC Knowledge Management Working Group was led by the FM and performed a coordinating role in identifying and facilitating opportunities to communicate and disseminate learning across the GEC programme and beyond to inform wider policy-making and programming. As the EM, we were an active member of this working group together with DFID. With the FM now focusing on supporting the successor programme to the GEC (i.e. GEC Transitions and accompanying 'Leave No Girl Behind' window), this working group has now ceased operating. However, the FM is still committed to actively supporting the communication and dissemination of the results from this evaluation. This also does not affect DFID's commitment to sharing these results within DFID and with its partners. The FM, DFID and EM continue to meet on a weekly basis. We will use these meetings to develop and implement the communication plan for these evaluation results as effectively as possible.

We will complete the final IW Endline Evaluation Report by the end of November 2017. The EM's contract ends in January 2018, which allows a limited amount of time for us to actively communicate the evaluation results as part of this evaluation programme. We are willing though to support further communication and dissemination by DFID as far as possible after the end of our contract.

1.2.4 Scope of the GEC IW endline evaluation

The endline evaluation aims to answer the following questions:

- What are IW projects' target populations? To what extent have target girls and their communities been reached by their interventions? (Section 3.1)
- To what extent has the IW improved girls' enrolment, attendance, retention and learning? (Sections 3.2 and 3.3)
- To what extent are IW interventions addressing key barriers to girls' education and with what effect? What type of intervention works, in what context, and for whom? (Section 3.4)
- In what ways have IW projects demonstrated innovation and with what effects? (Section 3.5)
- How scalable and sustainable are the activities funded by the IW? (Section 3.6)

The GEC endline evaluation focuses on **changes in outcomes from baseline to midline and from midline to endline** (i.e. attendance and learning) **and intermediary outcomes from baseline to endline** (i.e. barriers to girls' education). The FM reports on outputs and the progress in the delivery of GEC activities through the FM's

performance reporting, and is not within the scope of this evaluation. Projects' endline evaluation reports should provide a discussion of progress against their output targets.

The IW endline evaluation aims to answer questions about the effectiveness and impact of the IW projects. It also explores the value for money (VfM) delivered by projects ([Section 3.7](#)), as well as the potential sustainability of the activities delivered. Our assessments of VfM and sustainability rely on data and information provided by projects and information provided by the FM.

1.2.5 Structure of the IW report

The report is organised around the evaluation questions.

[Section 2](#) presents the approach and methodological challenges to synthesising and aggregating findings from the research conducted by IW projects and further analysis undertaken by the EM using the project datasets.

[Section 3](#) focuses on key findings, i.e. the extent to which target girls and their communities have been reached by IW interventions, the extent to which IW projects improved girls' enrolment, attendance, retention and learning, and which type of intervention works, in what context, and for whom.

[Section 4](#) and [Section 5](#) present our conclusions and recommendations for the different audiences of this evaluation.

A list of annexes can be found at the end of this report, which comprises:

- **Annex A.1:** GEC Evaluation Manager Terms of Reference;
- **Annex A.2:** GEC Theory of Change;
- **Annex B:** Roles and responsibilities for the GEC Evaluation;
- **Annex C:** Overview of IW projects and intervention mapping;
- **Annex D:** Methodology and tables; and
- **Annex E:** List of references.

2 Evaluation Approach and Methodology

2.1 Overview of the GEC Innovation Window evaluation strategy

For the Innovation Window (IW), the GEC Evaluation Strategy focuses on **project-led evaluation activities** (Section 2.1.1).

Projects assess the impact of their interventions on their specific target groups. They generate findings about what works, what does not and why at the project level, draw lessons learned about their theories of change, and reflect on possible adaptation and improvements to their project design. The main data sources comprise of: Projects' Endline Evaluation Reports: Projects' Outcome Spreadsheets: and Projects' Datasets.

The **Evaluation Manager** (EM) conducts a synthesis of project-level evaluation findings to assess the overall impact of the GEC IW interventions on girls targeted by IW projects (Section 2.1.2). We produce lessons learned to inform GEC and wider DFID programming, and to build the wider knowledge base around what works in girls' education.

It is important to note that the GEC evaluation strategy was not designed to test and compare the effectiveness of specific intervention types, or to directly assess what type of intervention is most effective. Projects carry out a variety of activities in their intervention areas and it is not possible to single out the impact of one specific intervention using the evidence available.

2.1.1 Project evaluation design and changes since baseline

IW projects assess the impact of their interventions on their specific target groups (see Section 3.1 for an overview of each project's specific target groups). The project-led evaluations include the following activities:

- Commissioning an independent (external) evaluator to collect data at baseline, midline and endline and produce an evaluation report at each stage that complies with a template provided by the FM and EM.
- Collecting a combination of quantitative and qualitative data in intervention and control communities (or schools), including a longitudinal household survey. IW projects are encouraged (not required) to use the standardised survey template provided by the EM to collect data consistently across the window.
- Testing literacy and numeracy using standardised international tests, and conducting appropriate statistical analysis to report on changes in learning outcomes.
- Reporting evaluation findings using the GEC reporting templates (report and outcome spreadsheet) provided by the FM.

Support provided to IW projects at endline

The FM supports projects with their evaluation and monitoring systems on a continuous basis (refer to Annex B for Roles and Responsibilities). The FM advises projects on changes to their evaluation design, and the adequacy of learning tests and analytical models. The FM also leads the quality assurance of projects' research instruments and evaluation reports.

The EM also supports projects. At endline, the EM:

- Provided projects with a household survey template for endline, as well as a package of guidance explaining how the survey changed between midline and endline, discussing good practice in supervising fieldwork processes, advising on the process for dealing with survey attrition, and for merging and submitting household survey datasets to the FM and EM;
- Shared this guidance with projects and their external evaluators through webinars hosted by the FM;
- Developed a detailed project endline evaluation report template; and
- Reviewed and quality-assured projects' endline evaluation reports and research instruments jointly with the FM.

Changes since baseline and data quality at endline

Following the baseline and midline research phases, all IW projects except ChildFund (Afghanistan) continued to sample control areas and carried out comparative evaluations of their projects. Moreover, all projects except Eco Fuel (Uganda) employed either a randomised control trial or a quasi-experimental design (Table 2). At endline, due to difficulties with the external evaluator, Eco Fuel (Uganda) relied entirely on qualitative methods: community-based focus group discussions and key informant interviews with students, mothers, teachers and head teachers, and community leaders in both treatment and control areas.

Three projects experienced difficulties matching observations from baseline and midline data, and replaced the original cohort study with a cross-sectional evaluation. ICL (Kenya) decided that the cohort sample was not representative, especially due to the high attrition rates observed in Mombasa and Kilifi. Therefore, the project decided to switch to a cross-sectional approach at endline. Four other projects had changed from cohort to cross-sectional models at midline.

Table 2: IW projects' evaluation designs and changes at endline

Project evaluation designs	Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda					Kenya		Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh
Quasi-experimental design		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Randomised Control Trial														✓			
Changes since baseline																	
Change from cohort to cross-sectional design		✓			✓		✓						✓		✓		
Baseline data dropped						✓										✓	
Control groups dropped																	✓
Quantitative methods dropped	✓																

Source: FM Quantitative Review Sheet

2.1.2 The EM evaluation approach

As the EM for the IW, we assess the overall impact of projects on targeted girls in treatment communities³¹. In contrast with the Step Change Window evaluation design, the IW evaluation design relies solely on IW projects' information, verified by the FM.

We therefore review and carry out an **analysis of IW reports, datasets and outcome spreadsheets** submitted by IW projects. The process adopted aims to synthesise the evidence provided by projects, in order to report on evaluation findings at the IW-level across all projects.

Our approach also involves assessing the quality of the data and findings against quality assurance criteria defined by individual projects, the FM and the EM (Figure 3). We have based our assessment primarily on the FM quality assurance performed on the projects' submissions (reports and datasets).

The step-by-step process adopted is as follows:

- Mapping of project documents and data available (Project Endline Evaluation Reports, Outcome Spreadsheets, Project Datasets, but also Project Midline Reports, Project Baseline Reports, Project Proposals and Project M&E Frameworks);
- Systematically extracting the data and analysis from project documents, including Project Datasets;
- Ensuring the consistency and quality of reported findings;
- Synthesising the evidence base provided by projects; and
- Answering the evaluation questions using IW projects' evidence base.

³¹ Refer to project targeting (Section 3.1.1).

Figure 3: Analysis and synthesis approach



Approach to synthesising IW projects’ findings

Given the multiple sources of information available and the fact that evidence presented by projects is drawn from their own research, there is no definitive source of data about project target groups, educational outcomes, barriers or intervention effectiveness. **This report therefore does not aim to provide a replacement endline for IW projects but aims to present a synthesis of the evidence base provided by projects at endline.**



*It is important to note that **projects did not conduct any process evaluation** of their implementation processes. As such, we rely solely on logframe results to assess whether a project implemented the activities it had planned at the design stage, which limits our assessment of whether the (lack of) effectiveness of projects relates to their design and/or to implementation factors.*

*We recognise that across such a diverse portfolio of projects **there are many factors (related to both project design and implementation) that could potentially explain why projects have been effective or not.** Where relevant, we have indicated the limitations of our interpretation of projects’ findings.*

Our quality assurance role as the EM therefore focuses on: (1) considering the comparability of measurement tools used across projects and consistency in reported measures across Project Endline Evaluation Reports, Outcome Spreadsheets and Project Datasets; and (2) assessing the quality of the data collected and reported.

Despite the triangulation of findings across the different sources available and the EM reanalysis of projects’ data, there are limitations to the EM’s interpretation of the synthesised data, which we describe in [Section 2.4](#).

Changes to the evaluation approach at endline

The EM’s evaluation approach has largely remained unchanged since baseline. We have used the same type of documents and data information provided by projects. However, we adjusted the data extraction processes to incorporate lessons learned from baseline and midline, such as the use of a ‘data extraction’ template focusing on:

- **Changes** – What has changed since baseline in terms of barriers to girls’ education? What has not changed?
- **Linkages to interventions** – As a result of which project intervention? How? Where? For whom?
- **Effects** – With what effect on education outcomes (attendance, learning)? For which sub-groups?
- **Other contributing factors** – What other non-GEC activities have happened and with what effect on barriers? Is there evidence of coping strategies and/ or enabling contexts?
- **Micro-level** – Is there any story of interest, individual pathways that can shed light about how change happens for girls and their communities?

The extraction process at endline therefore focused on **measuring changes against baseline** (in order to capture what happened during the whole duration of the programme), which either confirmed or contradicted changes evidenced and reported at midline. For more details about the findings from midline, refer to the [IW Midline Evaluation Report](#).

At endline, we also conducted a reanalysis of projects' data that focused on **learning outcomes disaggregated by sub-groups**. For a detailed account of the methodology employed, refer to [Annex D](#).

2.2 Methodology and data sources

A key difference between the SCW and IW Endline Evaluation Reports should be outlined for the reader. As the IW mainly uses project-led evaluation activities (Section 2.2.1) to assess project's effectiveness and impacts, the results presented in this report may come across in a more positive light than those presented in the SCW Endline Evaluation Report, which relies on independent, EM-led evaluation activities. Where needed, we acknowledge IW projects' reporting style and positive bias towards the effectiveness of their interventions.

2.2.1 Project information

The evidence gathered by projects during endline is documented in three different formats, as detailed below:

- **Project Endline Evaluation Reports** present evidence, key findings, and lessons learned based on the data analysis led by projects and by their independent evaluator/ affiliated researchers. The Project Endline Evaluation Reports focus on testing a project's theory of change and assumptions about target groups, educational outcomes and barriers to education;
- **Outcome Spreadsheets** are used by projects to report the endline levels of attendance and learning, which are the key outcomes for the GEC. In addition, learning outcomes are those on which Payment-by-Results (PbR) payments are based; and
- **Project Datasets** compile the raw data from the household surveys and/ or in-school surveys. The EM has carried out an independent analysis of this data for a selected number of key variables where the relevant information was available, documented and comparable. This "reanalysis" aims to cross-check and verify the figures and findings presented by the projects in their evaluation reports (refer to [Annex D](#)).

The three sources of information have different strengths and weaknesses.

[Project Endline Evaluation Reports](#) are based on the endline research and analysis conducted by projects and their independent evaluators, who had all committed in their M&E Frameworks to achieving high levels of representativeness, statistical power and analytical quality. However, reporting against indicators is not standard across projects and project reports do not always reflect the range of indicators of interest for GEC endline analysis at the programme level, and as such are not always in a standard format or disaggregated by sub-groups.



IW projects developed their own qualitative research designs, so they may have taken different approaches with regards to qualitative sampling or the development of interview guides. While quantitative data ([Project Datasets](#)) were shared with the EM along with [Projects Endline Evaluation Reports](#), it was not required from projects to submit their qualitative data to the FM. As a result, the qualitative findings presented in this report are based solely on IW projects' analysis, as presented in their reports.

[Outcome Spreadsheets](#) are a way of consistently capturing key outcome data and reporting on progress against targets for learning and attendance for all projects. The Outcome Spreadsheets have the advantage of providing a relatively standard format allowing disaggregation by grade, subject to some variation in the learning assessment tools used.

[Project Datasets](#) were submitted by projects along with their Endline Evaluation Reports, which allowed the EM to conduct a reanalysis of the findings presented in project reports. The EM chose to focus the reanalysis on barrier levels and exposure to interventions, to avoid a duplication with the reanalysis conducted by the FM on learning variables (presented in the [Quantitative Review Sheets](#)). The process followed by the FM to reanalyse learning outcomes was shared with the EM for verification for each project, along with a summary of key issues found in the datasets. In addition, the EM conducted a reanalysis of projects' data that focused on learning outcomes disaggregated by sub-groups. For a detailed account of the methodology, refer to [Annex D](#).

Generally, the quality of the data was variable. For a majority of projects, the identification of key variables was not possible and entailed further limitations in conducting the reanalysis of project data at the level of sub-groups (e.g. rural/urban populations, disabled groups, socio-economically disadvantaged groups) or for specific barriers (e.g. poverty, violence, early marriage). Key limitations in using project datasets to assess IW projects' effectiveness and impact at the programme level are outlined in [Annex D](#).



*As the EM for the GEC, we had originally planned to aggregate project datasets for meta-analysis. Unfortunately, due to the generally **poor quality of project data** and the **insufficient level of consistency** across them (type of survey, sampling designs, learning tests), this has not been possible either at baseline, midline or endline. Comparison across projects was therefore only possible for a selected number of variables (refer to [Annex D](#)).*

Measuring changes in barriers to girls' education and assessing the effectiveness of interventions

To further their understanding of marginalisation and develop their interventions, projects identified specific barriers at baseline that they assume drive educational marginalisation in their target areas. While some of these barriers are structural or environmental and beyond projects' direct control (such as the occurrence of droughts or political violence), others may be tackled through targeted interventions and support (such as negative attitudes towards girls' education or a lack of adequate sanitation facilities in schools).

It is important to note that this report presents evidence collected by projects of the **most reported barriers** *perceived* to be preventing girls from attending school and learning. As such, barriers may not be *actual* barriers (e.g. fear that violence may occur on the way to school *versus* reports of violence occurring on the way to school), but the influence of these **barriers, either actual or perceived**, is assumed here to similarly prevent girls from attending school and learning. Where information is provided by projects, we distinguish between the two types of barriers and discuss the potential effects on girls' access to education.

Following the data extraction at baseline, barriers were categorised across the key thematic areas (refer to [Figure 2](#) in [Annex D](#)) that emerged from the baseline reporting of IW projects. At midline and endline, similar categories are used to ensure continuity of reporting. Some sub-barriers, absent at baseline, have been found by projects at midline and added to the list of barriers.

We follow a three-staged approach to assessing the most and least prevalent barriers and the effectiveness of interventions (refer to [Annex D](#) for further methodological discussions):

1. **Identify barriers.** The metrics used to assess the prevalence of barriers are derived from the ways in which projects present their findings, e.g. whether the reported barriers are deemed as prevalent or not prevalent by the projects.

Across the IW and for each of the identified barriers, we discuss the **number of projects which have reported the existence of the specified barrier** in their target areas. The ranking of reported barriers (from most reported to least reported) gives the relative prevalence of some barriers compared to other barriers across IW projects³².

2. **Assess changes in barriers.** The second stage involves a **project-by-project assessment of findings** in order to assess whether the evidence was found, not found, inconclusive or not reported by projects for the specified barriers that projects' activities aimed to tackle.

Barriers have either lessened, not changed or worsened since baseline, and some barriers were discovered at midline. The extent to which barriers have changed (e.g. percentage or 'volume' of change) could not always be assessed. Therefore, changes in barriers should be interpreted more as a '**direction of change**', either positive, neutral or negative.

³² It is important to note that the data collected by projects is focused on their **target groups** rather than the general population or communities in which target groups live. This means that unless projects have undertaken a population study as part of their baseline, midline and endline research, those barriers that are most reported may not necessarily be the most prevalent in the communities in which they are working.

3. **Link changes in barriers to interventions.** Finally, the third stage relates to assessing the **effectiveness of interventions**. Similarly, evidence is derived from projects' findings, e.g. whether the interventions are deemed effective or not by the projects.

We indicate the origin of the findings by referring to individual Project Endline Evaluation Reports and we indicate our reservations on these findings wherever projects themselves have expressed reservations or when the EM reanalysis of project data could not validate projects' claims.

Where possible, we triangulate projects' findings using the existing literature relating to intervention effectiveness for girls' education (refer to [Annex E](#) for a list of references).

2.2.2 Secondary data

The interpretation of projects' endline findings was supported by the use of secondary data. More specifically, we gathered the following information: (1) international sources of secondary data relating to girls' literacy, attendance and enrolment ([Table 3](#)); and (2) existing literature about barriers to girls' education and education interventions' effectiveness (refer to [Annex E](#) for a list of references).

Table 3: Secondary data sources used

Educational outcomes
<p>Learning</p> <p>National female literacy rates for 2009-2013 measure the percentage of population aged 15–24 years who can both read and write a short simple statement on his/her everyday life, with understanding. This data is provided by UNICEF³³, which retrieves the information from the UNESCO Institute for Statistics.</p>
<p>Attendance</p> <p>Primary school female national net attendance ratio for 2009-2013 refers to the number of children attending primary school³⁴ who are of official primary school age, expressed as a percentage of the total number of children of official primary school age. This data is provided by UNICEF, which uses data from Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and other national household surveys.</p>
<p>Enrolment</p> <p>Primary school female national net enrolment ratio for 2009-2013 refers to the number of children enrolled in primary school who are of official primary school age, expressed as a percentage of the total number of children of official primary school age. To provide these data, UNICEF³⁵ uses Institute for Statistics (UIS) estimates based on administrative data from national Education Management Information Systems (EMIS) and UN population estimates.</p>

2.2.3 Triangulation and synthesis process

As described in [Section 2.1](#), this report draws evidence from a range of different data sources to answer the GEC evaluation questions. [Table 4](#) presents a simplified version of the GEC evaluation framework, showing how methods and data sources have been triangulated to answer each evaluation question.

³³ UNICEF, State of the World's Children 2015. Country Statistical Information. <http://data.unicef.org/resources/the-state-of-the-worlds-children-report-2015-statistical-tables/> Accessed 5 October 2016.

³⁴ Attendance is defined in a different way in the GEC (percentage of school days attended by enrolled girls). As such, the UNICEF definition is closer to the definition of an enrolment rate.

³⁵ Ibid.

Table 4: Overview of the streams of evidence used to inform the analysis presented in this report

GEC Evaluation Questions	Project information			Secondary data
	Project Endline Report	Project Datasets	Outcome spreadsheet	
Relevance: To what extent has the GEC reached marginalised girls? (Section 3.1)	✓			✓
Impact: What impact has the GEC had on marginalised girls' learning? (Section 3.2)	✓	✓	✓	✓
Impact: What impact has the GEC had on enabling marginalised girls to be in school? (Section 3.3)	✓	✓	✓	✓
Effectiveness: What has worked, why and with what effects? (Section 3.4)	✓	✓		✓
Innovation: In what ways have IW projects demonstrated innovation? (Section 3.5)	✓	✓		✓
Sustainability: How scalable and sustainable are the activities funded by the GEC? (Section 3.6)	✓			✓
Efficiency: To what extent does the GEC represent good value for money? (Section 3.7)	✓			

Using an **iterative approach** to synthesising evidence, we draw upon the analysis presented in the projects' endline evaluation reports, outcome data on learning, attendance and enrolment, findings from projects' dataset reanalysis and the secondary data available – to unpack how and why changes have (or have not) come about, and how well different types of interventions have delivered.

2.3 Methodological limitations and mitigation strategies

2.3.1 Limitations of the EM's approach and mitigation strategies

Challenges identified by the EM while extracting, analysing and synthesising the data are listed below:

- **Significant gaps and quality issues with the evidence base:** significant gaps and weaknesses in the evidence available arose in relation to some of the key GEC outcomes. Missing and/ or unreported figures, contradictory values reported in the Project Evaluation Reports and other inconsistencies in Project Datasets (refer to [Annex D](#)) were addressed where possible by triangulating the available evidence (e.g. with Outcome Spreadsheets).
- **Risk of penalising projects that are able to produce better quality data and evaluation reports:** some Project Evaluation Reports provided more granular evidence about what did not work. This does not necessarily imply that these projects did not work as well as other projects, which may simply not report as much evidence around a lack of effectiveness in their evaluation reports.
- **Contradictions arising from a diversity of data sources:** the diversity of data sources and different types of data reported by projects (quantitative versus qualitative data, population of reference, reporting style, etc.) led to difficulties in synthesising the findings that emerged into a coherent narrative. However the structured and systematic approach used for the analysis, triangulation and synthesis of the data helped resolve contradictions arising from the analysis by providing a transparent means of explaining why they occurred.
- **Synthesis challenges:** a carefully structured approach to the synthesis of project findings was adopted in order to mitigate against the effects of different types of bias. Challenges identified include:
 - potential **sources of heterogeneity**, including project research methodologies, the narrative versus quantitative nature of the synthesis, degrees of data validity and contextual factors; and
 - the identification of **adverse synthesis effects** – effects that were identified as very likely to have been lost during the synthesis process; for example, if two equally valid sources of data (e.g. Project Report findings and Outcome Spreadsheets) presented different findings, there was a

tendency to conclude that this was an inconclusive finding, leading the EM to investigate a third source (e.g. Project Dataset).

We do not expect these limitations to the approach to significantly compromise the quality of the synthesis of the endline findings, or its capacity to add significant value to DFID's understanding of how and to what extent the GEC IW projects managed to improve girls' educational outcomes. When necessary, we have indicated that caution should apply in the interpretation of the evidence presented.

2.3.2 Project data quality at endline

Data quality (Table 5) varied largely across projects over the course of the GEC. Most of the projects (13) achieved the minimal sample size recommended in their M&E framework. However, some issues were noticed in terms of ceiling or floor effects for nine projects.

Table 5: Data quality at endline

Learning data issues	Eco ¹	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda					Kenya		Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal	Afgh	
Minimal sample size not achieved	n/a									✓	✓	✓					
Important issues with re-contacting and substitution	n/a				✓	✓				✓	✓						
Ceiling effects	n/a	✓			✓	✓		✓	✓	✓	✓				✓		
Floor effects	n/a											✓					
Contamination of control group	n/a		✓	✓	✓		✓	✓		✓	✓	✓	✓				
Unrepresentative treatment or control group ²	n/a				✓	✓	✓				✓		✓			✓	

Source: FM Quantitative Review Sheet

¹ Endline research relied entirely on qualitative methods.

² This includes several types of issues, such as severely disabled girls having dropped out of the control group (CSU), treatment girls being selected by teachers (BRAC), disabled girls not willing to participate in the survey (LCDK), change in group composition (with a lower proportion of orphans, married girls, mothers and girls who have been pregnant) (TfAC) and over-representation of out-of-school girls (Mercy Corps).

Difficulties in tracking cohort girls were mentioned by six of the projects in the limitation section of their endline reports. Some projects coped with this issue by changing their design from cohort-based to cross-sectional. Several issues were mentioned specifically for the tracking of out-of-school girls: this was mentioned as being particularly difficult by Varkey (Ghana), Mercy Corps (Nepal), TfAC (Malawi) and ChildFund (Afghanistan).

As shown in Table 6, many projects faced challenges related to **longitudinally tracking cohort girls and matching observations across the survey waves**. So, attrition over the whole programme duration could only be worked out for only nine projects. Most of these projects experienced **high attrition rates**: PEAS (Uganda) and ICL (Kenya) lost most of their sample, because many girls had graduated; while CSU (Uganda), BRAC (Tanzania) and ChildFund (Afghanistan) experienced difficulties in re-contacting girls because they had relocated. TfAC's (Malawi) attrition was so high that the data was judged partially inconclusive and the exact amount of attrition could not be reported.

In some cases, projects' attrition can contribute to undermine their impact on learning. For instance, when attrition is high, especially in the control group, and when replaced girls from the control group perform better than the re-contacted girls from the treatment group, the overall impact may be underestimated. This is the case for CSU (Uganda) and LCDK (Kenya) where important biases were observed between the treatment and control groups due to a combination of a higher attrition rate in the control group, and a re-contacted control group with less severe disabilities. High attrition in Viva's (Uganda) control group, especially among out-of-school girls also produced partially conclusive data.

Table 6: Attrition rates among IW projects

Attrition rates	Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda					Kenya		Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh
Baseline – Midline	n/a	66%	n/a	21% ^c	72%	n/a	42% ^b	n/a	17%	23%	23%	27%	n/a	13% ^a	17% ^d	n/a	60%
Midline – Endline	n/a	40%	35%	n/a	56%	20%	40% ^b	11%	15%	13%	54%	25%	n/a	16%	n/a ^e	3%	9%
Baseline – Endline	n/a	79%	n/a	n/a	88%	n/a	65%	n/a	29%	33%	65%	45%	n/a	n/a	9% ^e	n/a	64%

Source: FM Quantitative Review Sheet. A grey cell indicates that the attrition rate was not reported.

^a Includes boys.

^b Data for treatment group only. For control group, attrition rate was 48%. No attrition data provided at endline.

^c Data for treatment group only. For control group, attrition rate was 29% at midline, and 51% at endline.

^d Four districts could not be visited at midline.

^e At endline, the new evaluator used the original list from baseline to contact girls. Therefore, it is not known what number of girls at endline were also contacted in the midline survey. The attrition rate from the original list is 9% at endline.

In some cases, **explanations for girls dropping out were provided**. Some of the explanatory factors mentioned in endline reports include migration and mobility of urban households, as well as illness or family responsibilities of girls (CSU (Uganda)). Changing households was also mentioned as the primary reason for attrition by BRAC (Tanzania): in 96% of the cases in which a girl could not respond to the survey, it was reported that she had moved away from the house – usually to live with other family members, to attend boarding school, to work, or to live with her husband or partner. Limited data availability at the school and household level was also mentioned: in the case of TfAC (Malawi), the main barrier to contacting the same girls at endline was a lack of household data from baseline and midline, as well as unreliability of school registers.

An additional issue mentioned by Varkey (Ghana) and Camfed (Zambia) was teacher absenteeism and/ or transfers to other schools, arising when data collection was to be conducted with teachers surveyed at midline and they could not be found.

Conversely, in the case of LCDK (Kenya), additional girls were included in the endline research, as it was decided to administer endline tests to both in-school and out-of-school girls. Therefore, the endline and midline samples are not entirely comparable.

Five projects faced issues in **re-contacting or substituting lost girls**, or decided not to do so. The reasons mentioned include an inability to replace girls due to low enrolment in cohort grades, in the case of Red een Kind (South Sudan), and time and resource constraints for BRAC (Tanzania). Varkey (Ghana) and Mercy Corps (Nepal) did not use a replacement strategy. However, this is not considered to be particularly problematic due to their low attrition rates (Table 6). In the case of Red een Kind (South Sudan), escalating insecurity also caused attrition of sampled girls, while also making substitution of cohort girls impossible. However, according to the external evaluator, as attrition was not systematic but random, there should not be any attrition bias in the study sample.

The case of CSU (Uganda) was deemed to be particularly problematic. Attrition in control schools was higher than in treatment schools, biasing the control sample. A replacement strategy for lost girls was implemented, but the decision to expand to different schools led to a ‘new’ control group which included several private schools with better education standards. Moreover, replaced girls in the control area were less severely disabled and from less poor backgrounds than those who had dropped out of school. Therefore, replacement girls were deemed to be not entirely comparable to ‘lost’ girls. Similarly, in the case of LCDK (Kenya), the midline and endline samples were compared, revealing systematic differences between new and re-contacted samples in the control group, in areas which include: school enrolment, attendance, literacy scores, and household characteristics such as the source of drinking water, head of household education level, and attitudes towards education for girls with disabilities, among others.

Another important issue observed across half of the projects for which quantitative data is available is the potential **contamination** of the control group: in the cases of ICL (Kenya) and Camfed (Zambia) the high levels of interaction between teachers and their transfer from school to school were considered to have potentially led to contamination of the control group. There were also mentions of other girls’ education projects being active in control areas: in the case of Red een Kind (South Sudan), a TearFund project reportedly implemented the GEC intervention model in control schools. In the case of TfAC (Malawi), a USAID project was reported in treatment and

control areas, with interventions aiming to improve reading. In the case of Link (Ethiopia), the government introduced gender-based training in control *woredas*.

Six of the projects were deemed to have gathered data from **unrepresentative** treatment and control groups. For instance, there were instances of refusals to participate in endline research on the part of ICL's (Kenya) control schools, which may have biased the composition of the control sample.

Table 7: Attendance data sources

Attendance data sources	Eco ¹	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda					Kenya		Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh
Spot checks	n/a	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓	✓
Attendance registers	n/a	✓	✓		✓		✓	✓	✓			✓	✓	✓	✓	✓	✓
Self-reported (survey) data	n/a		✓			✓		✓	✓		✓						✓

Source: FM Quantitative Review Sheet

In terms of **attendance data**, a majority of projects (13 out of 17) relied, at least in part, on spot checks. In most cases, these complemented attendance registers. However, in the case of ICL (Kenya), only one spot check was conducted, and only one week of attendance registers was available, limiting the reliability of data (refer to [Box 3](#) in [Section 3.3](#)).

In addition to these methods, technological solutions were employed in two cases: (1) BioSIM attendance data for ICL (Kenya) and (2) a webcam-based system for Varkey (Ghana), both discussed in more details in [Section 3.5](#). However, it was pointed out in project endline reports that such methods are not entirely reliable due to limited training for teachers and problems with internet connectivity.

2.3.3 Additional limitations of the IW projects' research

At endline, most projects highlighted several limitations in their methodology, and, in some cases, also described the mitigation strategies employed. It is important to note that the fact that a project outlined more challenges is not necessarily a sign of lower quality endline research – on the contrary, it might reflect more detailed and more transparent reporting. This section summarises some of the key challenges and, where available, mitigation strategies reported by projects in their endline evaluation reports.

Project data collection timings and length of implementation

The period between inception phases, during which baseline research was conducted and data collected at midline and endline, was not uniform across projects – implying that different projects have measured impact over longer or shorter periods of implementation.

[Table 8](#) shows the differences in evaluation activity timescales across the IW projects. For instance, HPA (Rwanda) had 11 months between midline and endline data collection, compared to as little as five months for Mercy Corps (Nepal). The vast majority of projects had between 11 and 13 months between midline and endline data collection activities. This limits the comparability of results across projects with very different data collection timings.

Table 8: Project data collection timings

Project data collection timings	Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link ³⁶	HPA	ReK	BRAC	Camfed	TfaC	Varkey	Mercy	VSO	ChFnd
	Uganda					Kenya		Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh.
Baseline to Midline (in months)	24	26	26	28	26	28	26	28	25	27	26	27	22	23	26	29	25
Midline to Endline (in months)	13	12	12	11	13	12	12	7 / 13	11	11	12	12	12	12	5	12	12
Length between baseline and endline evaluations (in months)	37	38	38	39	39	40	38	32	36	38	38	39	34	35	31	41	37

³⁶ At midline, Link (Ethiopia) started to collect data November 2015 for all the cohorts. At endline, the project started its data collection for the younger cohort in July 2016, and for the older cohort in December 2016.

Insecurity and accessibility

Varying factors related to accessibility of sites for data collection, such as project targeting of remote locations and/or conflict, posed issues in data collection in the case of Camfed (Zambia), Red een Kind (South Sudan), VSO (Nepal) and ChildFund (Afghanistan). In the case of ChildFund (Afghanistan), insecurity in the target region prevented research staff from accessing highly remote communities, which are therefore underrepresented in the study.

Data reliability

Several issues related to the reliability of endline data were mentioned. For instance, the reliability of education Management Information System (MIS) data was questioned in the case of Link (Ethiopia), while HPA (Rwanda), Viva (Uganda) and TfAC (Malawi) mentioned issues of self-reporting and social desirability biases among survey respondents. Respondents are likely to have an incentive to respond with what they believe the interviewee or survey administrator would like to hear – especially if they have benefited from the project.

Comparability of treatment and control groups

Differences in caste (with over-representation of lower castes in the treatment group) were mentioned as an issue by Mercy Corps (Nepal), although several regressions were run controlling for caste and did not find any significant impact. In the case of PEAS (Uganda), the control sample was very small as one of the control schools refused to be part of the endline research (discussed in the following section). In the case of Opportunity (Uganda) which trains school proprietors, offers tuition loans to parents, and delivers financial literacy training to girls, self-selection into the programme entailed that the treatment and control group are likely to differ in areas such as value placed on education and motivation.

Research fatigue

Viva (Uganda), PEAS (Uganda), ICL (Kenya) and Eco Fuel (Uganda) described issues of research fatigue in their reports, both in the treatment and in the control groups. In the case of PEAS (Uganda), one of the five control schools refused to be part of the endline research, leading to a very small control sample. This refusal was due to the feeling of being 'left out' by the project, with the control group not seeing a benefit of participating in the research as they did not benefit from any interventions. Similarly, ICL (Kenya) mentioned that control schools, especially in Mombasa, developed resistance to the study and either refused to participate or did not provide correct details about their physical address to research assistants.

3 Key Findings

3.1 To what extent has the IW reached marginalised girls?

At endline, the majority of projects had refined their understanding of the target groups they had set out to reach at baseline, and most projects either reached or exceeded their target number of beneficiaries.

Across the IW and within each project, target groups faced considerable disadvantages of various types, which project interventions aimed to reduce. Some projects considered all girls in their project areas to be marginalised and as a result targeted all girls who lived therein. Conversely, some projects applied a more detailed range of eligibility criteria to select girls in communities or within schools that they considered to be particularly marginalised, such as girls living with disability, orphans or ethnic minorities.

The variety of types of marginalisation and the diversity of reasons why girls are educationally marginalised meant that it was not always possible for projects to implement interventions that benefited all target girls equally. Some girls needed more support than others, and projects sometimes had to adapt their interventions to either include or exclude particular sub-groups of girls from their original design. This reflects the difficulties in targeting and designing projects tailored to the needs of heterogeneous populations.

3.1.1 Who are IW projects targeting?

The GEC aims to “*expand education opportunities to marginalised girls*”.³⁷ Its business case defined marginalised girls as “*those girls of primary and secondary school age [...] who have not been enrolled or have dropped out from school (whether living in slums, remote areas, ethnic minorities, girls with disabilities etc.) or are in danger of doing so.*”³⁸ DFID defined marginalisation in terms of the education outcomes that DFID wanted the GEC to focus on.

DFID deliberately did not prescribe the type of factors that marginalised girls from education as there was a lack of evidence about what caused girls’ marginalisation from education, and these factors were likely to vary from one context to another. GEC applicants were encouraged to focus on the girls with the greatest education needs in their target communities, leaving it to them to explain how and why their target girls were marginalised from education.

We have identified three broad categories of marginalisation criteria across the 17 IW projects, as listed below:

- **Educationally marginalised girls:** Projects which opted to define marginalised girls through the spectrum of educational marginalisation, e.g. out-of-school girls, girls at risk of dropping out, girls at risk of poor learning or poor attendance.
- **Geographically or socio-economically marginalised girls:** Projects which provided a range of socio-economic criteria to define marginalised girls, e.g. girls living in a slum or in a rural area, girls from displaced or migrant population groups, girls whose families are unable to meet basic needs or facing hunger, orphan girls, girls with disabilities, girls facing early marriage or a young pregnancy, girls living on the street or being forced into labour and – more broadly – any other definitions that fit the context where projects operate.
- **Combination of educational, geographic and socio-economic factors to identify marginalised girls:** Projects which identified marginalisation for their target group using multiple criteria or indexes.

At baseline, projects had selected educational or social groups that they wanted to target through their interventions, based on the different types of barriers that they anticipated would drive educational marginalisation in their target areas. At endline, only one of the 17 IW projects had continued to target the exact same educational and social groups set out during the inception phase, reflecting the adjustments that followed from learning from the baseline research.

³⁷ <https://www.gov.uk/girls-education-challenge#girls-education-challenge--the-portfolio-of-projects>.

³⁸ DFID (2012), Girls’ Education Challenge, Business Case Version 4, June 2012, p. 30.

Of the 16 projects for which target group characteristics shifted between baseline and endline, nine projects removed at least one characteristic (e.g. targeting older, orphaned or out-of-school girls) and 14 projects added one or more characteristics to their target beneficiary profile(s). [Table 9](#) provides an overview of the types of girls that each project targeted at endline, as stated by projects in their endline evaluation reports. In addition to direct learning beneficiaries (girls, but also boys depending on the project), projects' interventions can also indirectly have an impact on broader beneficiaries including other girls, boys, teachers and communities.

Table 9: Project targeting – primary target group(s) by IW project

Endline project targeting	Projects targeting this group	Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	/arkey	VSO	Mercy	ChFnd	
		Uganda					Kenya	Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal	Afgh			
School phase																			
Lower primary	11	✓		+		✓	✓		✓	✓	✓		+		✓	+		✓	
Upper primary	15	✓	•	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		+	
Lower secondary	8		✓	✓	✓		+	✓		✓		✓				•	✓		
Upper secondary	4			+			+			✓							✓		
Older	2		+		•					✓	•		•					•	
Social groups																			
Disabled girls	10	+	✓		✓	✓	✓		✓	+	•	✓				+		+	
Orphaned girls	6		✓		•			•		+		✓	✓	✓				+	
Pastoralist girls	3							✓		+	+							•	
Displaced girls	2									+								+	
Remote girls (rural)	3		✓						✓							+			
Slum-dwellers	4	✓				✓		✓		+									
Other girls	4				• ¹							• ²			✓	• ²	• ²		
Child labour	2				•					+								✓	
Poverty/Hunger	10	✓	✓	✓	•	✓		+	✓		+	✓	✓	✓		•			
Death/ separation in family structure	1													✓		•			
Affected by HIV/AIDS	1				•					+									
Young mothers	5				•			✓		+	+			+	+				
Street children	2				•	+				+									
Educational groups																			
Out-of-school girls	11		✓		✓		✓	•		✓	✓	✓		✓	✓	✓		✓	
Girls dropped out	11		+		✓	+	✓	+		+	✓	✓		•	✓	•	✓	✓	
At risk of dropout	10			+	✓	+	✓		✓	✓	✓			✓		✓	✓		
Girls in-school	15	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Key																			
✓	Target group reached																		
+	Target group added and reached since baseline																		
•	Target group removed since baseline																		
Not applicable: Target groups not included in project design are marked in Grey																			
1.	Other girls defined as domestic workers																		
2.	Other girls defined as part of ethnic minorities or low-caste groups																		

School phase groups

Projects targeted girls aged in the range of 5 to 19 years with a **dominant focus on primary school girls**. All IW projects, with the exception of Mercy Corps (Nepal) and PEAS (Uganda), targeted girls in primary-level education.

Four out of 17 projects targeted girls at upper secondary level. Five projects expanded the targeted school phases beyond those outlined at baseline into both lower primary and secondary levels. PEAS (Uganda) targeted girls at secondary school level, but at baseline, the project also selected girls in Grade 7 who had recently completed primary school, were eligible to enrol in secondary school the following year, and were living in the catchment areas for the treatment and control schools. From midline onwards, this cohort group was in lower secondary, and as such the sample group of beneficiaries no longer included any girls from primary levels.

At endline, two projects included older girls (up to 22 years old) in their learning beneficiary groups.

Educational situation

Almost all projects targeted in-school girls, except for ChildFund (Afghanistan), which targeted out-of-school girls specifically. A majority of projects (12) targeted both in-school and out-of-school girls. A further three projects were only targeting in-school girls. No projects have removed in-school girls from their target group of beneficiaries. ICL (Kenya) removed out-of-school girls from its beneficiary group at midline because the project had identified and enrolled the out-of-school girls found at baseline.

Girls who have dropped out and those who are at risk of dropping out were also an important focus for projects, with 11 out of the 17 projects targeting girls who have dropped out and ten projects targeting girls who are at risk of dropping out. This reflects that some projects focused on improving enrolment and attendance while others focused more strongly on improving learning and retention in school.

Social groups

IW projects targeted a range of social groups that they expected to **face particular challenges** in enrolling, remaining in school, and learning effectively. This included girls reported as being affected by disability (ten projects), poverty (ten projects), orphans (six projects), young mothers (five projects), and girls living in remote or rural areas (three projects), and others included in [Table 9](#).

Eleven projects added one or more social groups to their target beneficiaries, as they found their interventions benefited a more varied population of girls. Five projects removed social group characteristics from their target beneficiary profile, some at midline – Viva (Uganda) and ICL (Kenya) – and others at endline – Red een Kind (South Sudan), VSO (Nepal) and ChildFund (Afghanistan), as they realised they were not reaching these groups.

3.1.2 How marginalised are the girls targeted through the IW?

[Projects used marginalisation criteria at different levels \(community, school, household, the individual girl\) to select the girls they work with](#)

Some projects targeted **all of the girls living in a community**, either because all of the girls from the area were considered to be marginalised, or due to the nature of their interventions and difficulties in excluding less marginalised girls from the activities being delivered. For instance, Link (Ethiopia) worked with all girls in the project schools of the four targeted *woredas*, which were all considered to be disadvantaged. Similarly, Red een Kind (South Sudan) contended that all girls in Rumbek East are marginalised. Mercy Corps (Nepal) intervened in areas where ethnic minorities and some caste groups have been reported to be disadvantaged, while ChildFund (Afghanistan) targeted nomadic households – marginalisation criteria applied to the community as a whole. Similarly, one of the activities run by HPA (Rwanda) consisted of building separate girls' sanitation facilities using ECOSAN composting toilets, which directly benefited all the girls enrolled in their target schools.

By contrast, other projects applied a more detailed range of **eligibility criteria** to select girls in communities or within schools, assuming that in the target areas some girls are more marginalised than others. For instance, out-of-school girls and disabled girls received particular attention from some projects. While ICL (Kenya) only worked with out-of-school girls, Viva (Uganda) had a strong focus on this category of marginalised girls in addition to its work with girls at risk of dropping out from school. To a lesser extent, HPA (Rwanda), BRAC (Tanzania) and VSO (Nepal) set up special tutoring sessions for out-of-school girls, in parallel to other interventions. Two projects focused their interventions on supporting girls with disabilities: CSU (Uganda) organised special tutoring session for disabled girls, while LCDK (Kenya) improved access to school by adapting facilities for girls with disabilities. Viva (Uganda) also set up specialised Creative Learning Centres (CLCs) for vulnerable girls, including those living with disabilities, orphans, children affected by HIV/AIDS, street children, young mothers or pregnant girls, and others.

Selection methods varied across IW projects

IW projects employed various methods to **select the most marginalised girls** in their target communities.

Some projects developed marginalisation indices or checklists to identify their target population. In Malawi, TfAC targeted marginalised girls based on a comprehensive checklist which included single orphans, double orphans, married girls, sexually active girls, and out-of-school girls. BRAC (Tanzania) similarly developed an index with three dimensions: having recently dropped out of school (or if in-school, being at risk of dropping out); being from a low income household (as defined by a poverty score that was developed specifically for the Tanzanian context by the Grameen Foundation); and thirdly, being an orphan, having a physical or mental disability and being from a minority ethnic group. Similarly, Camfed (Zambia) developed an index presenting variables related to orphan status, household assets, hunger, education of household members, and whether the respondent had repeated a grade. The marginalisation status was then assigned based on a weighted index of these variables.

Community mapping, often with the direct involvement of local leaders, was also a common method of selection. In the case of CSU (Uganda), target girls were identified by project staff and local leaders, and after identification, underwent a medical assessment to ascertain their disability status and rehabilitation needs. Similarly, for ICL (Kenya), girls were selected through community mapping with the participation of community coordinators, teachers, local administrators and church leaders. Girls and parents were also able to request assistance directly in some cases. In Rwanda, HPA selected households using community deliberations organised during Umuganda Day, a monthly meeting during which communities come together to engage in *Ubudehe*³⁹ community dialogue (including consultations on which households are the poorest/ most vulnerable), do a variety of public works and engage in projects of benefit to the community.

Countries covered by IW projects are characterised by different degrees of educational marginalisation

Early pregnancy is one of the barriers to girls' education found across most IW projects. In 2014, three out of 12 IW countries have an adolescent fertility rate above 100 births per 1,000 among 15-18 year-old girls: Uganda (115), Tanzania (119) and Malawi (137). By contrast, in Rwanda, the adolescent fertility rate is much lower (27) and closer to Europe and Central Asia's rate (18). Rwanda also has the highest female-to-male student ratio in secondary school (54 percent of students being female) among IW countries.

Table 10 shows that the proportion of female-to-male students in secondary school in those countries with a high adolescent fertility rate (Uganda, Tanzania and Malawi) is slightly below 50 percent. South Sudan and Afghanistan contrast other IW countries, with only 35 percent of students enrolled in secondary school being female. Both South Sudan and Afghanistan are ranked fairly low among IW countries with regards to their youth literacy rate (15-24 years), which stands at 44 percent in South Sudan and 58 percent in Afghanistan. As shown later in Table 15, South Sudan also has the lowest overall enrolment rate, averaging at 34 percent between 2009 and 2013, compared to countries like Rwanda, Tanzania and Malawi which were close to 100 percent in that period.

The differences between IW countries with regards to the proportion of teachers in primary education who are trained and the pupil/teacher ratio in primary education are also important. More than 90 percent of teachers in IW countries are trained with basic skills, except for South Sudan and Ghana where the proportion is around a half. By contrast, the pupil/teacher ratio in primary schools is relatively high across the IW, lying between 40 and 60 in most IW countries, except in Ghana, Kenya and Nepal where the ratios are 30, 31 and 24 respectively, which is still above the European and Central Asian ratio (15) and may affect the quality of education.

3.1.3 To what extent have communities been exposed to GEC interventions?

Out of the 17 IW projects, 13 have succeeded in reaching (or exceeding) their target number of learning beneficiaries⁴⁰ set out at baseline (Table 10). Of these, nine projects reached more girls than their targets. Four projects, Eco Fuel (Uganda), Opportunity (Uganda), Camfed (Zambia) and Link (Ethiopia) reported direct beneficiaries that were comprised only of in-school girls. ChildFund (Afghanistan) was the only project for which the beneficiaries reached were all out-of-school girls. For the remaining 12 projects that reported reaching both in-

³⁹ As outlined in the HPA (Rwanda) endline report, *Ubudehe* refers to a community practice where members come together to solve problems of collective action. It is a process whereby the community comes together to assess their current situation and decide on the ways to most effectively and efficiently promote participatory development, democracy, reconciliation and unity.

⁴⁰ Learning beneficiaries are girls who have benefitted from GEC project interventions aimed at positively impacting their learning outcomes.

school and out-of-school girls, the number of in-school beneficiaries was much larger than the number of out-of-school beneficiaries.

Table 10: Beneficiaries at midline and secondary data at country-level

Beneficiary type		Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd	
		Uganda					Kenya			Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh
Direct learning Beneficiaries	Total project target	15,058	7,000	18,011	9,715	1,182	2,050	9,170	77,642	18,285	2,816	15,618	6,967	9,040	3,047	1,653	6,793	1,200	
	Reached by endline	20,634	6,760	20,679	7,481	2,024	2,485	9,170	51,801	18,781	4,722	15,314	6,967	9,000	3,567	9,404	8,000	1,488	
	In-school	20,634	6,154	20,679	5,491	1,400	2,180	8,170	51,801	17,791	3,772	13,950	6,967	6,750	3,567	8,969	7,000		
	Out-of-school		606		1,190	624	305	1,000		990	1,000	1,364		2,250		435	1,000	1,488	
	% reached	137%	96%	115%	77%	171%	121%	100%	67%	103%	168%	98%	100%	100%	117%	569%	118%	124%	
Teacher beneficiaries		n/a	424	595	1,911	1,198	672	n/a	2,000	112	81	650	693	400	504	144	964	50	
Indirect beneficiaries (boys, community, parents)		n/a	15,721	40,790	2,575	186,897	33,364	9,659	112,122	13,765	6,119	71,370	57,836	297,750	7,126	261	14,426	993	
Secondary data at country-level																			
Adolescent fertility rate (births per 1,000 women ages 15-19) - 2014				114.8				91.5	60.1	27	68.3	119.4	93.0	136.9	67.5		72.5		76.7
Percentage of students in secondary general education who are female (%) - 2015				47.4				48.5	48.1	53.9	34.5	49.4	46.8 ³	47.1	48.5 ¹		50.7 ¹		34.9
Pupil/teacher ratio in primary education - 2015				45.6 ³				30.6	55.0 ⁵	58.3	46.7	43.0 ²	47.9 ³	69.5	30.1		30.5 ¹		44.3
Percentage of teachers in primary education who are trained, both sexes (%) - 2015				89.4 ⁵				96.9 ⁶	84.6 ⁶	93.9	44.0 ³	99.9 ³	92.6 ⁴	90.8 ³	56.0 ¹		97.0 ¹		NA
Youth literacy rate (15-24 years) – 2015				87.0				85.9	69.5	85	44.3	87.3	91.5	75.1	90.6		89.9		58.1
<p>Sources: The number of beneficiaries reached by endline is harvested from the FM Endline M&E Tracker. Target numbers are harvested from Project Endline Evaluation Reports. Adolescent fertility rate is retrieved from United Nation Population Division (World Population Prospects). Percentage of students in secondary general education who are female, pupil/teacher ratio in primary education, percentage of trained teachers in primary school, and youth literacy rate are harvested from UNESCO database.</p> <p>Notes: ¹Data from 2016. ²Data from 2014. ³Data from 2013. ⁴Data from 2012. ⁵Data from 2011. ⁶Data from 2009.</p>																			

Projects that have succeeded in reaching their endline target number of beneficiaries have cited aspects of their projects that they believe have facilitated their outreach. One example is community outreach and involvement, which projects such as Varkey (Ghana) have reported helped identify out-of-school girls and increase re-enrolment.

Community mapping and recruiting was also mentioned by ICL (Kenya), and identified as a key component in recruitment of out-of-school girls for the project. Outreach activities conducted with the participation of community elders were mentioned by ChildFund (Afghanistan) as being particularly effective in identifying the targeted nomadic population. Furthermore, the participation of nomad elders in sensitisation activities was helpful to encourage parents to send their daughters to school and provide information on the project, identify the class locations that could be accessible for all students, introduce the selected teachers to the parents and community members, and help to resolve any community issues surrounding the intervention.

Extra-curricular activities and the **use of local languages in conjunction with English** are other activities that projects have cited as expanding their reach. For example, Varkey (Ghana) noted that facilitators and girls are more likely to share information and engage in open dialogue in after-school clubs than in formal settings.

Conflict and natural disasters are two reported contextual factors that have prevented projects from maintaining project activities and reaching their target beneficiary groups. For example, Red een Kind (South Sudan) has experienced cross-border conflicts, intra-communal, inter-tribal and militia-based violence, which has led to a number of schools being shut down, project staff evacuated, and even teachers being killed. TfAC (Malawi) has cited severe flooding in the Southern regions of the country as one of the causes of drops in attendance at Girls' Clubs. Further details are given in [Section 3.4.2](#).

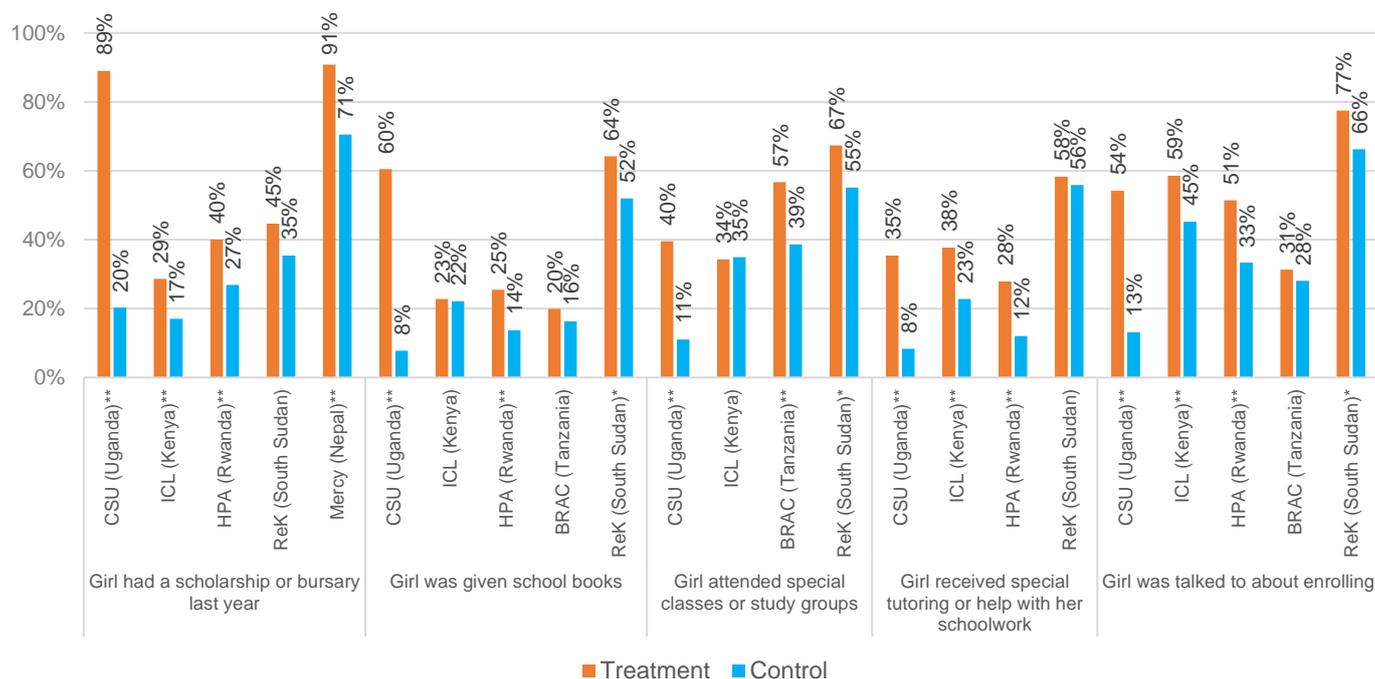
Activities reported in project areas show differences in exposure in treatment and control communities

[Figure 4](#) below shows the percentage of households in treatment and control areas that have reported that their girls received various types of intervention activities⁴¹ (from the project data reanalysis). It shows **some differences in reported exposure by treatment and control communities at endline**. Except for ICL (Kenya) where exposure to school books and special class provision is similar in treatment and control groups, all six projects for which data is available reported a higher level of exposure to interventions in treatment groups than in control groups, which was statistically significant for some of these interventions at least at the 10% level. This suggests that IW project interventions are being delivered and are visible in treatment areas to a greater extent than in control areas.

In two cases, there is a statistically significant difference ($p\text{-value} < 0.05$) between the treatment and control groups for all of the intervention activities listed: households surveyed in CSU (Uganda) and, in the case of HPA (Rwanda) households from treatment groups, reported a higher level of exposure to all of the interventions listed compared to their counterparts in the control groups. This means that these IW projects have a stronger visibility among their target groups, especially for CSU (Uganda) where reported levels of exposure are considerably higher in the treatment group.

⁴¹ Projects included in the tables represent those for which household surveys were received that included the relevant standard indicators developed by the EM.

Figure 4: Activities reported at endline in project areas (reanalysis from Project Datasets, six projects)



Notes: ** indicates a statistically significant difference between the treatment and control groups (p-value<0.05). * indicates a statistically significant difference between the treatment and control groups (p-value<0.1). The projects for which data was available is different than at midline because some projects added while others removed exposure questions in their household surveys at endline.

Where there is little difference in reported levels of exposure in treatment and control communities at endline, this may reflect **contamination effects or the presence of other actors** delivering education activities in the areas targeted by IW projects. This could also be due to the close proximity of treatment and control groups and the migration of families from control to treatment areas or families moving their daughters to treatment schools. When treatment and control communities are within close proximity of one another, it is more likely that the availability of improved learning conditions nearby is known to families in control communities and, therefore, more likely that they self-select into the treatment group.

Furthermore, it is common in these contexts that word-of-mouth about interventions in the areas spreads beyond the direct beneficiary communities. When control communities are geographically close to treatment communities, families may report knowledge of these interventions being carried out without being beneficiaries themselves.

Key findings – To what extent has the IW reached marginalised girls?

Most projects targeted in-school, primary-level girls. Some projects specifically targeted girls living with disabilities, orphans, or ethnic minorities, among others. Most projects modified their target groups following evidence of barriers or changes in implementation, suggesting that they adapted in view of the changing circumstances and the evidence they collected.

Various identification methods were used to **select marginalised girls in target communities.** Some projects developed marginalisation indices or checklists to identify their target population, others employed community mapping or conducted wealth ranking exercises in their target communities.

Conflict and natural disasters sometimes **prevented the interventions from reaching the targeted girls.** In general, the heterogeneity of marginalisation types and the diversity of reasons why girls are educationally marginalised meant that it was not always easy for projects to implement interventions that benefited all girls in their target group equally. Some girls needed more support than others, which projects had not always anticipated and had to adapt to.

Lessons learned

- **Community outreach and mapping was particularly effective in reaching the target population and identifying needs.** The participation of community leaders and elders can be an effective way of ensuring buy-in and community support during implementation. Projects with extra-curricular activities and projects using local languages were also able to expand their reach and achieve higher girls' engagement in activities, compared to other projects which did not take this approach.
- **Using marginalisation indices or checklists to identify their target population** enabled projects to define marginalisation as a relative concept, as they assumed that not every girl in a community is marginalised in the same way. Projects carrying out such a 'marginalisation assessment' could also explain why a particular sub-group in the community was being targeted while another was not, which may have prevented resentment from other sub-groups.
- **Projects were not always prepared for the challenges in reaching particularly marginalised sub-groups,** such as girls living with disability and out-of-school girls, who required additional support to attend and be able to learn in school. Some girls needed more support than others, and projects sometimes had to adapt their interventions to either include or exclude particular sub-groups of girls from their original design. This suggests that projects could not always reach and benefit the range of marginalised girls they had originally intended to, possibly due to the variety of barriers to education that different sub-groups of girls were facing. This reflects the difficulties in targeting and designing projects tailored to the needs of heterogeneous populations.
- **Other, non-GEC activities also reached IW target girls** in both treatment and control groups. This means that some of the improvement in education outcomes discussed in this report may be attributable to other activities, either complementing or duplicating IW projects' activities. Contrary to this, contamination between treatment and control groups may suggest that some IW impacts may not be captured through projects' evaluations ([Section 2.3.2](#)).

3.2 What impact has the IW had on marginalised girls' learning?

A general improvement in learning is visible in treatment areas for most projects since baseline. However, projects' achievement against both literacy and numeracy targets is low at endline across the window. Projects' achievement takes into account the progression in control areas and the specific learning distributions among target populations. At endline, only five projects (out of 16) achieved their literacy targets, and two projects achieved their numeracy targets.

Nine projects reported reading fluency in words per minute and provided data for baseline, midline and endline. Among these projects, treatment group scores are on average two words per minute above control groups' scores at endline. Across the ten projects using EGMA, treatment group scores are on average four percentage-points above control groups' scores at endline.

Learning is one of the GEC's key outcomes. Throughout this report, we use the term “learning” to describe girls' progress in school and the acquisition of new skills and knowledge in relatively broad terms. However, when measuring learning as a GEC outcome, we apply a more specific definition of learning as “a change in ability over time” in literacy (i.e. reading fluency and reading comprehension) and numeracy skills.

All IW projects were required to include a learning assessment as part of their M&E design. They could choose between different types of standardised assessments with the majority opting for a variant of the Early Grade Reading Assessment (EGRA)⁴² and Early Grade Math Assessment (EGMA)⁴³ tools.

Literacy – EGRA is used to measure the extent to which girls can demonstrate the *most basic* foundation skills for literacy acquisition in early grades. When taking this oral test, girls must perform a number of tasks such as recognising letters of the alphabet, reading simple words, understanding sentences and paragraphs, and reading with comprehension. We report EGRA scores as oral reading fluency measured by words per minute (wpm).

Numeracy – Projects used EGMA to measure the extent to which girls can demonstrate foundational numeracy skills in early grades. Girls are asked to: identify numbers; distinguish different quantities; identify missing numbers; complete number patterns; and perform basic addition and subtraction exercises. Projects reported on the results that girls achieved on a range of numeracy subtask and typically present a score out of 100.

Other forms of learning assessment – Three projects used the Uwezo test (“capability” in Kiswahili), which is adapted from the Annual Status of Education Report (ASER) instrument. It displays distinct competency levels that allow scoring of the literacy and numeracy levels of a child. One project used ASER (ChildFund (Afghanistan)), and another project used a National Assessment (Camfed (Zambia)).

Box 1: Tests and scales not always comparable

As the scales differ from one test to another, **literacy and numeracy test results are not always comparable**. For instance, the EGRA test usually scores girls' literacy in terms of words per minute read, but TfAC (Malawi) reported literacy as a composite score between 1 and 68⁴⁴ at baseline and midline, which excluded any comparison with other projects using EGRA. Similarly, EGMA is usually scored out of 100 but some projects reported the percentage of correct responses. As for the Uwezo test, it measures literacy and numeracy through levels but the number of levels differ from one project to another making comparisons difficult. [Annex D](#) presents a summary of the data collection tools used to measure and report on learning across all projects.

⁴² EGRA is an orally administered student assessment designed to measure the most basic foundation skills for literacy acquisition in the early grades: recognising letters of the alphabet, reading simple words, understanding sentences and paragraphs and listening with comprehension.

⁴³ EGMA is an oral assessment designed to measure a student's foundation skills in numeracy and mathematics in the early grades, including number identification, quantity discrimination, missing-number identification, word problem solving, addition and subtraction, shape recognition and pattern extension.

⁴⁴ At baseline, words per minute task was not administered and only comprehension was tested. At midline, words per minute tasks were administered and comprehension was tested in the same way as in baseline. In order to allow a comparison between baseline and midline, a weighted average of the EGRA subtasks was calculated, excluding the word per minute task. For midline-endline comparison, the evaluation is based on words per minute.

Benchmarks for literacy and numeracy and comparability of EGRA results across languages

International education experts consider oral reading fluency a strong predictor of later literacy⁴⁵. Children who do not acquire basic reading skills at an early age are more likely to repeat grades and eventually drop out of school, while the performance gap between early readers and non-readers increases over time. It is generally assumed that students should be able to read **a minimum of 45-60 words per minute** in order to understand a simple passage of text (Figure 5).

To date, no comparable benchmarks have been developed for the assessment of EGMA results. There is no established, single metric that readily represents mathematical ability as accurately as oral reading fluency (in wpm) represents literacy across subtasks.

Comparability across languages

While the EGRA test was developed and adapted for use in a range of different languages, establishing comparisons across languages is generally discouraged. Such comparisons should be interpreted with caution as reading acquisition rates are influenced by the features of the language (Seymour et al., 2003). However, some recent research examples have been supportive of cross-linguistic comparisons. For instance, processes of reading are considered universal regardless of language (Dunlap and Perfetti, 2008). Similarly, USAID's EdData II project, led by RTI International, has shown that *"there are sufficient similarities across languages in the skills that contribute to successful reading, [and] with care, they could be used to make approximate comparisons of some reading assessment results"*⁴⁶. Importantly, the findings of this project encourages **to measure change over time within a language**, which reflects the approach taken across IW projects and aligns with the way we present findings in this report.

In general, caution should be applied when interpreting changes over time in reading fluency (wpm) averaged across the IW, as the rate of progression may commonly be higher in some languages compared to others. Comparison across different languages has shown that children can achieve basic comprehension at different points in terms of words per minute⁴⁷. Comparisons against international benchmarks presented in this report are indicative only.



Among the 11 IW projects using EGRA tests to measure literacy, eight used the English version of the test. Two projects used both English and local versions of the test: Link (Ethiopia) administered the test in Wolaitigna for girls in Grade 2, and in English for girls in Grade 6, whereas HPA (Rwanda) let the girls choose between English or Kinyarwanda. For these two projects, the EGRA scores presented in Figure 7 are the average across both tests. Finally, TfAC (Malawi) and VSO (Nepal) only measured literacy in local languages (Chichawa and Nepali, respectively).

⁴⁵ Abadzi, H. (2011), *Reading Fluency Measurements in EFA FTI Partner Countries: Outcomes and Improvement Prospects*, GPE Working Paper Series on Learning, No. 1, Education for All Fast Track Initiative Secretariat, World Bank, Washington DC.

⁴⁶ USAID's EdData II project (2015), *Comparing reading assessment results across languages*, EdData II: Education Data for Decision-Making.

⁴⁷ Pretorius, E. and Spaul, N. (2016), *Understanding the relationships between oral reading fluency and comprehension in isiZulu, Xitsonga and Sepedi*, Reading and Writing, Vol 29, Issue 7, pp 1449-1471.

Figure 5: International benchmarks of oral reading fluency by grade and age⁴⁸

Grade	Age	Expected reading fluency (wpm)	Year-on-year improvement (wpm)
1	6 years	21	21
2	7 years	45	24
3	8 years	63	18
4	9 years	85	22
5	10 years	90	5
6	11 years	108	18
7	12 years	110	2
8	13 years	110	0

Tests not measuring words per minute

The Uwezo test assesses literacy by using levels rather than a score, questions or subtasks. It measures children's ability to perform literacy and numeracy tasks at a level of difficulty that is typical for Primary Grade 2 assignments. Ability is then reported as the level of tasks that the child can perform comfortably. Although this test allows reporting on students' learning progress, no benchmark on the level attained at each grade has been found. [Annex D](#) presents a description of the tasks that have to be mastered in order to reach a particular level in an Uwezo test.

It is important to note that some projects have adapted the test, limiting comparability with other projects. For instance, ICL (Kenya) administered a ten-level Uwezo test for literacy. Finally, one project used ASER (ChildFund (Afghanistan)), and another project used a National Assessment (Camfed (Zambia)).

Description of available data

Of the 17 IW projects operating at endline, the number of projects providing information for learning indicators is as follows:

- Literacy test scores (EGRA, wpm): **11 projects**
- Literacy test scores (other tests/ units): **5 projects**
- Numeracy test scores (EGMA, score/100): **12 projects**
- Numeracy test scores (other tests/ units): **4 projects**

Two projects did not report baseline data: Mercy Corps (Nepal) and LCDK (Uganda). These projects were therefore excluded from longitudinal comparisons requiring baseline, midline and endline data presented in this section.

It is important to note that **we do not report quantitative impact findings for Eco Fuel (Uganda)**, as the project only collected qualitative data at midline and endline.

Weighing across IW projects

The findings we present in this section and throughout the report are weighted by the number of girls in the projects' *endline* samples⁴⁹, by grade⁵⁰, then averaged across all targeted grades. Projects' samples are derived from projects' target groups and generally reflect projects' learning beneficiaries by grade. This means that the findings presented in this report reflect **the outcomes achieved for the specific learning beneficiaries targeted by each project**.

⁴⁸ Abadzi, H. (2011), *Reading Fluency Measurements in EFA FTI Partner Countries: Outcomes and Improvement Prospects*, GPE Working Paper Series on Learning, No. 1, Education for All Fast Track Initiative Secretariat, World Bank, Washington DC.

⁴⁹ We use the distribution of the endline sample to compute the weighted averages. Similarly, we used the distribution of projects' midline samples to compute baseline and midline scores. As a consequence, the scores reported in this section may slightly differ from the ones presented at midline.

⁵⁰ To ensure comparability between baseline, midline and endline, we use the grades that were tested at the three data collection points.

When we present an average at the window level, this is a simple average across IW projects. In addition, when specified, we present a **weighted average across the IW to reflect varying project sizes** (total number of direct learning beneficiaries).

Projects' achievements against standard deviation targets

In addition to presenting projects' literacy and numeracy scores achieved at midline and endline, we also indicate **whether projects have achieved their targets**, expressed in standard deviations (SD). Projects' targets are the same for both literacy and numeracy, and were set by the FM and projects using baseline learning data⁵¹. By choosing to define the learning target as a proportion of the standard deviation of learning scores for girls, the GEC aims to account for the specific learning distributions among target populations, and hence to reflect the context in which each project intervenes.

At baseline, projects were asked the following (Figure 6):

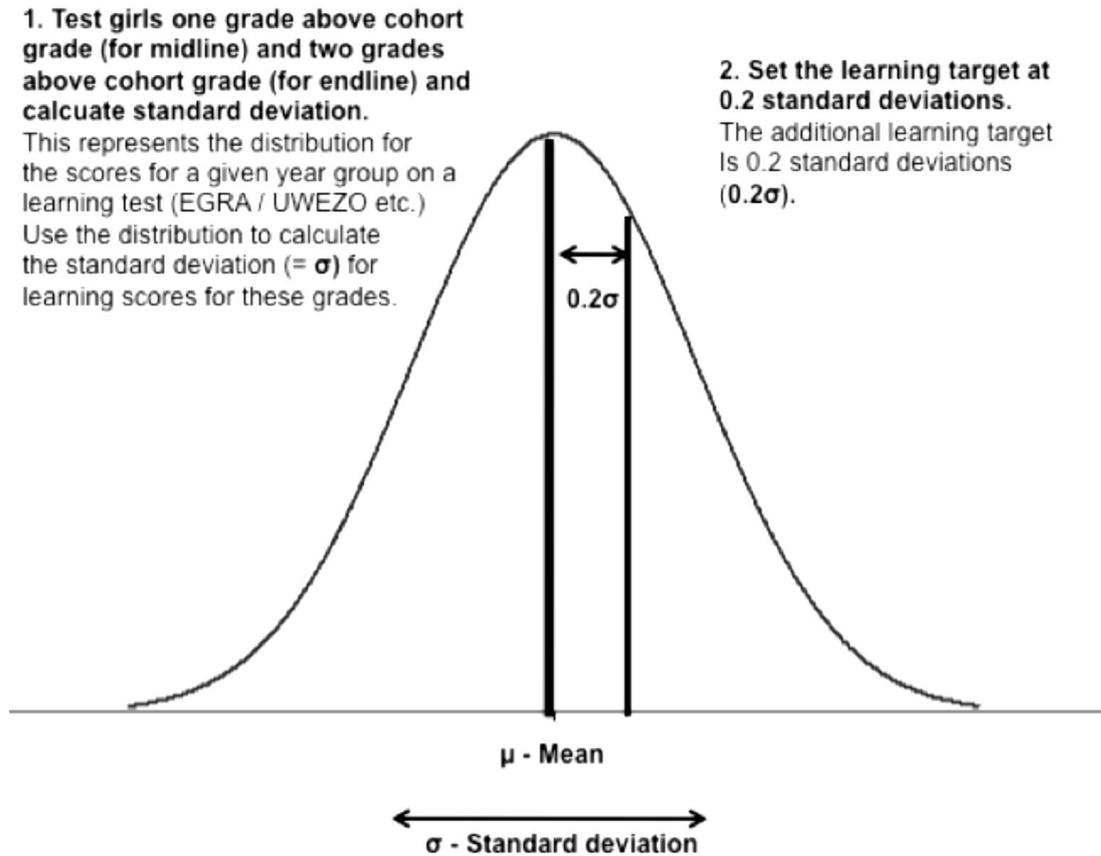
- For each grade in the cohort group, **measure the learning scores** of girls enrolled in *one grade and two grades higher than the cohort group* and calculate their standard deviations. Those were then used to define the midline and endline targets respectively.
- **Set the learning target at 0.2 standard deviation** of scores for the relevant grade⁵². Some projects have chosen to use a higher change in standard deviation, 0.25 or 3 SD. Projects targeting out-of-school girls also tested a sample of Grade 1 girls to establish a target for out-of-school girls.

This process allows targets to be set that are specific to the project's context. It also enables a comparison of projects' achievement across different learning tests (EGRA/ EGMA, Uwezo, ASER, national assessments), since standard deviation is not dependent upon the type of assessment used.

⁵¹ Fund Manager for the GEC (September 2013), *GEC Learning guidance on outcome targets*.

⁵² 0.2 and 0.3 SD are commonly used as a target in educational programmes. An increase in learning scores of 0.4 SD and over is considered a very high achievement across educational studies. Source: Evans, David K., and Anna Popova. 2016. "What really works to improve learning in developing countries? An analysis of divergent findings in systematic reviews," *World Bank Research Observer* 31(2): 242-270.

Figure 6: Learning target setting for GEC projects⁵³



It is important to note that ChildFund (Afghanistan) does not use control groups so no data is available to establish a counterfactual. For this project, endline achievement against target has been derived through a simple difference between midline and endline scores, which means that the literacy and numeracy impacts in SD are compiled using a before and after comparison on a sample of out-of-school girls which benefited from the project’s interventions since baseline⁵⁴. This was already the case for the computation of achievement against target at midline. **Positive results for ChildFund (Afghanistan) should therefore be interpreted with caution and differently from results of projects using a control group.**

Similarly, the relatively high achievement against target (literacy) observed for Red een Kind (South Sudan) was reported by the FM as a methodological oddity. This is due to the very low baseline scores with low variance, which meant that the SD target was set low. **Endline literacy results for Red een Kind (South Sudan) also require careful interpretation.**

Reanalysis of learning outcomes disaggregated by sub-groups

In order to explore learning improvements for specific groups of girls, the EM conducted a reanalysis of projects’ data that focused on learning outcomes disaggregated by sub-groups. We present this analysis in the section below.

The first step consisted of **replicating the findings from the FM reanalysis of project datasets**. This ensured that the main variables used to recalculate projects’ findings were correctly identified in the datasets for the subsequent sub-group analysis. Due to missing/ non-comparable baseline or midline data, findings from two projects (out of 16) could not be replicated. For another four projects, minor discrepancies were found during replication.

⁵³ Fund Manager for the GEC (September 2013), *GEC Learning guidance on outcome targets*.

⁵⁴ The project only works with out-of-school girls.

For the 14 projects where the replication of findings was possible, the EM proceeded with **identifying variables for sub-group analysis**. The main limitation in this task was the absence of data labels and the inconsistency in questions being asked to girls and care givers at different points in time (baseline, midline and endline). In some cases, learning data and household survey data could not be merged due to the lack of a unique identifier.

Sub-groups explored were as follows:

- School phase (low primary, upper primary, lower secondary, upper secondary);
- Age groups (from 6 to 19 years old);
- Educational groups (in-school, out-of-school, dropped out, never attended, has repeated grade);
- Type of school (government school, community school);
- Disabilities (sight, hearing, walking, language difficulties);
- Language of instruction (native, does not speak, speaks little language of instruction);
- Meeting basic needs (hunger, no access to clean water, difficulty to afford school, girl earning money);
- Income quintiles (first, second, third, fourth, fifth);
- Parental characteristics (living without parents, parents' education level);
- Young mothers;
- Safety (living in a safe area, unsafe area);
- Geographical groups (conflict area, non-conflict area, rural, urban, slums, drought affected);
- Remoteness (journey to school one hour or more, less than one hour);
- Vulnerable groups (child labour, sexual violence, child headed household); and
- Pastoralist (nomadic, not nomadic).

We could not always find variables and data for each of the above categories, which means we do not report on all of them here. Tables presenting the reanalysis of outcomes by all sub-groups are available in [Annex D](#).

Finally, **only a few projects had attendance data** in their learning datasets. Results could rarely be replicated, and it was only achieved for three projects (TfAC (Malawi), BRAC (Tanzania) and Camfed (Zambia)).

3.2.1 What impact has the IW had on literacy?

Table 11: Literacy scores at baseline, midline and endline in treatment and control groups (16 projects)

Literacy		PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd			
		Uganda				Kenya			Eth		Rwa	Sou	Tan	Zam	Mal	Gha	Nepal	Afgh		
Parameters	Test	EGRA	EGRA	EGRA	Uwezo	Uwezo	Uwezo	EGRA	EGRA	EGRA	EGRA	National test	EGRA	EGRA	EGRA	EGRA	ASER			
	Language	English	English	English	English	English	Local	English	Local	English	Local	English	English	English	Local	English	Local	English	English	
	Unit	wpm	wpm	wpm	5 levels	5 levels	10 levels	wpm	wpm	wpm	wpm	wpm	/100	wpm	wpm	wpm	wpm	wpm	5 levels	
	Control group used	Yes	Yes ^a	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
	In-school cohort ^b	G7-8	G1-10 (tuition loan) ^c	G2, 5, 8 and 9 (school loan) ^c	G1-11	G1-4	G1-8	G4-7, 9-10	G2	G6	G1-9	G2-5	G5-6	G5	G5-6	G2-3	G1-4	G6-7	Winter CBE, Winter ALP	
	OOS cohort	No	No	Yes	No	No	No	No	No	Yes	Yes	Yes	No	Yes	No	No ^d	Yes	No		
	Sample size	Yes	Yes	Yes	Yes	Yes ^e	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes ^f	Yes	Yes	Yes ^g	No		
Overall impact (all grades and out-of-school girls)																				
Baseline	Treatment	79	57	53	1.2			4.7	3	30	11	16	11	36	24		7	20	1.2	
	Control	83	52	50	1.8			4.6	2	29	10	14	12	36	27		6	23		
Midline	Treatment	104	83	80	2.8	3.8	3.7	5.3	16	53	21	32	20	37	27	40	22	42	70	2.4
	Control	110	76	83	3.0	3.4	3.1	5.6	8	40	20	28	21	34	28	42	22	43	72	
Endline	Treatment	116	97	79	3.9	3.6	3.6	7.5	26	56	44	60	29	47	33	55	36	48	72	3.2
	Control	118	91	82	4.2	3.0	2.9	6.6	11	43	45	54	24	49	33	54	33	48	72	
Baseline to Midline	Target (SD)	0.25	0.20	0.30	0.30	0.30		0.30	0.30		0.20	0.20	0.30	0.30	0.20	0.20	0.20	0.20	0.35	
	Impact (SD)	0.12	0.26	0.24	0.11			0.40	0.59		0.54	-0.65	0.18		0.26	0.01	0.35		1.54	
	Achievement against target	46%	132%	80%	35%	-		134%	196%		268%	-324%	61%	-	86%	1%	173%	-	441%	
Midline to Endline	Target (SD)	0.20	0.20	0.20	0.20	0.20		0.20	0.20		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.35	
	Impact (SD)	0.15	0.06	0.00		0.33		0.17	0.15		0.12	1.60	-0.15		0.14	0.11	-0.12	0.11	1.16	
	Achievement against target	61%	28%	0%	-	165%		86%	77%		59%	800% ^h	-51%	-	47%	56%	-58%	57%	322%	
Baseline to Endline	Impact (SD)	0.27	0.32	0.24				0.57	0.74		0.66	0.95	0.03		0.40	0.12	0.23		2.70	
	Achievement	53%	80%	48%	-	-		115%	148%		164%	238% ^h	16%	-	71%	29%	58%	-	387%	

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Notes

The first rows of the table describe the **type of assessment** used in order to measure literacy, the **unit** used, the presence or absence of a **control group** in the project analysis, the **grades (G)** of the girls tested, and the presence or absence of an **out-of-school cohort** tested. The row **sample size** provides information on whether the sample is sufficient to demonstrate statistical significance.

The following rows show the **baseline, midline and endline scores for the treatment and control groups** as weighted averages based on endline samples extracted from the projects' outcome spreadsheets. These averages have been calculated across different levels or girls' populations (in-school versus out-of-school). Refer to [Annex D](#) for disaggregated data.

Target (SD) rows show the project's midline (from baseline to midline) and endline (from midline to endline) targets in standard deviation.

The **literacy impact** row shows the impact achieved by each project in standard deviations. **Project achievement against target** is the percentage of target achieved. The last row is a translation in qualitative terms of the adjustment impact in percentage. It is rated from 0 to 5: 0 – Inconclusive or n/a; 1 – Negative impact (<0%); 2 – Target not achieved (0-50%); 3 – Target half-achieved (50-100%); 4 – Target achieved (100-150%); 5 – Target over-achieved (>150%).

It is important to note that **we do not report on Eco Fuel (Uganda)'s quantitative impact findings**, as the project only collected qualitative data at endline.

^a At baseline, Opportunity (Uganda) had no treatment or control group. The split was determined by who took out loans, once implementation started. As such, Opportunity (Uganda) have updated the baseline treatment/control split at midline to reflect new knowledge about the composition of treatment and control groups.

^b Some cohorts have not been followed at endline. They have been removed from the average scores calculations for baseline, midline and endline in order not to alter the comparability of the scores. They are still included in the DID estimation. These cohorts are Grade 9 for PEAS, Grade 4 for Varkey, and Grades 5 and 6 for CSU (only followed at baseline).

^c The project supported two types of loans: School Fee loans (SFL), which are offered to families and are used to pay for the fees of private schools (usually low-medium cost schools), and School Improvement loans (SIL), which go to school proprietors for the purpose of improving school infrastructure. Girls were sampled based on these two loans.

^d OOS cohort only followed at baseline.

^e No data for baseline due to sampling error.

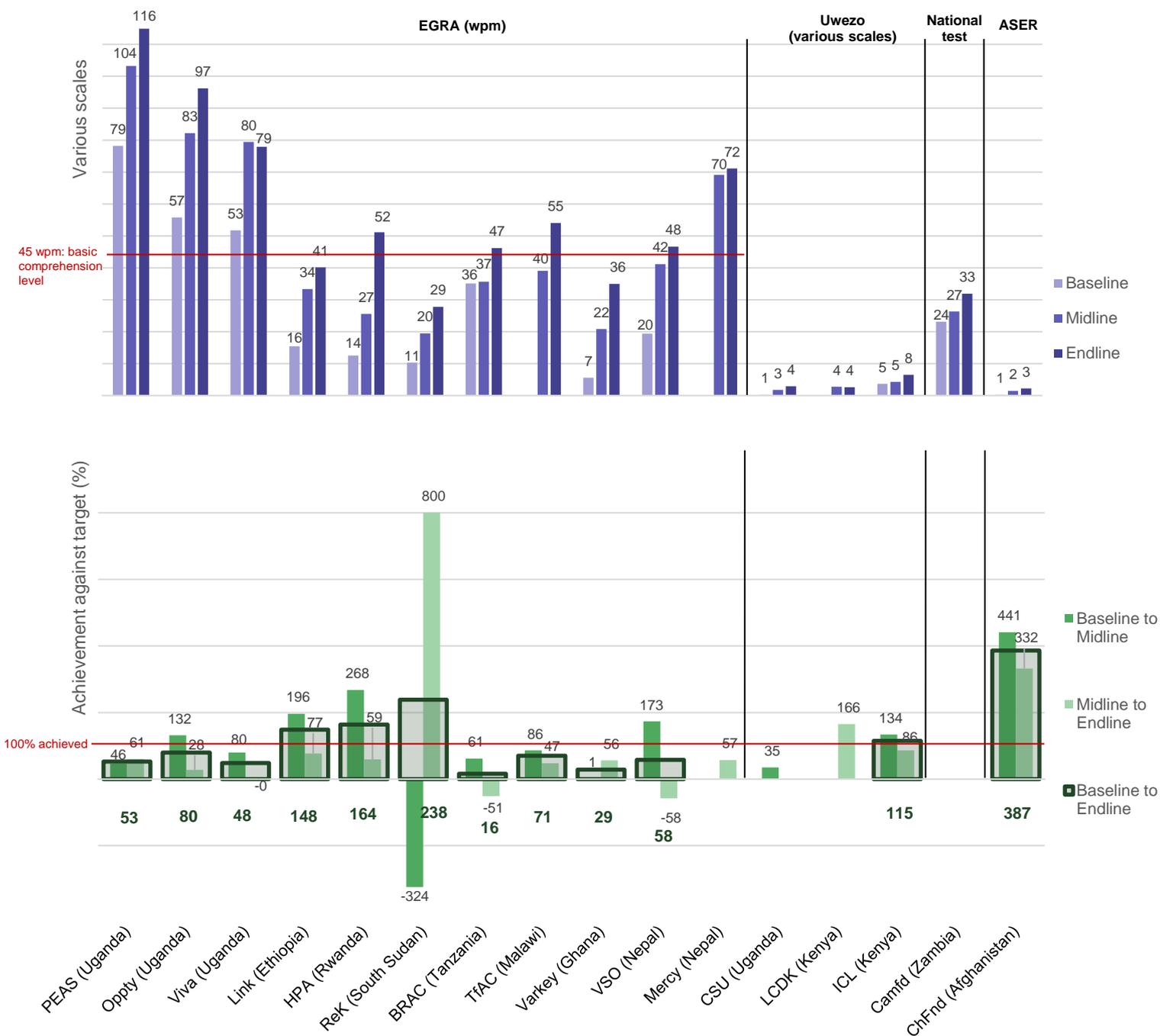
^f Baseline data in a different unit.

^g No data for baseline. The midline evaluator has not been able to systematically match baseline data with cohort girls as the baseline evaluator only provided an ID and the corresponding roll number – available in school registers – but not the names. In some cases, the schools were not able to provide the registers, and in other cases, some roll numbers belonged to boys. As a consequence, a large part of the sample has been replaced at midline and the evidence is deemed inconclusive.

^h For Red een Kind (South Sudan), the large literacy result is a methodological oddity due to very low starting scores with low variance meaning that the SD target comes out very low. This result needs careful interpretation.

It is important to note that we do not report quantitative impact findings for Eco Fuel (Uganda), as the project only collected qualitative data at midline and endline.

Figure 7: Literacy scores in treatment groups (baseline, midline and endline) and achievements against target, by project (16 projects)



A general improvement in reading fluency is visible in treatment areas for all projects since baseline

A general increase of reading fluency scores is visible in treatment groups between baseline and endline, except for Viva (Uganda) where girls’ reading fluency slightly dropped since midline (Figure 7). Among projects using the EGRA test to assess literacy, **eight projects reported an average reading fluency of at least 45 words per minute at endline**, which corresponds to a basic comprehension level. Only three projects were above this threshold at baseline.

Due to the different scales used by projects for the Uwezo test – 5-levels for CSU (Uganda), 5-levels for LCDK (Kenya) and 10-levels for ICL (Kenya), a comparison is difficult. At endline, we find that the improvements

observed since baseline vary from less than one level to three levels. Finally, ChildFund (Afghanistan), using the ASER test, observed an improvement of two levels in its treatment group from baseline to endline.

Box 2: Ugandan projects have higher-than-average literacy levels

In [Figure 7](#), higher literacy levels of projects are seen in Uganda. Although PEAS (Uganda), Opportunity (Uganda) and Viva (Uganda) work with older girls compared to other IW projects, high reading fluency results cannot be solely attributed to the grades targeted. If we compare grade by grade, Opportunity (Uganda) and Viva (Uganda) have much better results at baseline than other IW projects.

This may be explained by the fact that Uganda's educational system provides a better education than other IW countries' education systems, at least in terms of teaching literacy and numeracy skills to students. Uganda was one of the first African countries to provide free universal primary education in 1997, after Malawi in 1994. The event, designed as a 'Big Bang' approach⁵⁵, initially reduced disparities in access to primary education between rural and urban areas. Although an increase in enrolment rates had been observed at the time, concerns were expressed about the quality of education since the number of students passing the national primary leaving exam only marginally increased⁵⁶. To improve the relevance of education to local communities, a Thematic Curriculum was introduced in 2007, focusing on literacy, numeracy and life skills. In addition, education is now delivered in children's mother tongue in their early years. Among the countries covered by IW projects, Uganda has the highest female 15-24 years literacy rate: 85 percent vs. 65 percent on average for other IW countries⁵⁷.

Achievement against target remains low at endline across the window

At endline, **five projects (out of 16) have reached their literacy targets set at baseline** ([Figure 7](#) and [Table 11](#)): Link (Ethiopia), HPA (Rwanda), Red een Kind (South Sudan), ICL (Kenya) and ChildFund (Afghanistan). In the cases of Red een Kind (South Sudan) and ChildFund (Afghanistan), the high, positive achievements should be interpreted with caution due to low variance in the sample when targets were set (Red een Kind) and the absence of a control group against which to compare findings (ChildFund).

Across the nine projects reporting reading fluency in words per minute and reporting data for baseline, midline and endline, treatment group scores are on average two words per minute above control groups' scores at endline (difference-in-difference)

At baseline, girls in intervention and control groups read on average 33 and 32 words per minute respectively, which corresponds to a level attained in Grade 1 according to international benchmarks ([Figure 5](#)). Three years later this has increased to 61 words per minute in treatment groups, which corresponds to a Grade 2-3 level and also to the minimum required to understand a simple passage of text⁵⁸. In control groups, the average also improved but only to 58 words per minute ([Figure 8](#)).

This difference in trends observed for the two groups (intervention and control) suggests that the nine IW projects had an aggregate positive effect on the average literacy score of girls in treatment groups by increasing reading fluency by an additional two words per minute compared to control groups (difference-in-difference or net effect).

This difference is five words per minute at endline when adjusted for the number of girls reached ([Table 12](#)).

⁵⁵ <http://siteresources.worldbank.org/EDUCATION/Resources/Education-Notes/EduNotesUganda.pdf>.

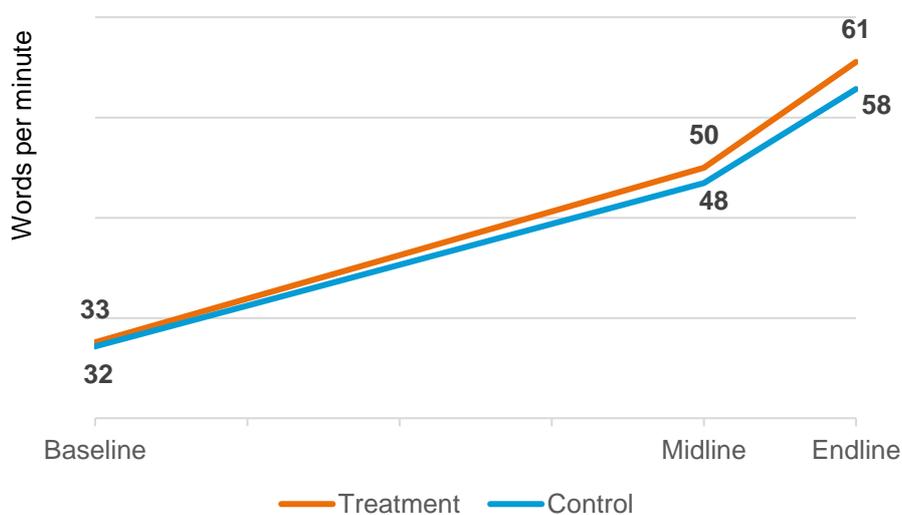
⁵⁶ Hedger et al (2010), Sector Budget Support in Practice: Case Study Education Sector in Uganda. ODI: London.

⁵⁷ Education data are provided by UNICEF <http://data.unicef.org/resources/the-state-of-the-worlds-children-report-2015-statistical-tables/> Accessed 5 October 2016.

Table 12: Improvement over control group scores, EGRA average word per minute, weighted vs. non-weighted by number of girls reached (nine projects)

Literacy (reading fluency) projects reporting EGRA wpm only	Baseline-to-midline improvement over control group scores	Midline-to-endline improvement over control group scores	Baseline-to-endline improvement over control group scores
Simple average across projects	1 wpm	1 wpm	2 wpm
Adjusted for number of girls reached	4 wpm	1 wpm	5 wpm

Figure 8: EGRA average word per minute scores from baseline to endline, treatment vs. control (nine projects)⁵⁹



Note: The above graph represents the time elapsed between baseline and midline (on average 30 months) and between midline and endline (on average 7 months). Refer to [Section 2.3.2](#) for more information on data collection timings.

⁵⁹ Projects for which data is available at baseline, midline and endline.

3.2.2 What impact has the IW had on numeracy?

Table 13: Numeracy scores at baseline, midline and endline in treatment and control groups (16 projects)

Numeracy		PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd		
		Uganda				Kenya			Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh	
Parameters	Test	EGMA	EGMA	EGMA	Uwezo	Uwezo	EGMA	EGMA	EGMA	EGMA	EGMA	National test	EGMA	EGMA	EGMA	EGMA	ASER		
	Unit	/100	/100	/100	7 levels	5 levels	/100	/100	/100	/100	/100	/100	/100	/100	/100	/100	5 levels		
	Control group used	Yes	Yes ^a	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
	In-school cohort ^b	G7-8	G1- 10 (tuition loan) ^c	G2, 5, 8-9 (school loan) ^c	G1-11	G1-4	G1-8	G4-7, 9-10	G2	G6	G1-9	G2-5	G5-6	G5	G5-6	G2-3	G1-4	G6-7	Winter CBE, Winter ALP
	OOS cohort	No	No	Yes	No	No	No	No	No	Yes	Yes	Yes	No	Yes	No	No ^d	Yes	No	
	Sample size	Yes	Yes	Yes	Yes	Yes ^e	Yes ^f	Yes	Yes	Yes	Yes	Yes	Yes	Yes ^g	Yes	Yes	Yes ^h	No	
Overall impact (all grades and out-of-school girls)																			
Baseline	Treatment	56	27	58	1.9			35	28	26	69	77	27		40	20		1.1	
	Control	58	25	64	2.7			36	26	24	73	80	27		40	23			
Midline	Treatment	69	36	71	4.1	3.7	82	46	45	58	75	83	31	81	57	42	75	2.5	
	Control	69	34	69	3.9	3.1	80	37	33	60	74	87	32	80	52	43	76		
Endline	Treatment	74	37	73	5.8	3.6	84	60	55	83	72	88	37	84	66	48	76	2.5	
	Control	72	37	74	6.0	2.9	80	38	37	82	70	87	38	80	61	48	74		
Baseline to Midline	Target (SD)	0.25	0.20	0.30	0.30	0.30	0.30	0.30	0.20	0.20	0.30	0.30	0.30	0.20	0.20	0.20	0.20	0.35	
	Impact (SD)	0.09	0.14	0.37	0.07			0.43	-0.15	0.12	-0.06		0.18	0.27	0.37			1.77	
		36%	71%	189%	36%	-	-	142%	-75%	59%	-20%	-	60%	136%	185%	-		506%	
	Achievement against target	Target not achieved	Target half-achieved	Target over-achieved	Target not achieved	Inconclusive	Inconclusive	Target achieved	Negative impact	Target half-achieved	Negative impact	Inconclusive	Target half-achieved	Target achieved	Target over-achieved	Inconclusive	Target over-achieved		
Midline to Endline	Target (SD)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.35	
	Impact (SD)	0.16	-0.04	-0.13		0.34	0.00	0.44	0.28	0.02	0.50		0.26	0.04	-0.06	0.19	0.04		
		78%	-19%	-63%	-	171%	0%	222%	138%	12%	249%	-	132%	19%	-29%	97%	10%		
	Achievement against target	Target half-achieved	Negative impact	Negative impact	Inconclusive	Target over-achieved	Target not achieved	Target over-achieved	Target achieved	Target not achieved	Target over-achieved	Inconclusive	Target achieved	Target not achieved	Negative impact	Target half-achieved	Target not achieved		
Baseline to Endline	Impact (SD)	0.25	0.10	0.24				0.87	0.13	0.14	0.44		0.44	0.31	0.31			1.81	
	Achievement	55%	26%	83%	-	-	-	174%	32%	35%	88%	-	89%	77%	78%	-		258%	

Notes

The first rows of the table describe the **type of assessment** used in order to measure numeracy, the **unit** used, the presence or absence of a **control group** in the project analysis, the **grades** of the girls tested, and the presence or absence of an **out-of-school cohort** tested. The row **sample size** provides information on whether the sample is sufficient to demonstrate statistical significance.

The following rows show the **baseline, midline and endline scores for the treatment and control groups** as weighted averages based on the distribution of endline samples extracted from the projects' outcome spreadsheets. These averages have been calculated across different levels or girls' populations (in-school versus out-of-school). Refer to [Annex D](#) for disaggregated data.

Target (SD) shows the project's midline (from baseline to midline) and endline (from baseline to endline) targets in standard deviation.

The **numeracy impact** row shows the impact achieved by each project in standard deviations. **Project achievement against target** is the percentage of target achieved. The last row is a translation in qualitative terms of the adjustment impact in percentage. It is rated from 0 to 5: 0 – Inconclusive or n/a; 1 – Negative impact (<0%); 2 – Target not achieved (0-50%); 3 – Target half-achieved (50-100%); 4 – Target achieved (100-150%); 5 – Target over-achieved (>150%).

^a At baseline, Opportunity (Uganda) had no treatment or control group. The split was determined by who took out loans, once implementation started. As such, Opportunity (Uganda) have updated the baseline treatment/control split at midline to reflect new knowledge about the composition of treatment and control groups.

^b Some cohorts have not been followed at endline. They have been removed from the average scores calculations for baseline, midline and endline in order not to alter the comparability of the scores. They are still included in the DID estimation. These cohorts are Grade 9 for PEAS, Grade 4 for Varkey, and Grades 5 and 6 for CSU (only followed at baseline).

^c The project supports two types of loans: School Fee loans (SFL), which are offered to families and are used to pay for the fees of private schools (usually low-medium cost schools), and School Improvement loans (SIL), which go to school proprietors for the purpose of improving school infrastructure. Girls were sampled based on these two loans.

^d OOS cohort only followed at baseline.

^e No data for baseline due to sampling error.

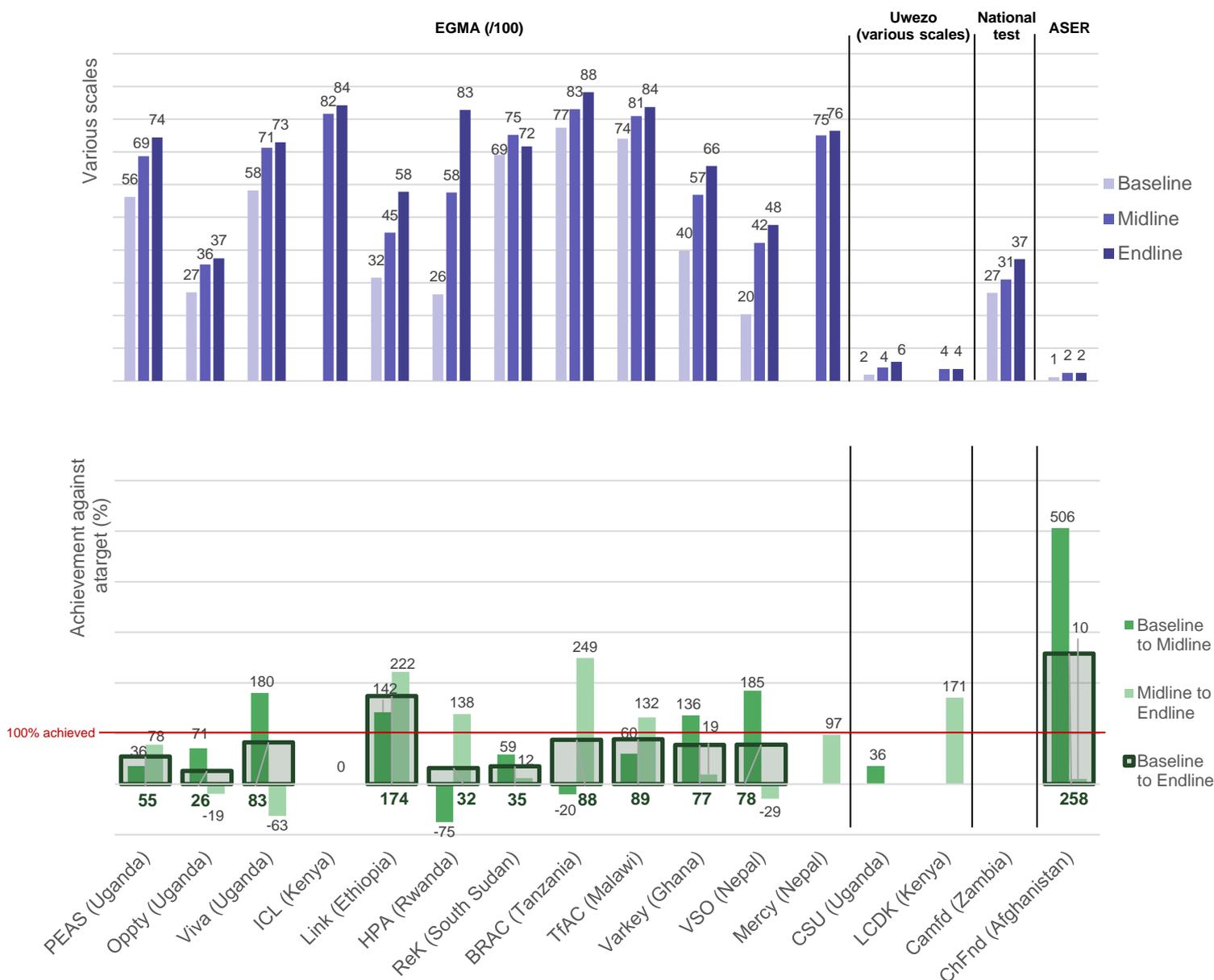
^f No data for baseline for which a 5-levels Uwezo tests has been used.

^g Baseline data in a different unit.

^h No data for baseline. The midline evaluator has not been able to systematically match baseline data with cohort girls as the baseline evaluator only provided an ID and the corresponding roll number – available in school registers – but not the names. In some cases, the schools were not able to provide the registers, and in other cases, some roll numbers belonged to boys. As a consequence, a large part of the sample has been replaced at midline and the evidence is deemed inconclusive.

It is important to note that we do not report quantitative impact findings for Eco Fuel (Uganda), as the project only collected qualitative data at midline and endline.

Figure 9: Numeracy scores in treatment groups (baseline, midline and endline) and achievements against target, by project (16 projects)



A general improvement in numeracy is visible in treatment areas for all projects since baseline

Similarly to literacy, there is a general increase in the EGMA scores from baseline to endline in the treatment sample. Only Red een Kind (South Sudan) shows a decline between midline and endline (Figure 9).

Due to the different scales used by projects which administered the Uwezo test – 7-levels for CSU (Uganda) and 5-levels for LCDK (Kenya), a comparison is difficult. At endline, we find that the improvements observed since baseline vary from less than one level to four levels. Finally, ChildFund (Afghanistan), using the ASER test, observed an improvement of one level in its treatment group from baseline to endline.

Achievement against target is low at endline across the window

At endline, **two projects (out of 16) have reached their numeracy targets set at baseline**: Link (Ethiopia) and ChildFund (Afghanistan). In the case of ChildFund (Afghanistan), the high, positive achievement should be

interpreted with caution due to the absence of control group scores. In addition, TfAC (Malawi), BRAC (Tanzania) and Viva (Uganda) are close to having achieved their targets (above 80 percent).

Across the ten projects using EGMA and reporting data for baseline, midline and endline, treatment group scores are four percentage-points above control groups' scores at endline (difference-in-difference)

At baseline, girls in intervention and control groups scored on average 48 and 49 respectively. Three years later this increased to 68 in treatment groups. In control groups, the average also improved but only to 65 (Figure 10).

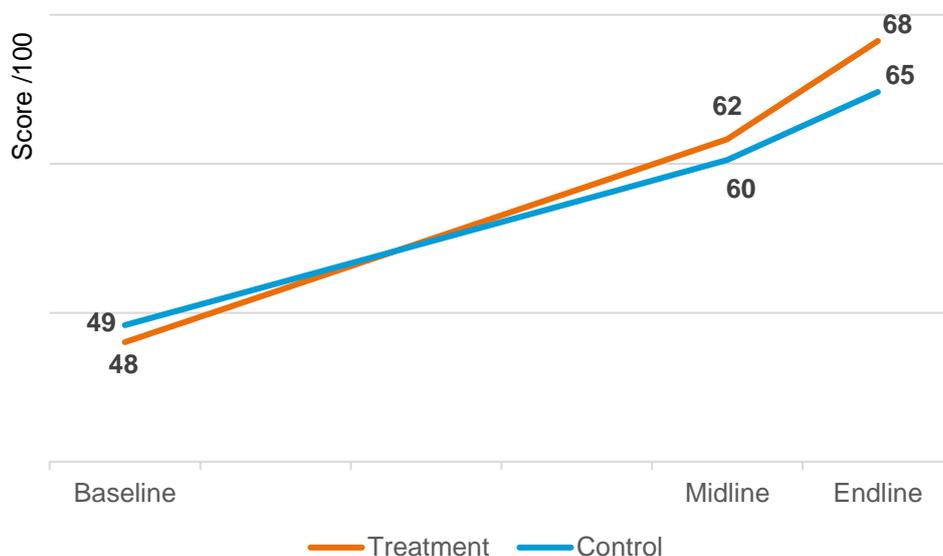
This difference in scores observed for the two groups (intervention and control) suggests that the ten projects had a positive effect on the average numeracy score of girls in treatment groups by increasing numeracy by an additional four percentage-points compared to control groups (difference-in-difference or net effect).

This difference is of eight points at endline when adjusted for the number of girls reached (Table 14).

Table 14: Improvement over control group scores, EGMA average score, weighted vs. non-weighted by number of girls reached (10 projects)

Numeracy (score/100) projects reporting EGMA scores only	Baseline-to-midline improvement over control group scores	Midline-to-endline improvement over control group scores	Baseline-to-endline improvement over control group scores
Simple average across projects	3 points	1 point	4 points
Adjusted for number of girls reached	4 points	4 points	8 points

Figure 10: EGMA average scores from baseline to endline, treatment vs. control (10 projects)⁶⁰



Note: The above graph represents the time elapsed between baseline and midline (on average 30 months) and between midline and endline (on average 7 months). Refer to Section 2.3.2 for more information on data collection timings.

⁶⁰ Projects for which data is available at baseline, midline and endline.

3.3 What impact has the IW had on enabling marginalised girls to be in school?

A small increase has been observed in IW projects' attendance rates. Attendance at endline stands above national averages for a majority of projects. This moderate improvement can be explained by the relatively high values of the attendance rate at baseline, as well as the difficulties in measuring attendance accurately.

At endline, we found no consistent trend in enrolment rates for the four projects for which baseline and endline data is available. Enrolment decreased for two of these projects, stagnated for one project and increased for another project.

The poor quality of attendance and enrolment data does not allow for further conclusions on girls' ability to attend and stay in school.

To assess the extent to which girls are attending school across IW projects, we looked at a combination of two dimensions that are used together to ensure that girls 'are in school'. These are enrolment and attendance.

Enrolment rates – IW projects report enrolment rates as the proportion of girls in a target community who are enrolled in school. There are two main data sources: household surveys and school registers. Importantly, census data are not always available in target communities, so the enrolment rate sometimes corresponds to the proportion of girls who attend school among the respondents of the household survey. For projects using school registers as a data source, enrolment levels are calculated as the difference between the number of girls enrolled at baseline and the number of girls enrolled at endline in selected schools.

Attendance rates – Attendance rates are compiled using projects' reported findings of the average of the proportion of schooling days attended. Projects collected attendance data from school registers and spot checks (Box 3). For BRAC (Tanzania), this data served to verify some of the self-reported information on enrolment and attendance collected from the surveyed households. Nevertheless, IW projects have pointed out their **lack of confidence in the attendance data** collected to date, as spot checks revealed that school registers were not a consistent and reliable source of information. This prevented the EM from drawing a definite conclusion with regards to attendance rates of target girls.

Box 3: GEC requirements for IW projects' measurement of attendance

The FM provided IW projects with guidance⁶¹ on measuring attendance before they undertook their baseline/ midline/ endline research. Although the relationship between attendance and learning is not always clear-cut, improving girls' attendance reflects the concern that even when they are enrolled in schools, girls are not necessarily attending and learning. As a result, **attendance was chosen as a stronger indicator of the impact of educational interventions than enrolment**.

IW projects were advised of two main options for measuring attendance. They could either track a cohort of marginalised girls over time with girls selected randomly, or collect data from a sample of intervention schools (designed to represent the entire project population) and from a sample of control schools. In the latter case, average attendance is measured for the group without tracking individual girls. In most cases, there were no systems for collecting individual girls' attendance data. As a consequence, most of the projects chose the second approach by developing a method to determine the **average attendance of targeted girls**.

Three attendance data sources have been used⁶²:

- **School register data** on a representative sample of intervention and control schools. The FM advised using the same sample of schools between baseline, midline and endline. Between each data collection point, the duration of days or weeks should also be the same (for instance, comparing September to December 2016 rates to September to December 2015 attendance rates for consistency).
- At least three unannounced **spot checks** per year at both intervention and control schools that should be aligned to the same timing and duration as the previous years' spot checks. When a spot check is undertaken, projects should count the number of girls in the classes and compare this to the school register

⁶¹ Fund Manager for the GEC (June 2013), *The Girls' Education Challenge – Attendance guidance*.

⁶² Fund Manager for the GEC (September 2016), *Measuring Attendance on the GEC: methods, challenges and results*.

taken for that day. The purpose of these spot checks is to verify attendance data from the school registration system.

- Data collected through **household surveys** allows projects to triangulate attendance rates and verify data accuracy. It provides a self-reported measure of attendance through questions such as “*since the start of the most recent school year, has [girl] attended her main school on most days that the school was open?*”

As pointed out by the FM, collecting data on attendance is challenging because many schools do not have registers. Moreover, when there is a register, it is often not used regularly or it is not completed accurately, especially under teacher performance-pay systems or when government funding is linked to the attendance rate. This undermines the reliability of data collected.

To establish a high degree of confidence in the reporting on attendance, the FM and the EM also encouraged IW projects to ensure that attendance data collected is independently verified by IW projects’ independent evaluators and set attainable targets for additional improvements to attendance over the project period. Through the midline review process undertaken by the FM, many projects showed a significant deviation between findings from spot checks and school registers. Where school registers have been deemed unsuitable for reporting, spot checks have often been relied upon as a primary source, despite the limited number carried out by projects and their external evaluators.

Finally, improving attendance data quality (which a few projects have tried to achieve in their intervention schools) can also reduce attendance levels as attendance lists become more accurate, in comparison to control schools where attendance recording remains poor and often inflated as a result.



The GEC requirements did not specify that IW projects should provide enrolment information, unless projects had a specific focus on interventions aimed at improving enrolment and/or retention. As a consequence, the evidence base for these two outcomes found across the IW and presented in this section is more limited compared to learning outcomes.

*With regards to attendance, it is likely that the questions measuring attendance in the household survey are not sufficiently sensitive to pick up small changes in attendance. At the same time, projects have equally struggled to measure attendance reliably, using spot checks and school registry data. Poorly kept student records **hamper the reliability of both approaches.***

Description of available data

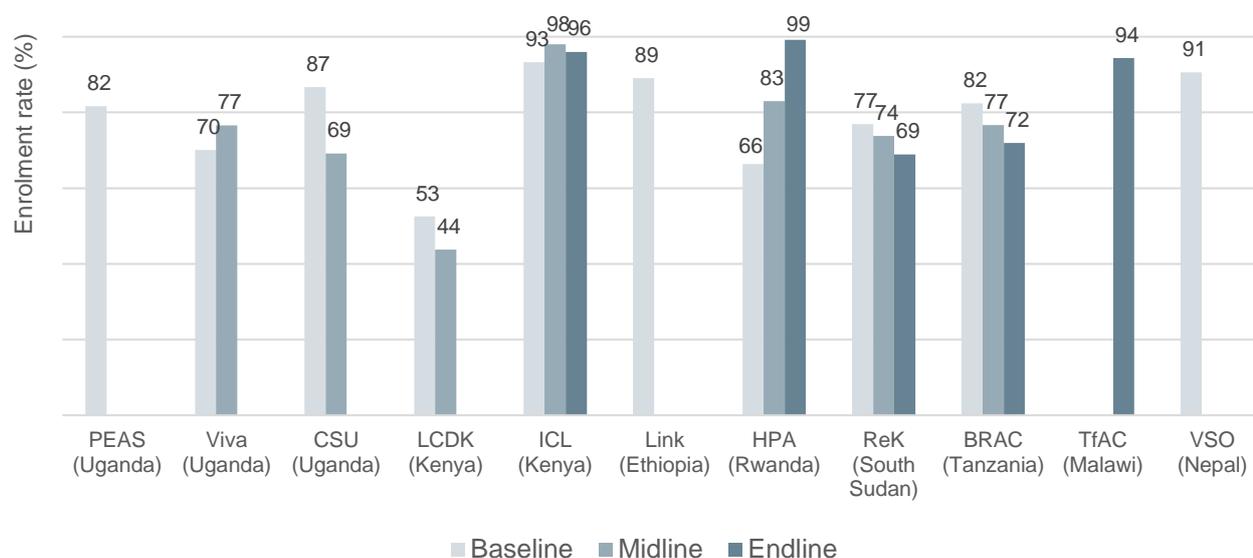
Of the 17 IW projects operating at endline, the number of projects providing information for being-in-school indicators is as follows:

- Enrolment: 11 projects
- Attendance: 14 projects

3.3.1 What effects has the IW had on enrolment?

No consistent trend in enrolment rates emerged among the four projects collecting this data

There is no consistent trend in enrolment rates between baseline and endline for the four projects for which baseline and endline data is available. Enrolment decreased for two of these projects, stagnated for one project and increased for another project.

Figure 11: Average enrolment rate at baseline, midline and endline, in treatment groups, by project (eleven projects)


A comparison with available national enrolment rates of girls in primary schools provided by UNICEF⁶³ (Table 15) shows that at endline only BRAC's (Tanzania) enrolment rate remains below the national average. However, enrolment figures should be interpreted with caution, as measurement techniques and data quality differ between sources.

Table 15: Comparison of IW project enrolment rates to national data (five projects)⁶⁴

Enrolment rate (%) – Comparison to national data	ICL	HPA	ReK	BRAC	TfAC
	Kenya	Rwanda	S. Sudan	Tanzania	Malawi
Baseline (treatment only)	93%	66%	77%	82%	-
Midline (treatment only)	98%	83%	74%	77%	-
Endline (treatment only)	96%	99%	69%	72%	94%
UNICEF data – 2009-2013 ⁶⁵	83%	97% [UNESCO]	34%	98%	100% [UNESCO]

3.3.2 What effects has the IW had on attendance?

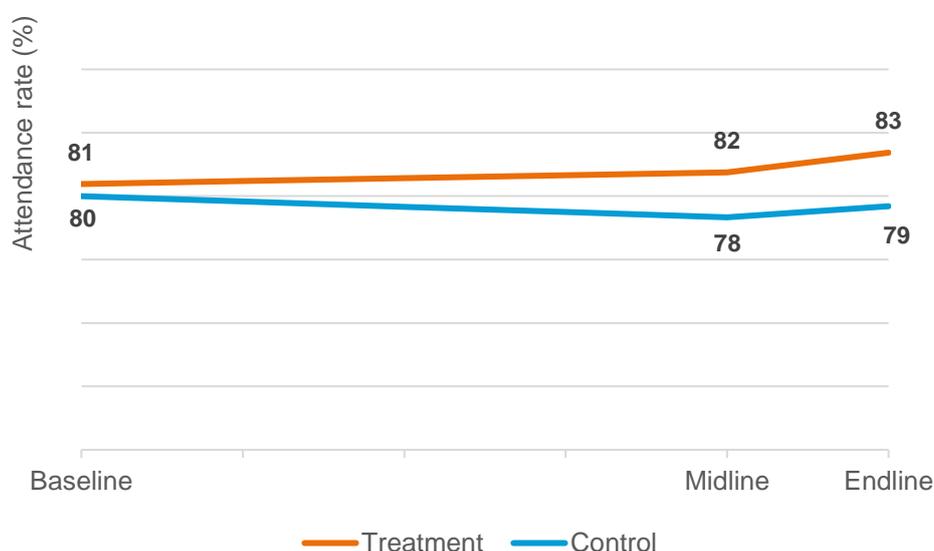
Attendance increased slightly since baseline

On average, the attendance rate increased only slightly from baseline – 81 percent in treatment groups and 80 percent in control groups – to endline – 83 percent in treatment group and 79 percent in control group. This moderate improvement can be explained by the relative high values of the attendance rate at baseline, the majority of which were higher than the national average, as well as the difficulties in measuring attendance accurately. It is also possible that attendance cannot be increased beyond a certain level due to structural barriers such as poverty and other related factors that keep girls away from school on a regular basis.

⁶³ Education data provided by UNICEF: <http://data.unicef.org/resources/the-state-of-the-worlds-children-report-2015-statistical-tables/> Accessed 5 October 2016.

⁶⁴ Projects with data available at endline.

⁶⁵ We use UNESCO data when UNICEF data was not available. UNESCO data corresponds to the Total Net Enrolment Rate, Primary (female, %), that is the total number of students of the official age group for a given level of education who are enrolled in any level of education, expressed as a percentage of the corresponding population. <http://data.uis.unesco.org/>.

Figure 12: Average attendance rate at baseline, midline and endline, treatment vs. control (12 projects)⁶⁶


Attendance at endline is above national averages for a majority of projects

Across the 14 projects which reported data for attendance, nine projects have endline rates which stand above the national averages (Table 16). Trends by project since baseline highlight the disparities across projects, behind the general increase observed at the window level.

Table 16: Comparison of IW project attendance rates to national data (14 projects)⁶⁷

Attendance rate (%) Comparison to national data	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	Varkey	VSO	ChFund	
	Uganda				Kenya		Eth	Rwa	S. Sud	Tan	Zam	Gha	Nepal	Afg	
Baseline (Treatment)	89%	95%	84%	80%	70%	83%	81%	92%	74%	97%	79%	79%	51%	84%	
Midline (Treatment)	87%*	95%*	82%*	86%*	75%*	88%	85%*	92%*	74%*	92%*	85%	71%*	53%	73%	
Endline (Treatment)	79%	93%	67%	90%*	88%	84%*	93%*	92%	74%	99%	86%*	67%	74%	86%*	
National average [Source]	88% [IUS, 2011]				87% [DHS, 2014]		70% DHS, 2011]	91% [DHS, 2010]	21% MICS, 2010]	79% [DHS, 2015]	82% [DHS, 2013]	69% [DHS, 2014]	85% [DHS, 2011]	43% [IUS, 2011]	

Note: * indicates that the value is higher in the treatment group than in the control group.

3.3.3 Outcomes by sub-group based on projects' own data

In this sub-section, we present the trajectories of attendance, literacy and numeracy outcomes on a range of subgroups based on the analysis of IW projects' own quantitative data.

As far as possible, we used baseline, midline and endline datasets and **compared the trajectories of treatment and control groups using difference-in-difference estimators**. However, this was not always possible because some projects only submitted endline data, or their endline data was not linkable with their baseline and midline data. Projects' datasets also often lacked the meta-information that allows to properly identify treatment status,

⁶⁶ Projects with data available at baseline, midline and endline.

⁶⁷ Data for net attendance rate provided from the World Bank database that gather data from various sources. For each country, data for net attendance rate is not published on an annual basis. Therefore, we used the most recent data provided by Demographic and Health Surveys (DHS). When data was not available for a country, we used a different source.

subgroups, test variables as well as the way these test variables need to be combined to create aggregate literacy and numeracy scores. As far as possible, we tried to replicate the analysis from the outcome spreadsheets to ensure our calculations were correct. Further details on the methodology and associated limitations can be found in [Annex D](#).

Projects for which the reanalysis of outcomes by subgroups could be performed are:

- **Baseline-to-endline analysis:** HPA (Rwanda), Link (Ethiopia), Viva (Uganda), Varkey (Ghana) and Camfed (Zambia).
- **Midline-to-endline analysis:** Mercy Corps (Nepal), Red een Kind (South Sudan), ICL (Kenya), LCDK (Kenya), BRAC (Tanzania), PEAS (Uganda), ChildFund (Afghanistan), TfAC (Malawi) and Opportunity (Uganda).

Subgroups are defined at each wave. For instance, for age and grade levels this means that we compare Lower Primary girls at midline with Lower Primary girls at endline. We only consider subgroups for which data is available from at least three projects.

[Table 17](#) presents difference-in-difference indicators (comparison over time and above the control group) or simple differences (comparison over time) across IW, using the following symbols:

+	The DiD indicator is positive and statistically significant at the 5% level. Notation: DiD.
✓	The simple difference (before-after) indicator is positive and statistically significant at the 5% level in treatment areas. Notation: SiD.
⊖	Neither the DiD nor the simple difference is positive and statistically significant.
<p>Note: For projects who have a control group, we first calculate the DiD indicator. If it is statistically significant, we report it. If it is not, we calculate the simple difference and report it if statistically significant. We only show indicators that are based on at least 30 observations. For projects whose baseline data is available, differences are calculated between baseline and endline. Otherwise, differences are calculated between midline and endline.</p>	

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Table 17: Subgroup analysis of IW projects' data

Outcome subgroup analysis	HPA Rwa		Link Eth			Red Sou		Viva Uga		Mercy Nep		ICL Ken		LCDK Ken			BRAC Tan			VSO Nep		Varkey Gha		Camfd Zam			PEAS Uga		LCSU Uga		Chind Afg		TfAC Mal			Oppty Uga				
	EGRA English wpm	EGRA local wpm	EGMA %	EGRA wpm	EGMA %	Att %	EGRA wpm	EGMA %	EGRA wpm	EGMA %	EGRA wpm	EGMA %	JWEZC	EGMA %	JWEZC English	JWEZC local	JWEZC	EGRA wpm	EGMA %	Att %	EGRA wpm	EGMA %	EGRA wpm	EGMA %	National test %	National test %	Att %	EGRA wpm	EGMA %	JWEZC	JWEZC	ASER	ASER	EGRA wpm	EGMA %	Att %	EGRA wpm	EGMA %		
	LIT	LIT	NUM	LIT	NUM	ATT	LIT	NUM	LIT	NUM	LIT	NUM	LIT	NUM	LIT	LIT	NUM	LIT	NUM	ATT	LIT	NUM	LIT	NUM	LIT	NUM	ATT	LIT	NUM	LIT	NUM	LIT	NUM	LIT	NUM	ATT	LIT	NUM		
All girls	✓		+	+	+	+	+	✓	○	○	○		✓	○		○	✓	+	✓				○	+	✓	✓	+	✓	✓			✓	○	✓	+	✓	✓	○		
School age																																								
Lower primary	✓		✓	+	+			✓	○					○		○							✓	✓								✓	○				✓	✓		
Upper primary	✓		✓	+	+	+	○	+	✓	✓				+	○		○	○	✓	✓				○	✓	✓	✓	+				○	○	✓	+	✓	+	○		
Lower secondary	✓		+					✓	✓					✓			○	○	✓									✓	✓									✓	✓	
Upper secondary	✓		+								○	✓		○																										
Age groups																																								
< 6 years old																																								
6 – 8 years old															○		○															○	✓					○	○	
9 – 11 years old	✓		✓	+	+				○	✓				○		○								○	+							✓	○	○	○	○	○	○	○	
12 – 13 years old	✓		+	+	+			✓	✓					○	○		○	✓		✓				✓	+	+	✓	○				✓	○	✓	+	✓	○	○		
14 – 15 years old	✓		✓	+	+	+	○	○	✓	✓	○	○		○		○	✓	✓	✓				✓	✓	✓	○	+	✓	✓		○	○	✓	+	✓	○	○	○		
16 – 17 years old	✓		○					✓	+	+	○			○			✓	○	✓				○	✓	✓	✓	○	✓	✓				✓	+	+	○	✓	○		
18 – 19 years old	+		+					○		○	○			○														○	✓					○			○	○	○	
> 19 years old									○	○	○																													
School groups																																								
In school	✓		○				+	+			○	○		✓				✓	+	✓				○	+	✓	✓	+			✓	○	✓	+	✓	✓	✓	○		
Out of school							○	+			○	○						✓	○																	+	○			
Dropped out	✓		✓															✓	+	✓																				
Never attended																		○	○																					
Has repeated grade	✓		✓				✓	○																✓	○	✓	✓	○										✓	✓	
Has never repeated grade	✓		○				✓	✓																○	+	✓	✓	○										✓	○	
Girls with disability																																								
Disabled girl	✓		✓	✓	✓		+	○								○	✓	○	✓														✓	○	✓					

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Outcome subgroup analysis	HPA Rwa			Link Eth			Red Sou		Viva Uga		Mercy Nep		ICL Ken		LCDK Ken			BRAC Tan			VSO Nep		Varkey Gha		Camfd Zam			PEAS Uga		LCSU Uga		Chnd Afg		TfAC Mal			Oppty Uga			
	EGRA English wpm	EGRA local wpm	EGMA %	EGRA wpm	EGMA %	Att %	EGRA wpm	EGMA %	EGRA wpm	EGMA %	EGRA wpm	EGMA %	JWEZC English	EGMA %	JWEZC local	JWEZC	EGRA wpm	EGMA %	Att %	EGRA wpm	EGMA %	EGRA wpm	EGMA %	National test %	National test %	Att %	EGRA wpm	EGMA %	JWEZC	JWEZC	ASER	ASER	EGRA wpm	EGMA %	Att %	EGRA wpm	EGMA %			
	LIT	LIT	NUM	LIT	NUM	ATT	LIT	NUM	LIT	NUM	LIT	NUM	LIT	NUM	LIT	LIT	NUM	LIT	NUM	ATT	LIT	NUM	LIT	NUM	LIT	NUM	ATT	LIT	NUM	LIT	NUM	LIT	NUM	ATT	LIT	NUM	ATT	LIT	NUM	
Not disabled	⊖		⊖	+	+	+												✓	+	✓							✓	✓							+	+	+			
Meeting basic needs																																								
Unable to meet needs				+	+	+			✓	✓																												⊖	⊖	
Able to meet needs				✓	+	+			✓	✓				⊖		⊖																						✓	⊖	
Difficult to afford school	✓		✓	+	+	+			✓	⊖	⊖	⊖		⊖		⊖											✓	✓												
Not difficult to afford school	✓		✓								⊖	⊖		⊖																										
Parental characteristics																																								
Lives without parents	✓								⊖	⊖	⊖	⊖						⊖	⊖	✓				✓	✓	✓	✓	✓	✓	⊖										
Lives without mother	✓		✓						⊖	✓															✓	✓	+													
Lives without father	✓		✓						✓	+				⊖		⊖								✓	✓	✓	✓	✓										⊖	⊖	
Lives with both parents	✓		+				+	⊖	✓	✓	⊖	⊖		⊖		⊖	✓	+	✓				✓	+	✓	✓	+	✓	✓					+	+	+	✓	⊖		
PCG can read and write LOI	✓		✓				✓	⊖	✓	✓																	✓	✓										✓	⊖	
PCG cannot read and write LOI	✓		✓				+	⊖	✓	✓																	✓	✓										⊖	⊖	

All girls

We were able to calculate differences in literacy and numeracy scores over time for 14 projects for which we have at least endline and midline data. Out of these 14 projects, only one does not have a control group: ChildFund (Afghanistan). In literacy, only two of these 14 projects show a positive and statistically significant difference-in-difference (DiD)⁶⁸: Link (Ethiopia) and Red een Kind (South Sudan). In numeracy, five projects show a statistically significant DiD: HPA (Rwanda), Link (Ethiopia), BRAC (Tanzania), Varkey (Ghana) and TfAC (Malawi).

School phase

Lower and upper primary school girls are the most represented subgroups in project data. Most projects show at least a positive and significant before-after difference in learning for these two subgroups (✓). Link (Ethiopia), Red een Kind (South Sudan), ICL (Kenya), TfAC (Malawi) and Opportunity (Uganda) even show a positive and statistically significant DiD for learning. **Improvements in numeracy for girls in upper primary stand out** with four out of 12 projects showing a 5% DiD in numeracy.

Attendance has improved significantly for girls in upper primary for two out of four projects, and improved above the control groups for another two projects.

Age groups

Projects report learning scores across a range of age categories. Girls from 9 to 17 are covered by most of the 14 projects for which we have data. A majority of projects (nine projects) show a positive and significant increase in learning in treatment areas over time⁶⁹. Only a few projects show a 5% DiD in literacy: Link (Ethiopia), Mercy Corps (Nepal) and Camfed (Zambia). **Four projects show a 5% DiD in numeracy for the 12-13 age group**, which is higher than for literacy for the same age group.

Attendance data has improved significantly for girls aged 14-15 years old for two out of four projects, and improved above the control groups for another two projects for the same age group.

School groups

Four out of ten projects show a 5% DiD in numeracy for in-school girls, versus only one project (out of nine projects) in literacy. Impact on literacy and numeracy are broadly similar for other groups.

Concerning out-of-school girls, **only one project shows a positive and significant DiD in literacy** (TfAC (Malawi)), and **one other project demonstrates a positive and significant DiD in numeracy** (Red een Kind (South Sudan)). This does not mean that out-of-school girls did not, in some instances, improve more than in-school girls. It could be due to small samples that do not show statistical significance, even if the size of the difference is relatively large. This also points to the inability of projects' evaluation designs and data to demonstrate an effect on out-of-school girls.

Girls with disability

The evidence is mixed for girls with disabilities. Red een Kind (South Sudan) report a 5% DiD in literacy for girls with a disability, but there is no evidence available for girls without disability. Conversely, BRAC's (Tanzania) girls with no disability show a 5% DiD in numeracy, but evidence of improvement in numeracy for girls with a disability is inconclusive. As such, we can conclude that improvements took place for girls with a disability, but it is unclear to what extent these compare to improvements for girls with no disability.

Meeting basic needs

Table 17 presents different indicators related to poverty coming from two variables: ability to meet basic needs and difficulty to afford school. Generally, **projects for which data is available do not seem to have had a greater impact on the households least able to meet basic needs compared to their target communities, with only one exception.** Link (Ethiopia): girls in households who are unable to meet basic needs and girls in households who have difficulties to afford school both show a 5% DiD in literacy and numeracy. This can also point to the general level of deprivation in areas targeted by this project.

⁶⁸ Shown as '+' in Table 17

⁶⁹ Shown as '✓' in Table 17

Parental characteristics

Projects' surveys usually do not contain any specific questions on whether the girl is an orphan, but rather ask whether the girl lives with their parents. This can cover a variety of cases such as girls attending boarding school or girls whose parents have migrated to work abroad. It is therefore difficult to conclude on the impact of projects on such a heterogeneous population.

It is worth noting though that Camfed (Zambia) shows a 5% DiD for the attendance of girls who live without a mother. In addition, Red een Kind (South Sudan) shows significant, positive literacy results for girls whose primary caregiver cannot read and write in the language of instruction compared to other subgroups.

Key findings – What impact has the IW had on enabling marginalised girls to be in school and learn?

Achievement against both literacy and numeracy targets is low at endline across IW projects. Five projects (out of 16) have reached their literacy targets set at baseline, and two projects achieved their numeracy targets. In the cases of Red een Kind (South Sudan) and ChildFund (Afghanistan), the high, positive achievements should be interpreted with caution due to low variance in the sample when targets were set (Red een Kind) and the absence of a control group against which to compare findings (ChildFund).

Nine projects reported reading fluency in words per minute and provided data for baseline, midline and endline. Among these projects, **girls in treatment areas can read an additional two words per minute on average** compared to girls in control areas at endline.

Across the ten projects using EGMA and providing data for baseline, midline and endline, **treatment girls' scores are four percentage-points above control girls' scores** at endline (difference-in-difference).

A small increase has been observed in IW projects' attendance rates. This moderate improvement can be explained by the relatively high rates of attendance at baseline, as well as the difficulties in measuring attendance accurately. Attendance at endline stands above national averages for a majority of projects.

Subgroup analysis revealed that improvements in numeracy are mostly driven by improvements for girls in upper primary and girls aged 12 – 13. Only one of the IW projects is able to demonstrate a positive and significant DiD for out-of-school girls in literacy (TfAC (Malawi)), and one other project demonstrates a positive and significant DiD for out-of-school girls in numeracy (Red een Kind (South Sudan)). Similarly, projects for which data is available do not seem to have impacted more on the poorest among their target communities except for one project, Link (Ethiopia).

Lessons learned

- **Projects have had difficulties improving learning outcomes for girls during the lifetime of the programme.** Targets were set at baseline in a way that accounted for the specific learning distributions among target populations, and hence reflected the context in which each project intervenes. A change in standard deviation of 0.2 to 0.3 is a modest target in view of results achieved by other educational programmes, which suggests that IW projects should have been able to reach their targets. However, it is possible that since projects aimed to target *marginalised* girls, learning improvements for this specific population were more difficult to secure and take more than three years of support to materialise.
- It is also possible that **projects had not anticipated which barriers would be most crucial in preventing girls from improving their learning.** [Section 3.4](#) explores the extent to which project interventions contributed to delivering educational improvements in learning and attendance.
- **Data quality is of concern** for a large number of IW projects. Despite the provision of guidance aiming towards the standardisation of approaches and research tools, and support during the elaboration of projects' M&E framework and tools, various issues with the evidence presented at endline ([Section 2.3.2](#)) suggest that the findings across the IW may not reflect the full (positive or negative) picture and should be interpreted with caution.
- Other, non-GEC activities also reached IW target girls in both treatment and control groups. This means that **some of the improvement in education outcomes discussed in this report may be attributable to other activities**, either complementing or duplicating IW projects' activities. Inversely, contamination between treatment and control groups implies that **some IW impact may not be captured through projects' evaluations** ([Section 2.3.2](#)).
- Projects should have more systematically **tracked and reported the exogenous factors** that influenced their project design and delivery, as well as the wider effects of their interventions on local actors and communities, including those that affected their control groups. This would have helped them capture spillover effects and complementarity (including potential duplication) with other actors, to inform the ways they could adapt and strategically enhance the added value of their interventions.

3.4 What has worked, why and with what effects?

IW projects aimed to address a range of barriers to girls being in school and learning. In this section, we present projects' findings about the effectiveness of their interventions⁷⁰ on the barriers identified in their areas.

For a detailed presentation of the methodology, refer to [Section 2.2.1](#).

For summary tables for each intervention and each barrier, refer to [Annex D](#).

3.4.1 What effects has the IW had on barriers to girls' education and with what impact on learning and being in school?

In this section, we report on the following barriers and thematic areas, in order of their importance with regards to their impact on girls' education across the IW:

- Poverty;
- School-related factors;
- Girls' aspirations, confidence and decision-making (e.g. about early marriage); and
- Parental and community attitudes towards girls' education.

[Table 18](#) below presents the evidence related to the impact of interventions on attendance (A) and learning (L), and is discussed throughout this section following the above-mentioned thematic areas.

⁷⁰ We indicate the origin of the findings by referring to individual Project Endline Evaluation Reports and/ or Outcome Spreadsheets (for cases in which outcome data did not validate projects' claims). Where possible, we also triangulate projects' findings using the existing literature relating to intervention effectiveness for girls' education.

Table 18: Attendance (A) and learning (L) impact by intervention type at endline

Endline evidence by intervention	Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda				Kenya			Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal		Afgh
Economic interventions offsetting the cost of education																	
Income-generating activities	⊖	≡		⊖	⊖		⊖		⊖		⊖				⊖	⊖	
Loans and savings	⊖		⊖	≡												⊖	
In-kind support (school kits, menstrual supplies)	⊖	⊖		⊖	A*	A	A	A				≡	A		A*	A*	⊖
Teacher training and support																	
Skills/ pedagogy training		L		L	A*/L					⊖	⊖	≡	L*	L	⊖		L
Gender responsive pedagogy training		⊖		⊖			⊖	A/L*		⊖			≡	⊖	⊖		A/L
Inclusive classroom training				⊖	A*/L	A/L*				⊖			L*		⊖		A/L
Literacy and numeracy training										⊖			L*	L			L
Peer support and mentoring for teachers												≡		L			⊖
Infrastructure and resources for schooling																	
School and classroom building/ improvement		A	⊖		A*	A	A		A								⊖
WaSH facilities		A			A*			A	A								A*
Technology in classroom							⊖							L			
Learning materials				⊖	⊖						⊖	≡					
School management and governance interventions																	
Technology for school management		⊖					⊖	⊖						⊖			
Working with PTAs and other stakeholder groups		A		⊖	⊖	A/L*	⊖	A/L*	⊖			⊖		⊖	⊖	⊖	A
Working with education authorities		⊖		⊖		⊖				⊖							≡
Extra-curricular activity and non-formal education																	
Tutoring clubs (homework, reading/ literacy)		⊖		⊖	⊖			A/L*		⊖	⊖		L*	⊖	⊖	L	⊖
Mixed/ boys' clubs				⊖				⊖						⊖			
Mentoring (peer support, learner guides)	⊖	⊖					A		L*	⊖	⊖				A*		⊖
Life skills and health information		⊖	⊖	⊖		⊖	A	⊖		A	⊖		A	⊖	⊖	A*	
Vocational training		A		⊖											⊖	⊖	
Empowerment and self-esteem interventions																	
Safe spaces				⊖									A/L*				
Role models (older girls, female teachers, parents)			⊖					L*		A			L*	⊖	A*		A
Mentoring							A			A	⊖						
Activities that promote girls' voice and participation		⊖		⊖	⊖			A/L*			⊖		A/L*		⊖	A*/L	
Community-based interventions																	
Media (radio, TV, advertising)		⊖							⊖				A				
Community meetings/ gatherings		⊖			A*					A	⊖		A		A*	A*	
Parents' groups/ women's groups					⊖	A/L*	A	⊖							⊖		
Visits and support to households				A/L						A			A			A*	
Interventions with men and boys						⊖				A							
Working with faith groups and traditional leaders										A							A
Adult literacy																	⊖

Endline evidence by intervention	Eco	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda				Kenya			Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal	Afgh	
Marginalisation-related interventions																	
Interventions in remote or nomadic locations										⊖							A/L
Interventions addressing cultural/linguistic exclusion																⊖	⊖
Interventions addressing disability	⊖	⊖		A	A*	A/L*					⊖						
Interventions with other marginalised groups		⊖		⊖			A/L						A/L*				
Violence-related interventions																	
Community awareness around violence										⊖			≡		⊖		
Child protection policies development in schools		⊖						⊖				⊖	A				
Improvement of referral systems		⊖										⊖			⊖		
Interventions against corporal punishment		⊖		⊖						⊖				L			≡
Interventions against peer violence		⊖								⊖							
Interventions against child marriage and FGM		⊖		⊖						⊖					⊖		⊖
Interventions against abuse from adults in charge		⊖								⊖		⊖			⊖		⊖
Notes:																	
1 – A* indicates that the attendance target has been achieved at endline (only for projects with conclusive data using a control group). A indicates a positive impact without targets being fully reached.																	
2 – L* indicates that the learning targets (either literacy or numeracy, or both) have been achieved at endline (only for projects with conclusive data using a control group). L indicates a positive impact without targets being fully reached.																	
3 – Interventions with limited or no effect are marked with '≡'.																	
4 – Inconclusive or missing evidence is marked with '⊖'. A number of interventions are marked as inconclusive, mostly because of the limited evidence presented in projects' reports, but also due to a lack of explanation around pathways to attendance (A) and learning (L).																	
5 – Interventions not included in project designs are marked in grey.																	

Poverty remains a key barrier to girls' education

At endline, many girls benefitting from IW interventions continue to face challenges associated with poverty. Poverty is complex to address, especially for projects primarily implementing school-based interventions that are not always able to influence the pervasive and persistent effects of poverty at household and community levels. However, poverty is still affecting educational experiences. The inability to pay for transport to school, school fees, or girls contributing to housework, continue to keep girls away from regular schooling.

Across the window, we find that the cost of schooling and the significant housework commitments of girls in particular have an effect on girls' attendance and learning. Paying for school fees or ensuring girls have access to scholarships has helped reduce the cost of schooling. The provision of school kits and sanitary pads temporarily reduced the indirect costs of education and is positively linked to improved attendance for girls. There is also encouraging evidence that the effects of 'time poverty' and domestic responsibilities have improved as a result of raising parents' awareness about the benefits of a more equal distribution of tasks within the household.

However, although almost all IW projects aimed to tackle these issues, very few projects have been successful in addressing them. None of the projects aiming to offset the cost of education could demonstrate an impact on learning outcomes at endline as a result of this type of intervention.

Which barriers to education have improved since baseline? As a result of which intervention(s)?

All IW projects identified poverty and livelihood issues as key barriers to girls' education at baseline. This includes the affordability of school fees and learning materials (e.g. textbooks, uniforms), as well as livelihood arrangements that can make it difficult to attend school regularly and find time to study. This may be the case, for instance, where girls spend a significant share of their day doing household chores, caring for other family members, or working

outside the house. Overall, a large share of IW projects' budget (15 percent on average) was invested to address poverty.

At endline (Table 18 in Annex D), a limited number of projects reported a positive change in **household commitments of girls** (four projects), the **ability to fulfil basic needs** (three projects), the **cost of schooling** (two projects) and the lack of educational resources at home (one project). Four projects presented evidence that shows that poverty has worsened as a barrier to girls' education in their target areas. Across the window, we find that the *cost of schooling* and *significant housework commitments of girls* in particular have had an effect on girls' attendance and learning. Although almost all IW projects aimed to tackle these issues, very few projects have been successful in addressing them.

It is important to note that the GEC is an education programme rather than a livelihoods programme. As such, removing structural barriers⁷¹ and alleviating severe poverty would typically be beyond the mandate and capacity of locally focused education projects. However, we explored whether projects have been able to help families reallocate resources or bridge gaps in household resources through ways that enable them to send their girls to school and learn. We also assessed whether the burden of household chores and livelihood activities on girls has decreased since baseline, as a result of families prioritising education more.

Paying for school fees still remains a barrier to girls' education

Across IW countries, only Zambia officially requires students to pay tuition fees at primary school level. However, despite Free Secondary Education being written into the Tanzanian and Ugandan Constitutions, fees can still be requested from parents⁷². Similarly, in Malawi, parents are expected to contribute to school construction/renovation. In Kenya, parents are still expected to pay fees to the school. And at secondary school level, only Afghanistan, Kenya and Nepal officially have free tuition across IW countries.

At endline, we find that **projects paying for school fees or ensuring girls have access to scholarships have helped reduce the cost of schooling**. Only one project (ICL (Kenya)) directly paid for school fees, and only for out-of-school girls who re-enrolled. Three other projects managed to leverage support from other stakeholders: LCDK (Kenya) enrolled 350 households in a government cash transfer programme which provides financial resources to support disabled children, Mercy Corps (Nepal) ran a campaign to inform parents about access to scholarships through a government scheme, and VSO (Nepal) liaised with a partner working in the same area (Children for Tomorrow) implementing a scholarship programme based on academic merit and parents' socio-economic situations. LCDK (Kenya) is also working at sub-county level to support the passing of a bursary bill which will specifically support children with disabilities to access assistive devices and support them to go to school.

Despite these interventions, school fees still remain a major reason for girls dropping out of school or not enrolling at endline, as evidenced by Viva (Uganda), PEAS (Uganda), Red een Kind (South Sudan), ICL (Kenya) and BRAC (Tanzania). ICL (Kenya) reports cases where girls are being "*chased away for school fees*"⁷³:

"You know as parents we really struggle a lot. Like me I have a niece of mine in this school and she is often chased away for school fees and sincerely I have really tried to educate her but sometimes I feel the burden is too much. At time even affording food is difficult... so you ask yourself... will I educate the child or make sure she eats first. It's really hard."

Parent interview, Endline Evaluation Report, ICL (Kenya)

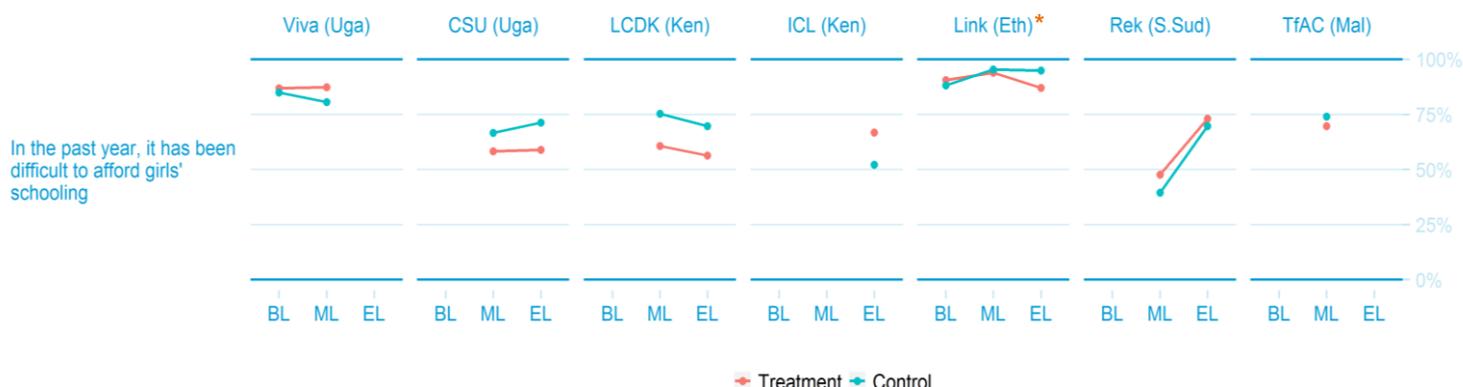
Evidence from the reanalysis of projects' household survey datasets (Figure 13) also suggests that caregivers' perceptions around the affordability of girls' schooling has remained largely unchanged compared to control groups since midline, except for Link (Ethiopia) where there is a significant improvement in the treatment group.

⁷¹ Refer to the mapping of barriers (proximal versus structural) in Annex D.

⁷² <http://www.worldpolicycenter.org/policies/is-education-tuition-free-and-compulsory/is-primary-education-tuition-free-and-compulsory> Also: Vavrus F. Moshi G. (2009) 'The Cost of a "Free" Primary Education in Tanzania', International Critical Childhood Policy Studies Journal , 2 (1): 31–42. Bold T. Kimenyi M. Mwabu G. Sandefur J. (2010) 'Does Abolishing Fees Reduce School Quality? Evidence from Kenya', CSAE Working Paper Series 2011–04.

⁷³ Refer to the EM thematic studies for similar findings: *Narrow Windows, Revolving Doors: What affects adolescent girls' ability to stay in school?* (2016) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/520249/Narrow-Windows-Revolving-Doors-What-affects-adolescent-girls_ability-to-stay-in-school-Research-Report-March-2016.pdf

Figure 13: Perceptions of caregivers about difficulties to afford girls' schooling in the past year (reanalysis from Project Datasets, seven projects)⁷⁴



The **high dependence of girls on scholarships** is also of concern. In the case of ICL (Kenya), there is no evidence that girls will continue to benefit from any kind of financial support, either from the project or from other institutions offering bursaries. Likewise, the increased intake of scholarships may not be sustained for Mercy Corps (Nepal) as school stakeholders and community members no longer receive information about how to access scholarships after the end of the GEC funding.

PEAS' (Uganda) schools, which set their own fees against market benchmarks, also intended to lower the cost of schooling for girls through advocacy to the Ugandan Ministry of Education and Sports (MoES) for a reformed Public Private Partnership (PPP). The project expected to secure additional funding from the government to reduce their fees "to near zero". However, despite on-going discussions with the MoES since 2013, the partnership has not been secured during the lifetime of the project and school fees even increased as a result of inflation in 2015 and 2016, resulting in parents and students identifying increased school fees as the main reason not to attend school.

The provision of school kits and sanitary pads temporarily reduced the indirect costs of education

Beyond school fees, there are a variety of expenses that must be met – for example school uniforms, textbooks, stationery, but also contributions to the school development fund (e.g. for classroom construction) and payment of costs associated with school projects and extracurricular activities. These costs usually come in addition to 'formal' school fees.

Activities providing in-kind support are meant to enable parents and girls to cover these indirect costs of education. For instance, Viva (Uganda) provided a School Start Up pack to out-of-school girls, including stationery, writing pads, a uniform and a bag. At midline, 35 percent of girls receiving a pack stated that that they would not be able to afford those schooling items, citing the School Start Up pack as a reason for returning to school. At endline, girls who were asked to list the most important support received from the project listed providing "school materials" and "Start Up packs". TfAC (Malawi) distributed back-to-school packs to out-of-school girls, consisting of a uniform, exercise books, pens, pencils and a bag, which similarly incentivised girls to enroll or re-enroll in school⁷⁵. VSO (Nepal) also provided stationery and uniforms after the April 2015 earthquake, which prevented drop-out due to a lack of household resources.

While providing an incentive for out-of-school girls to return to school and supporting parents during hardship periods, the distribution of school kits may not have a durable effect on girls' ability to stay in school and afford costs associated with going to school in the future. Mercy Corps (Nepal), for instance, explains the decision to provide re-entrance packages as particularly relevant for girls from economically marginalised families who drop out due to indirect costs, but also acknowledges that this is not a sustainable solution, while "recognising the large impacts this extra year can have on [especially vulnerable girls] life chances".

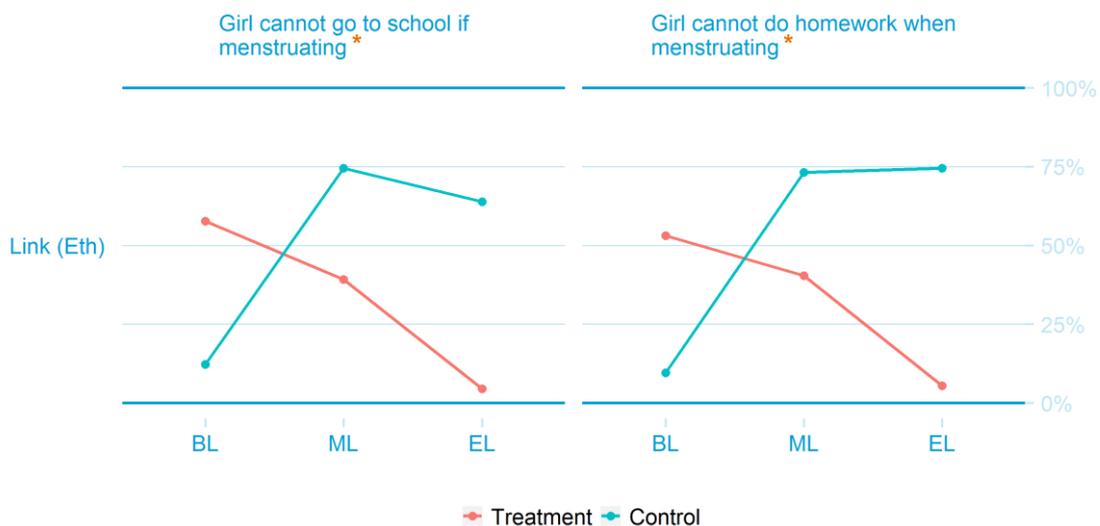
In contrast, among items provided as part of projects' in-kind support, **sanitary pads had the greatest impact on reducing the cost of schooling and improving attendance**. After puberty, providing sanitary products enables

⁷⁴ On Figure 13 to Figure 17, we present our reanalysis from the projects' datasets. An asterisk "*" indicates the variables for which the difference in difference from midline to endline is statistically significant.

⁷⁵ Some in-school girls reported to have un-enrolled for a brief period of time in order to obtain a back-to-school pack.

girls to address yet another cost of schooling. At endline, Link (Ethiopia) reported that 91 percent of senior school girls could attend school during menstruation, versus only 24 percent in the control group. Reanalysis of Link’s (Ethiopia) project data also showed that almost all beneficiaries’ caregivers by endline reported positive attitudes towards girls attending school and doing their homework during menstruation with a positive impact over the control group from midline to endline (Figure 14). Finally, LCDK (Kenya), ICL (Kenya), TfAC (Malawi) and Link (Ethiopia) all presented evidence that the provision of sanitary pads improved attendance.

Figure 14: Perceptions of caregivers around menstruation and girls’ schooling (reanalysis from Project Datasets, one project)



Girls and teachers also mentioned the reduced stigma and teasing that girls had been experiencing at school due to not being able to ‘manage’ menstruation. Additionally, the provision of sanitary products (and other school-going items) appear in some cases to have stopped girls from engaging in petty trade to buy basic necessities such as soap, pants and sanitary pads.

Nevertheless, there are limitations to the in-kind support projects can provide. In-kind support is usually thought of as short-term financial relief for girls and their parents. But projects’ evidence showed that the support created **expectations around continuing provision**. PEAS (Uganda) concluded that the distribution of menstrual kits was not financially sustainable after midline. As a result, the project identified local providers of affordable sanitary pads to supply the school shops and shifted the focus of their interventions at midline to delivering education about how to manage periods in schools. Similarly, ICL (Kenya) noted that schools are putting in place mechanisms to source and distribute their own supply of sanitary pads, which may sustain the benefits realised during the lifetime of the project.

Similar to in-kind support, one project, Mercy Corps (Nepal), facilitated access to solar lamps in its target communities to allow girls to study at night. At endline, most girls (98 percent) reported that their interest in studying had increased since purchasing a solar lamp, and that their parents, from observing them doing their homework at night, are being more supportive of their education. Qualitative evidence also showed that solar lamps helped families reduce their energy expenses on items such as kerosene or candles, therefore increasing the household’s disposable income. While these findings are encouraging, it is difficult to draw conclusions about the effectiveness of improving access to solar lamps more generally as only one project across the IW implemented this activity.

Finally, Varkey (Ghana) realised shortly after baseline that distributing school snacks was necessary to enable girls to concentrate during after-school sessions. However, the project did not find that this had a strong impact on school club attendance among girls. Furthermore, boys in those schools have complained and shown resentment because they felt left out, illustrating the limitations to the provision of in-kind support. As explained by the project:

“These [school snacks] are not fundamentally changing the levels of poverty experienced by [...] students in the deprived districts in which the project operates. As a result [of] well-known economic imperatives for subsistence [...], many parents continue to need their daughters (and

sons) to sell on market days or help with farming or household chores, and as a consequence skip school [and after-school sessions].”

Midline Evaluation Report, Varkey (Ghana)

There is encouraging evidence that ‘time poverty’ and domestic responsibilities have improved at endline

More than half of the IW projects aimed to tackle issues around girls’ housework commitments. Examples of household work include taking care of siblings, cooking, cleaning, fetching water and taking care of ill family members. At endline, four projects presented evidence of **a reduction in domestic responsibilities and a more equal distribution of tasks within the household.**

At midline, TfAC’s (Malawi) research showed that girls who have difficulties completing their homework due to household chores performed worse on both EGRA and EGMA tests. At endline, after community sensitisation activities, parents reported that *“these days we are sending the girl to school but in the past we would not allow the child to go to school before cleaning plates”* and that *“[we] allow the children to go to the girls’ club even if there are some household chores to do”*. Qualitative evidence showed that TfAC’s (Malawi) listening clubs raised parents’ awareness around the distribution of housework:

“Now we share the household chores equally to both girls and boys or we the parents do it.”

Focus group discussion with parents, Endline Evaluation Report, TfAC (Malawi)

Link (Ethiopia) reported that girls’ club mentors talked to parents about household chores. More specifically, mothers were invited to the school to discuss their daughter’s performance and encouraged to reduce their domestic chores. At endline, 23 percent of parents reported *very much* decreasing household chores and 71 percent reported *somewhat* decreasing household chores. However, 69 percent of parents reported household chores still affected girls’ attendance and learning, indicating that with no alternatives other than relying on girls, changes in this area are a difficult process.

VSO (Nepal) highlighted at endline that the increase in study hours was a result of a change in parental attitudes brought about by community dialogues and home visits. Qualitative findings showed that mothers reported an increased workload at home while they encouraged girls to devote more time to their homework. Household visits and street dramas were quoted as the main factors influencing this change.

Similarly, Mercy Corps (Nepal) introduced a training with parents focused on gendered roles and responsibilities in households. This occurred after midline, as girls in the project areas had reported a gendered awareness of the division of domestic work in their families, and pointed to their brothers being treated differently:

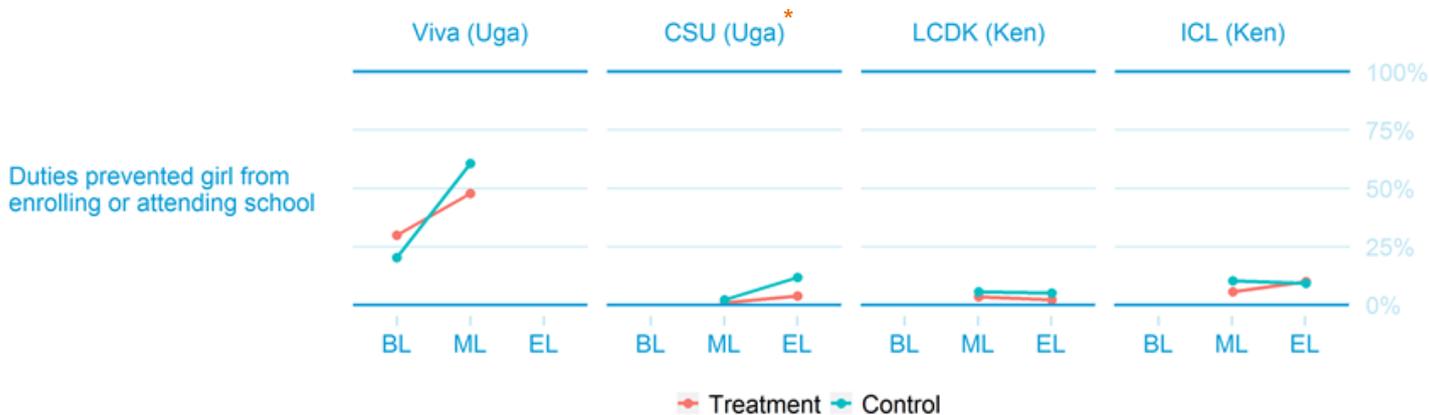
“We aren’t as lucky as our brothers. They can just wake up late and leave for school. We have to do a lot before we get ready for school. We turn up late sometimes because of this.”

Focus group discussion with girls, Midline Evaluation Report, Mercy Corps (Nepal)

Using a *time poverty and roles and responsibilities matrix*, the training aimed to demonstrate that chores were not equally distributed among family members, and that with a more equal distribution, family members could save time at the household level and increase girls’ study time. While the number of girls citing household chores as a reason for not attending school decreased from midline to endline, it still stands out as the main reason for girls being away from school.

Additionally, the reanalysis of projects’ household survey data ([Figure 15](#)) illustrated that for CSU (Uganda), the perceptions of caregivers around duties preventing girls from enrolling or attending school had significantly improved compared to the control groups, as girls grew older from midline to endline.

Figure 15: Perceptions of caregivers around duties preventing girls from enrolling or attending school (reanalysis from Project Datasets, four projects)



Increasing income through loans, savings and income-generating activities had mixed effects on girls’ education

In contrast with in-kind support, interventions such as promoting income-generating activities with parents and caregivers can increase household income and eventually lead parents to invest in girls’ education (school fees and other costs). While income generation may take time to achieve tangible benefits for girls’ education (such as increased enrolment or attendance), we explore whether projects have presented evidence of contributing to an increase in income level, and if so, whether increased incomes, savings or access to loans lead to an increase in spending on girls’ education, in particular through the affordability of school fees.

Different approaches have been taken by projects:

- Some projects (ICL (Kenya), Eco Fuel (Uganda), and BRAC (Tanzania)) have **worked with parents and members of the community** to initiate economic empowerment projects. They have created partnerships with banks, provided livelihood training to parents and helped them set up small-scale businesses such as Eco Fuel’s (Uganda) briquette reseller system. BRAC (Tanzania) is linking girls’ mothers to existing microfinance/ agricultural programmes.
- Other projects have chosen to **involve girls in income-generating activities**, such as HPA (Rwanda) or Viva (Uganda). Viva’s (Uganda) girls have been taught entrepreneurial skills in addition to the mainstream curriculum, and are actively engaged in raising the funds they need to get back to school and stay in school. HPA (Rwanda) established Mother-Daughter Clubs to increase households’ capacity to generate income and foster positive mother-daughter relationships, especially for out-of-school girls.
- HPA (Rwanda) has also incorporated income-generating activities **within the school**, in order to cover school costs for marginalised girls and invest in school-related activities and school infrastructure. School businesses are expected to continue growing after the project ends, with profits made available to improve girls’ education through school action plans.
- Opportunity (Uganda) provides **tuition loans to parents**, savings accounts to girls and education-related insurance.

Endline evidence from project evaluation reports shows that **none of the ten projects implementing income-generating interventions or facilitating access to loans and savings had conclusive effects on girls’ learning**. While household income sometimes increased as a result of projects’ interventions, this type of economic intervention, as opposed to the direct provision of school material or access to scholarships, did not always lead to an increase in spending on girls’ education. For instance, Opportunity (Uganda) reported at endline that the main reason for dropping out continued to be school fees despite parents accessing loans in order to pay for school fees.

Opportunity (Uganda) targeted low to medium cost private schools, which typically collect fees on a daily, weekly or monthly basis. School fees are therefore a major cause of irregular attendance. The project provided tuition loans to self-employed parents who sometimes engage in seasonal work to facilitate school fees being paid on time. As a

result of focusing on the self-employed⁷⁶, the project managed to target the parents most likely to benefit from such loans⁷⁷:

“Given the fairly erratic cash flow [...] for the self-employed care givers, their cash flow patterns do not match school fees payment structure during the year, making access to school fees loans very important.”

Midline Evaluation Report, Opportunity (Uganda)

The flexibility of the school fee loans enabled parents to pay school fees as well as buy books and pens. The project also reported that tuition loans are helping parents transfer girls from government funded schools to low cost private schools, where the quality of education is deemed higher. However, the project did not meet its attendance or learning targets at endline, which makes it difficult to conclude that the model has been successful. Loan repayments, according to Opportunity (Uganda), have been met when due, although it has been reported that some parents decided to relocate after failing to repay their loans.

The most convincing model at endline remains ICL (Kenya). The project noted that parents in Mombasa experienced an increase in their incomes by selling clothes, running small shops and engaging in the charcoal business. However, while the evidence suggests that **parents had fewer difficulties paying school fees at endline compared to baseline**, there is no clear causal link established with the increase in available income. Community dialogues about the importance of paying school fees on time were reported by parents as the main reason for more regular payments.

Similarly, BRAC (Tanzania) interestingly noted at midline that fathers are generally more engaged in economic activities than mothers, but that they are less likely to “*pay attention to the education of children*”. Consequently, increased incomes may not automatically translate into increased spending on education, which remains highly dependent on household choices (and constraints) and parents’ attitudes towards education.

Income-generating activities involving girls also had mixed effects on their education. Almost all PEAS’ (Uganda) girls being taught entrepreneurial skills (such as agriculture and business skills) at school mentioned that participating in such trainings motivated their attendance. HPA (Rwanda) also observed an increased engagement in girls’ schooling from parents, who pointed out the relevance of what girls learn at school:

“School is a place which can open other doors for my daughter. She now learns skills which will allow her to make money when she finishes her studies.”

Parent interview, Endline Evaluation Report, HPA (Rwanda)

However, teaching girls entrepreneurial skills and engaging them in raising the funds they need to get back to school and stay in school (Viva (Uganda)) can also be a mixed blessing: girls mention that skills learned through businesses could help them have useful careers after they graduate, but such involvement in income-generating activities while being of school-age can also **divert girls’ attention from learning core skills such as literacy and numeracy, and potentially lead them to drop out of school**. BRAC (Tanzania), for instance, noted at midline that students involved with livelihood activities have difficulties attending day-long learning sessions in BRAC’s study clubs, which experienced a high dropout rate of ‘working’ students.

Have changes in barriers led to an improvement in educational outcomes (attendance and learning)?

Tackling poverty was identified as a key constraint to girls achieving education outcomes and has been at the centre of the design of most IW projects, with 15 out of 17 projects implementing economic interventions aiming to offset the cost of education.

At endline, we found that:

- Paying for school fees or ensuring girls have access to scholarships helped reduce the cost of schooling.

⁷⁶ The majority (73 percent) are self-employed, either in agriculture or non-agricultural retail and services. A further 13 percent are engaged in the informal economy.

⁷⁷ Opportunity (Uganda) determines the size of loans to parents through an assessment of the household’s capacity to repay, therefore excluding the poorest households but ensuring that: (1) the intervention targets the beneficiaries it has been designed to help (i.e. a group of self-employed parents in a specific financial situation); and (2) the beneficiaries are receiving the type of support they need (i.e. loans they can repay).

- The provision of school kits and sanitary pads temporarily reduced the indirect costs of education.
- There is encouraging evidence that ‘time poverty’ and domestic responsibilities have improved as a result of raising parents’ awareness about the benefits of a more equal distribution of tasks within the household.
- Increasing income through loans, savings and income-generating activities did not directly improve girls’ access education and learning.
- There is strong evidence that **addressing the cost of schooling through in-kind support is linked to improved attendance for girls.**
- **None of the projects aiming to offset the cost of education could demonstrate an impact on learning outcomes.**

School-related barriers have improved since baseline

At endline, we found that the quality of teaching improved as a result of projects’ interventions. Improved teaching practices led to learning improvements as girls benefited from a classroom environment that proved more conducive to learning. Regular teacher training involving on-the-job feedback and a focus on engaging in constructive interactions with students had a positive impact on learning. Projects’ evidence showed that continued training and support is crucial to maintaining teaching quality.

School facilities also improved since baseline. The provision and/ or rehabilitation of school infrastructure increased school accessibility and girls’ attendance. However, long distances and the fear of insecurity on the way to school remain key barriers to attendance at endline, despite projects’ attempts to address such issues.

Schools working with parents improved their engagement with education and also increased girls’ attendance. As teachers actively followed up on girls’ performance, parents received advice and counselling with regards to education and discussed the reasons behind girls not attending school regularly.

Overall, there is strong and positive evidence that interventions at the school level improved attendance and learning across the window.

Which barriers to education have improved since baseline? As a result of which intervention(s)?

Different issues have been reported across IW projects since baseline:

- All projects mentioned issues with the **quality of schooling** as a key barrier to girls’ education. Such issues included poor teaching practice and pedagogy, frequent teacher absence, lack of qualified teachers and inappropriate curriculum.
- Projects also found that a **lack of adequately equipped classrooms** hampers learning in school. Classrooms may lack solid floors or roofs to protect children from the weather, access to electricity and water, sufficient desks or seating. Toilets may not be lockable, or there may only be common toilets for boys and girls.
- Finally, a few projects explicitly stated in their theories of change that **poor school governance** was a barrier to girls’ education. This included a lack of planning and accountability, as well as poor structures for joint decision making between teachers, parents, and other community stakeholders through parent-teacher or school management committees.

Overall, a large share of IW projects’ budgets (16 percent on average) was invested to address the constraints school staff and teachers face in their efforts to improve the classroom environment. In addition, 13 percent on average was spent on improving school management and governance, and another 12 percent on school infrastructure and resources.

The school-related barriers most frequently addressed by projects were inadequate school facilities, long distance to school and teachers’ inadequate pedagogy. In terms of achieving positive change, projects’ endline research shows that **teachers’ pedagogy has improved** (nine projects), **as well as school facilities** (seven projects). Only two projects have reduced or improved girls’ travel to school ([Table 19](#) in [Annex D](#)).

Teaching teachers ‘how to teach’ and teacher trainings in literacy and numeracy improved girls’ learning

At endline, projects’ evidence shows that teacher training and support interventions have been associated with positive changes in the classroom environment. This finding emerges from different types of intervention: providing skills training to teachers (literacy and numeracy), making classrooms more inclusive or improving teachers’ pedagogical skills. Most projects present evidence that these interventions **improved girls’ learning outcomes** (Table 18).

Teaching practices

For those projects which have demonstrated an impact on learning, improved teaching practices have been mentioned as a key contributing factor.

Varkey’s (Ghana) qualitative evidence highlighted the importance of improved teaching quality and student-centred approaches. Both teachers and facilitators applied new communication and classroom management techniques, reinforcing teachers’ attention to student’s understanding and participation in the classroom (Box 4).

Viva (Uganda) also reported that the highest performing girls in the Creative Learning Centres were those taught by teachers who had received more training, had more experience and longer service in the same location than other teachers. Creative teaching methods in particular were reported by Viva’s (Uganda) teachers as having changed their teaching style (more group work, clearer lesson plans, alternative disciplinary measures) and contributed to improved relationships with students, positive discipline changes and more engaged students helping each other learn in the classroom. TfAC (Malawi) also highlighted the importance of facilitation skills as well as the use of participatory and interactive methods. ChildFund (Afghanistan) reported a substantial improvement in teaching competencies at endline, with most teachers now using lesson plans, checking students’ understanding and promoting student participation.

Varkey (Ghana) and PEAS (Uganda) demonstrated that **continued, on-the-job teacher training is successful in changing teaching styles**. By giving facilitators regular exposure to experienced teachers during MGCubed distance lessons, Varkey’s (Ghana) model effectively trained facilitators in best teaching practices. PEAS’ (Uganda) school-based Continuing Professional Development model focused on training teachers ‘on the job’ rather than via workshops⁷⁸, which improved teaching practices:

“[...] it enables teachers to practice making changes on the job, and allows for immediate feedback in a ‘real-world’ setting, both of which help teachers to learn quicker and embed sustained changes into their teaching practice.”

Midline Evaluation Report, PEAS (Uganda)

Both PEAS (Uganda) and Varkey (Ghana) included classroom observations and feedback mechanisms to monitor and improve the benefits of teacher training, which suggests that initial training and on-going mentoring are crucial in changing teaching habits.

Inclusive techniques (gender and disability)

Some projects combined pedagogical training with a gender approach or a focus on disability, in order to improve teachers’ responsiveness to specific needs. However, whether these resulted in more equal treatment for girls and boys and a more inclusive classroom environment is not always clear.

Evidence of the effectiveness of gender trainings is largely inconclusive. ChildFund’s (Afghanistan) teachers were observed giving equal opportunities to boys and girls while participating in classroom activities. However, VSO (Nepal) noted at endline that teachers’ understanding of gender-friendly teaching remained questionable.

Evidence of the effectiveness of inclusive education training that addressed disability is generally more positive. CSU (Uganda) and LCDK (Kenya) both trained teachers with the specific aim of making teachers more responsive to the needs of disabled girls. At endline, teachers were found to be more supportive of teaching girls with disabilities, declaring that they had the skills to support inclusive teaching. Girls with disabilities also reported “*feeling more included in the classroom, recognising teachers’ efforts to allow them to participate*” (Endline

⁷⁸ In particular, PEAS’ (Uganda) in-service training has included filming teachers in the classroom and enabling them to self-assess their performance as well as receive peer feedback.

Evaluation Report, CSU (Uganda)). Individualised learning plans for girls with disabilities were well-received by parents, according to LCDK's (Kenya) qualitative research.

Teachers' literacy and numeracy skills

Teachers' limited subject knowledge was found to hinder girls' learning at various points during implementation. After identifying a lack of teaching focus on numeracy at midline, PEAS (Uganda) devised a 'booster strategy' to embed numeracy practice into teaching, which also included targeted support to maths teachers. At endline, the project reported an improvement in numeracy scores, which contrasted with the limited progress observed between baseline and midline.

Similarly, ChildFund (Afghanistan) noted at endline that numeracy scores tended to improve rapidly at first, but then plateaued once students transitioned to learning subtractions and eventually divisions. According to the project, these findings suggest a weakness in the numeracy curriculum and/ or teachers' limited capacity to teach more advanced numeracy concepts.

In summary, improved learning can be attributed to a variety of trainings and support provided to teachers. At endline, we find that **teachers' capacity to teach basic skills such as literacy and numeracy and their ability to engage in constructive interactions with students are crucial to improving learning.** This is supported by findings from DFID's literature review '*Interventions to enhance girls' education and gender equality*' (2014)⁷⁹.

Finally, the sustainability of benefits achieved for teachers and girls could be threatened by the high rate of teacher transfers (to government or private schools). While the transfer of trained teachers may have positive effects in other schools and for other girls, projects have shown that continued training and support is crucial to maintaining teaching quality. Sustained teaching quality may therefore rely on the capacity of IW projects to advocate for the integration of enhanced pedagogy into mainstream teacher training at the national level. As put by Viva (Uganda), "*the main concern expressed about this work is the relatively small scale of the interventions compared with the extent of need*" (Endline Evaluation Report).

Box 4: Technology in the classroom and computer-assisted learning

Varkey's (Ghana) main intervention is around setting up distance learning in schools ('MGCubed lessons'), during which children are taught English and mathematics for two hours per day, five days a week, by a remote 'master' teacher. The distance learning model is supported by digital content and a student-centred pedagogical design, with the aim of addressing the barriers students typically face in Ghanaian classrooms: teacher absenteeism and insufficient time-on-task.

According to Varkey (Ghana), girls revealed that they enjoy the practical aspects of the MGCubed lessons and the teachers' ways of explaining difficult concepts. In addition, Varkey (Ghana) distributed workbooks to students and teaching and learning materials to teachers, endowing intervention schools and students with further resources. The endline evaluation team members noted:

"The programme delivery was visually appealing, and the online teachers were clearly engaging (...). Students were doing group work, and also working independently, but guided by the facilitator."

Endline Evaluation report, Varkey (Ghana)

At endline, Varkey's (Ghana) distance learning model has proven successful in terms of reaching its objectives around the increased volume of instructional hours, as well as enhanced teaching quality, addressing the issue, among others, of teacher absenteeism. Furthermore, the project has had positive spillover effects on teachers' pedagogy and teaching style, as a result of being exposed to quality teaching during distance learning sessions: MGCubed teachers in their normal non-MGCubed lessons were observed using good practice methods such as student-centred activities, assessment for learning, group work and peer learning.

Classroom observations at endline emphasised the role of the facilitators in the classroom. For about 45 percent of the time, the remote 'master' teacher is not actively teaching, as the facilitators engage in classroom management but also demonstration, lecture, discussion or verbal instructions to the students. As such, **introducing technology in the classroom appears to have primarily benefited facilitators:** being introduced

⁷⁹ Unterhalter E, North A, Arnot M, Lloyd C, Moletsane L, Murphy-Graham E, Parkes J, Saito M (2014) Interventions to enhance girls' education and gender equality. Education Rigorous Literature Review. Department for International Development.

to a specific curriculum, new learning materials and repeated exposure to a ‘master’ teacher’s techniques improved teachers’ own ability to teach – to a similar standard to what may have been achieved by long term, on-the-job teacher training.

Impact on learning outcomes

While teaching quality improved, the project has had **mixed results on girls’ learning**. From baseline to midline, a significant effect could be observed on numeracy scores (over and above the control group) but the project did not achieve its numeracy targets at endline. From midline to endline, after having had no positive impact on reading fluency from baseline to midline, Varkey’s (Ghana) endline findings suggest that a significant effect can be observed on reading fluency.

Limitations

Varkey (Ghana) mentioned that at the beginning of the project, school technology equipment came under repeated attack from thieves, resulting in the schools having to provide 24/7 security. Security issues have made it difficult to implement the self-study component of the project, as school facilitators do not find it safe for students to stay in the classroom after dark, for fear of possible robbers’ attacks. Electricity outages and transmission interruptions were also reported to have interrupted MGCubed lessons.

Provision and/ or rehabilitation of school facilities have increased school accessibility and girls’ attendance

At endline, **projects’ evidence around building or improving sanitation facilities and water points is generally very positive**. Girls describe how the provision of separate sanitation facilities within schools increased their confidence and sense of safety as well as their privacy (HPA (Rwanda), PEAS (Uganda), LCSU (Uganda), Link (Ethiopia), Opportunity (Uganda) and Mercy Corps (Nepal)). Clear linkages were made between these activities and improvements in girls’ attendance, particularly from PEAS (Uganda), CSU (Uganda) and Link (Ethiopia).

Other types of school infrastructure improvements have been reported to improve perceptions around the school environment. For instance, parents in the PEAS’ (Uganda) project areas now identify the school environment as safe as a result of the project installing school fences and improving lighting in dormitories. CSU (Uganda) and LCDK (Kenya) both mentioned that the construction of ramps, paved walkways and supportive rails to the sanitation facilities, but also the establishment of resource centres where disabled girls can use learning materials adapted to their needs, have improved the attendance and retention of disabled students.

However, limitations to the provision and/ or rehabilitation of facilities have been reported. For instance, sanitation facilities did not always have water and had been poorly kept, so that girls were unable to use them. Maintenance of newly built or renovated facilities, in particular WaSH facilities, is crucial to ensure that benefits for girls are being sustained. **It is not always clear how these will be maintained** after the end of project funding.

Furthermore, it was reported that some of the improvements were **unfairly benefiting girls compared to boys**. For example, the provision of lighting in girls’ dormitories was seen as equipping girls to academically outperform boys (PEAS (Uganda)). This has led the project to directing resources from other donors towards “*filling the gaps in provision for boys*”, including the construction of additional dormitory facilities and sanitary blocks for boys.

Long distance to school remains a barrier to girls’ education at endline

At endline, only two out of 13 projects aiming to improve safety on the way to school or reduce journey time provided evidence of a positive change. We find that transport to get girls to school is linked with improved school attendance (CSU (Uganda)), and ChildFund (Afghanistan) also enabled girls to enrol and attend school regularly through mobile school tents and nomadic teachers.

However, the inability to afford transport to school and poor access to roads in remote areas during the rainy seasons are still major challenges for most girls at endline (Varkey (Ghana), BRAC (Tanzania), LCDK (Kenya), Viva (Uganda), PEAS (Uganda) and Opportunity (Uganda)), highlighting that structural barriers such as infrastructure are often beyond projects’ direct control. It is highly **unlikely that projects delivered results at scale in this area**, unless improvements made to schools and transportation systems are taken up by the education system and extended more widely.

Schools working with parents improved their engagement with education and increased girls' attendance

Projects' evidence at endline showed that interventions relating to school management and governance have been mostly inconclusive in terms of their impact on girls' attendance and learning. However, four projects presented evidence of improved educational outcomes as a result of **working with parent-teacher associations (PTAs) and other stakeholder groups** (Table 18).

At endline, Link (Ethiopia) found that parents felt more included in school planning and decision-making processes as a result of PTA facilitation. According to a parent benefiting from the intervention:

“As a parent, I and other parents had never received a call from school to discuss our daughters' grades or matters in relation to them apart from some instances in which they were required to bring a parent to school to confer matters of default on their part. These days, we are given a chance to extensively discuss with the school. This is the change that I have not experienced in my entire life time.”

Parent interview, Endline Evaluation Report, Link (Ethiopia)

As teachers actively followed up on girls' performance with parents, they received advice and counselling with regards to education and also discussed the reasons behind girls not regularly attending school. Such counselling from teachers and school staff was valued as one of the most important interventions of Link (Ethiopia) by parents in the treatment communities. Similarly, PEAS (Uganda) encouraged PTAs to contact parents to discuss cases of absenteeism. At endline, the project found that 96 percent of the girls whose parents were contacted by the school about their daughter's absenteeism now attend school more than 80 percent of the time. This type of counselling also included advising around cases of pregnancy and led to the re-enrolment of girls after giving birth.

While other types of school management and governance interventions (e.g. working with education authorities or technology for school management) have been inconclusive to date, it is important to note that inconclusive evidence does not imply that the interventions have been ineffective or unsuccessful. As a more diffuse type of intervention, it is likely that the effects of school management and governance activities have been more difficult to evidence by projects, whose focus is primarily on conducting household surveys and following a cohort of girls.

Have changes in barriers led to an improvement in educational outcomes (attendance and learning)?

Identified as a key constraint, school-related factors have been at the centre of the design of most IW projects, with 16 out of 17 projects engaging in school infrastructure improvement, teacher training and/ or school management interventions. **Half of these projects (8 out of 16) had a positive impact on girls' learning** (Table 18).

Intervention packages such as PEAS' (Uganda), Viva's (Uganda), Link's (Ethiopia), TfAC's (Malawi), LCDK's (Kenya) and Varkey's (Ghana) are among the most effective models in terms of addressing school-related barriers and having an impact on learning. Those intervention models have all sought to address multiple constraints to learning – including the low level of training among teachers, the lack of structured curricula/ learning content and the lack of adequate facilities.

At endline, we found that:

- Teaching teachers 'how to teach' improved girls' learning. Facilitation skills, the use of participatory methods and checking students' understanding are common features of successful teaching improvement models.
- Continued, on-the-job teacher training is successful in changing teaching styles.
- Teachers' limited subject knowledge was also found to hinder girls' learning at various points during implementation. Teacher trainings in literacy and numeracy have proven crucial to improving teaching quality and eventually girls' learning.
- Schools working with parents improved their engagement with education and increased girls' attendance.
- Provision and/ or rehabilitation of school facilities have increased school accessibility and girls' attendance.
- There is strong evidence that **addressing barriers to girls' education at the school level is linked to improved attendance and learning for girls.**

This is in line with findings recently posted by the Abdul Latif Jameel Poverty Action Lab (J-PAL)⁸⁰ which conducted a cost-effectiveness analysis of randomised evaluations of 29 programmes to find out about the impact of strategies to improve student learning. J-PAL found that teaching children according to their learning needs was the most consistently effective strategy at improving learning, in addition to being cost-effective.

Girls' aspirations and confidence improved since baseline, with some effect on learning

At endline, we found that girls' self-confidence and aspirations had improved since baseline. Despite these positive changes, the evidence is mixed as to whether extra-curricular activities, non-formal education and self-esteem interventions effectively improved girls' attendance or learning.

Support from mentors, female community members and other (older) girls have improved girls' aspirations and self-confidence. Similarly, tutorial classes helped girls increase their performance and confidence in their ability to learn. However, the evidence is drawn from only four out of 14 projects addressing girls' low aspirations and lack of decision-making ability. This is encouraging but limited evidence that addressing girls' low aspirations and lack of confidence is linked to improved learning.

Early marriage is still widely cited as a reason for drop out, and early pregnancies remain a key barrier to education for girls after puberty. At endline, we conclude that enhancing girls' aspirations or addressing early marriage can be a long and complex process.

Which barriers to education have improved since baseline? As a result of which intervention(s)?

A large share of IW projects (14 out of 17) assumed in their theories of change that girls' low aspirations and lack of decision-making ability affect girls' education. This includes early marriage and the inability to make decisions relating to pregnancy.

Projects have addressed girls' low aspirations and lack of decision-making ability through two types of interventions: first, through extra-curricular activities and non-formal education and second, through interventions designed to improve empowerment and self-esteem. Extra-curricular activities and life skills clubs – whether open to girls only, or also to boys – are commonly established as a way of helping students to develop non-schooling skills, greater aspirations and commitment to study. They can also build self-confidence and communication skills, which enables girls to participate more fully in class. A large share of IW projects' budget (16 percent on average) was invested in extra-curricular activity and non-formal education (13 percent) and empowerment and self-esteem interventions (3 percent).

At endline (Table 20 in Annex D), projects reported a **positive change in girls' self-confidence** (five projects) and **the influence of role models** (four projects). Only three out of 12 projects addressing early marriage reported a positive change in this area. Notably, TfAC (Malawi) provides evidence of positive change for all sub-barriers in relation to girls' aspirations and decision-making.

Despite positive changes in self-confidence and aspirations, **the evidence is mixed** as to whether extra-curricular activities, non-formal education and empowerment/ self-esteem interventions have effectively improved girls' attendance or learning (Table 18). Only four out of 14 projects addressing girls' low aspirations and lack of decision-making ability had a positive impact on learning. We highlight the pathways to learning of interventions from these four projects below.

Tutoring clubs and mentoring from female role models increased girls' self-confidence and improved learning

Evidence from projects' endline research suggests that girls' learning improved as a result of higher self-confidence for Link (Ethiopia), TfAC (Malawi), HPA (Rwanda) and Mercy Corps (Nepal). Higher self-confidence also increased attendance for some projects, in particular VSO (Nepal).

Role models and mentors

Link (Ethiopia) and TfAC (Malawi) presented evidence of girls' increased self-confidence at endline. Both worked with role models, either female teachers or parents. Girls from Link (Ethiopia) reported increased confidence that education can help them in the future, after having met with female parents from the community. Girls also cited

⁸⁰ <https://www.povertyactionlab.org/policy-lessons/education/increasing-test-score-performance> Accessed in September 2017.

female teachers as “*a reason for better learning*” (Endline Evaluation Report, Link (Ethiopia)). Similarly, TfAC (Malawi) worked with Agents of Change (female teachers/ facilitators) who organised weekly afternoon girl clubs, for both in-school and out-of-school girls. Girls engaged in interactive group activities to build self-confidence, role-playing games to address real life situations, and exercises to build literacy and numeracy skills, with similar effects on their aspirations and self-confidence⁸¹.

VSO’s (Nepal) model, although different from the Link (Ethiopia) and TfAC (Malawi) interventions, is also of interest. VSO (Nepal) is the only IW project whose core intervention was centred on mentoring.

‘Little Sisters’ were supported academically and emotionally by ‘Big Sisters’. Regular visits and support from Big Sisters aimed to build a close relationship, which eventually enabled the Little Sisters to be trusting enough to share their problems with the Big Sisters. VSO’s (Nepal) endline research showed that Little Sisters’ self-esteem improved, and that the guidance and support from the Big Sisters (help with homework, discussions with parents, emotional support) contributed to improving attendance for the Little Sisters – while forging relationships between girls, their parents and other members of the community. VSO’s (Nepal) model effectively leveraged the knowledge of **older girls in the community, who were best placed to understand the problems target girls face and how to address them**. A key limitation to this model was the high turnover of the Big Sisters, some of which, after working with VSO (Nepal) for a few months, left in order to pursue their studies, find better job opportunities or get married. This was a key constraint for the project, especially as it took time for the new Big Sisters to build a relationship of trust and confidence with their Little Sisters.

Tutoring clubs

The pathways to learning were most evident for Link (Ethiopia) and TfAC (Malawi), which both established tutoring clubs for girls. Both projects presented strong evidence at endline that **tutorial classes helped girls increase their performance and confidence in their ability to learn**. Girls valued tutorial classes as these were smaller, provided them with individual help and enabled them to ask questions that they may not have dared to ask in front of boys or in front of the whole class (Link (Ethiopia)). Similarly, TfAC’s (Malawi) endline evidence revealed that 79 percent of girls agreed that it was easier to learn reading during tutorial classes rather than at school.

Early marriage and pregnancies remain a key barrier to education for girls after puberty

Only three projects reported an improvement in relation to early marriage at endline: TfAC (Malawi), HPA (Rwanda) and Link (Ethiopia).

Link (Ethiopia) highlighted that parents were less inclined to marry their daughters at a young age compared to baseline. Similarly, girls were seen as more willing to complete their education. At endline, 78 percent of parents (of senior girls) reported that they do not agree with early marriage, compared to 44 percent in the control group.

“I am advising my daughter to learn rather than getting married.”

Senior girl’s parent, Endline Evaluation report, Link (Ethiopia)

TfAC (Malawi) also provided individual support and counselling to girls at risk of being married early, being pregnant or girls who had a baby/ miscarriage. For instance, Agents of Change have discussed sexual and reproductive health rights with girls and their parents, leading to fewer girls engaging in sexual activities or marrying early in the treatment group compared to the control group at endline. However, qualitative evidence from focus group discussions revealed at endline that parents still did not fully support girls’ access to contraceptives:

“If we do let them know that, then we are encouraging them to start having sexual relations.”

Focus Group Discussion with parents, Endline Evaluation Report, TfAC (Malawi)

⁸¹ While TfAC (Malawi) presents quantitative evidence that self-efficacy leads to a positive attitude towards school and improved attendance and learning, no qualitative evidence of how this change happens for girls is given in their midline or endline evaluation reports.

Finally, ICL (Kenya) highlighted the extent to which early pregnancies remain a barrier to girls' education in the project areas:

“In our school once you get pregnant you are not allowed to come back to the school. You are allowed to go to other school because the girl will not be comfortable with this school again because they will be intimidated by the other students.”

Head of school, Endline Evaluation Report, ICL (Kenya)

Have changes in barriers led to an improvement in educational outcomes (attendance and learning)?

Despite positive changes in self-confidence and aspirations, **only four out of 14 projects** addressing girls' low aspirations and lack of decision-making ability **had a positive impact on learning** (Table 23). It is important to note that the timeframe required to achieve lasting change in areas such as early marriage or girls' ability to make their own decisions was reported as a challenge by most projects which have attempted to address those barriers.

At endline, we conclude that:

- Support from mentors, female community members and other (older) girls have improved girls' aspirations and self-confidence.
- Tutorial classes helped girls increase their performance and confidence in their ability to learn.
- Other than tutoring classes, there is **encouraging but limited evidence that addressing girls' low aspirations and lack of self-confidence is linked to improved learning**.
- Early marriage and pregnancies remain a key barrier to education for girls after puberty.

Parental and community attitudes improved since baseline, leading to higher attendance

At endline, we found that community-based activities such as gatherings and meetings to raise awareness about girls' education had a positive impact on parents' attitudes and beliefs, leading to improved attendance for girls.

Visits to households also changed attitudes towards girls' education and helped develop direct and regular contacts between parents and the school. There is strong evidence that addressing parents and communities' negative attitudes towards girls' education is linked to improved attendance.

With only two of the 14 projects (aiming to improve attitudes towards girls' education) demonstrating an impact on learning outcomes, we conclude that community-based interventions did not have a direct effect on improving learning.

Which barriers to education have improved since baseline? As a result of which intervention(s)?

A large share of IW projects (14 out of 17) also assumed in their theories of change that negative parental and community attitudes towards girls' education led to girls being less likely to enrol and remain in school than boys. Ten percent on average of IW projects' budget was invested in community-based interventions, which is smaller than the average spending on poverty and school-related barriers.

At endline, the most frequently mentioned sub-barriers were negative attitudes towards education (11 projects) and a lack of family support for education (nine projects). In terms of achieving positive change in these areas, projects' endline research showed that **family support for education has increased** across six projects. Seven projects (out of 11 addressing this barrier) provided evidence of **improving attitudes towards girls' education** (Table 10 in Annex F).

Projects have undertaken a variety of activities to raise awareness of the value of education in communities, mobilise parents to (re-) enrol their girls in school, and engage communities in improving school governance and support structures for girls. A key focus has been on community meetings/ gatherings (seven projects). For example, Red een Kind (South Sudan) implemented four community-based interventions: community meetings/ gatherings, household visits and support, activities with men and boys, and activities with faith groups and traditional leaders.

Despite positive changes in attitudes and support for education, only two out of 14 projects had a positive impact on learning (Table 23). However, the impact on attendance is more positive, with eight projects reporting **increased attendance for girls as a result of community-based interventions**.

Projects' discussion of attitudinal change often covers a number of sub-barriers at once, particularly in the qualitative evidence presented. For instance, projects discuss negative attitudes towards education or families valuing boys' education over girls as part of the lack of family support for education. In this section, we choose to focus on parents' attitudes and support towards education and the broader community's views on whether girls should be in school and learning. Importantly, as a result of social desirability bias, further negative attitudes towards girls' education may exist in contrast to what is actually being reported by projects. It is also fair to note that most projects report difficulties in measuring intermediary outcomes involving changes in attitudes and behaviours⁸².

Community dialogues (meetings, gatherings) improved parents' attitudes towards girls' education

At endline, there is evidence that community-based activities such as community gatherings/ meetings had an impact on parents' attitudes and beliefs around girls' education, leading to improved attendance for girls.

TfAC's (Malawi) model focused on organising community listening clubs with parents to promote gender equality, sexual and reproductive health, as well as the benefits of investing in girls' education. These interactive radio dramas enabled parents to **discuss daily situations they encountered with their daughters and that they could easily relate to**:

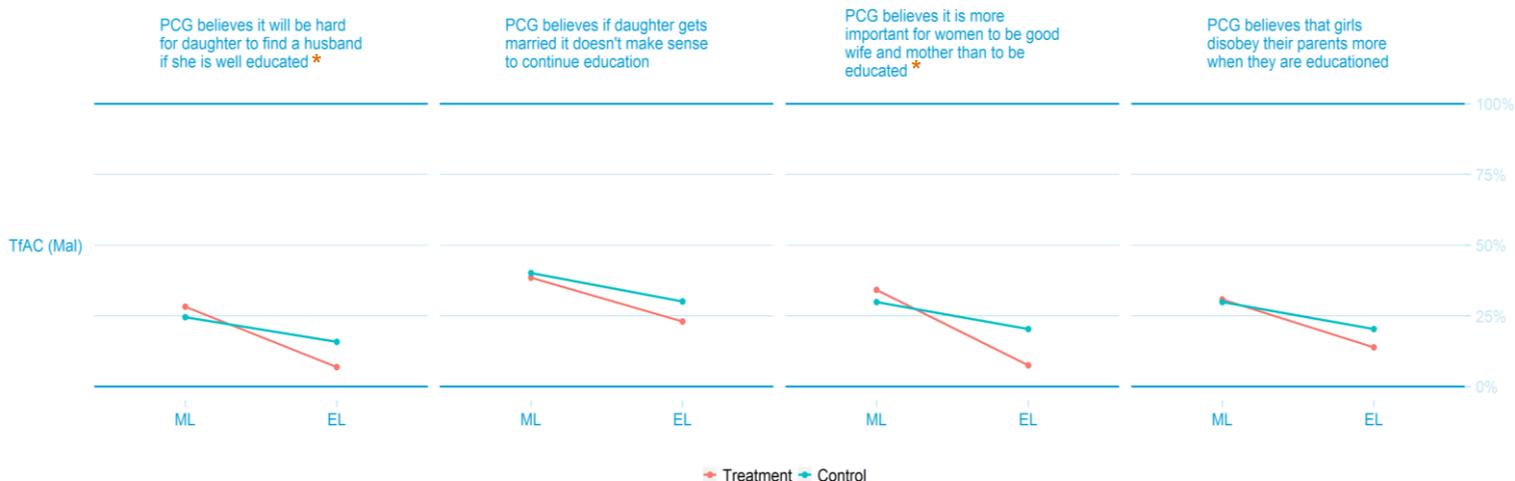
"We start at 2pm listening to the radio play, after that we are asked questions like what we have grasped in the play and we answer according to the play. Sometimes what's in the play is what happens in our respective homes".

Parent interview, Endline Evaluation Report, TfAC (Malawi)

The percentage of parents who feel that their daughter is as likely as their son to make use of her education after school increased from 31 percent at baseline to 76 percent at endline. The reanalysis of TfAC's (Malawi) project data also suggests that primary caregivers positively changed their perceptions about girls' education compared to the control group (Figure 16).

⁸² IW projects used a wide range of qualitative tools in order to measure attitudinal changes. General information can be retrieved from Key Informant Interviews (KIs) that include local education departments, political leaders, school directors and head teachers. This method is employed by most IW projects and is completed with teacher observations (Varkey (Ghana), ChildFund (Afghanistan)) and classroom observations (Camfed (Zambia)). Household surveys are the second method to collect qualitative data. The information gathered is rich, deals with more personal characteristics, and some beliefs or attitudes related to girls' education can be measured. Although open-ended questions can be included, the structured nature of questionnaires generally limits the collection of data to yes/no responses and to levels of agreement to suggested propositions. Finally, In-Depth Interviews (IDIs) and Focus Group Discussions (FGDs) are rich tools to collect data on perceptions, opinions, beliefs and attitudes. Carried out face-to-face, those create a rapport between the interviewer and the respondents. A wide range of actors including school staff, PTA members, parents, boys and girls took part in FGDs conducted by IW projects, which contributed to the richness of data collected across the IW. Finally, some projects used participatory exercises in order to collect additional data that could not be investigated through FGDs. BRAC (Tanzania) tested communication, negotiation and confidence skills by giving the girls short exercises and by scoring them on various skills. By contrast, TfAC (Malawi) used Safety Mapping Exercises where girls had to identify "safe" and "unsafe" places and discuss what made them safe/ unsafe.

Figure 16: Perceptions of caregivers around the importance of girls’ education (reanalysis from Project Datasets, one project)



In the same vein, Mercy Corps (Nepal) highlighted the influence of the Educate Girls Alleviate Poverty campaign (which included a radio campaign as well) on parents and communities’ knowledge, attitudes and practices around the relevance of education for girls as well as the management of their household finances for girls’ education, leading to improved attendance for girls.

Visits to households and outreach activities led by community members changed attitudes towards girls’ education

We focused on two projects which have implemented visits and provided support to households as part of their community-based interventions: Viva (Uganda) and Red een Kind (South Sudan). Both projects have been effective in improving attitudes towards girls’ education, as well as increasing attendance.

Red een Kind (South Sudan) mobilised ‘school mothers’, who visited schools three times a week to check on girls and followed up with girls who had missed school. In the absence of female teachers, girls felt supported in the community with the presence of the school mothers who talked to their parents about staying in school.

“The school mothers advised us to never miss school, unless we are sick. Even when someone misses, they come to our homes and find out why we missed school. This has encouraged the girls to make sure that they don’t miss out on school.”

Girl interview, Endline Evaluation Report, Red een Kind (South Sudan)

Viva (Uganda) worked with community (paid) mentors who engaged directly with parents in the community to help them develop parenting skills, household economic sustainability strategies, and to change their attitude towards girls’ education. At endline, the project found that girls from households receiving support from a mentor got higher scores in literacy and numeracy tests compared to other girls, demonstrating **the benefits of developing direct and regular contacts between parents and the school.**

Support from traditional authorities to promote girls’ education (TfAC (Malawi) and Red een Kind (South Sudan)) also improved parents’ and communities’ awareness around the importance of girls’ education.

Positive change in attitudes towards education for girls with disabilities also took place

Often led by parents of disabled girls themselves, positive change occurred in LCDK’s (Kenya) and CSU’s (Uganda) treatment communities with regards to attitudes towards disabled girls’ education. LCDK (Kenya) focused on the establishment of parents’ support groups. Parents’ support groups were described by the project as *“providing a place where they can share experiences and begin to advocate for the rights of disabled girls in their communities”* (Midline Evaluation Report). LCDK (Kenya) also described how men from these groups have had one-to-one discussions with other men in the community.

Similarly, CSU (Uganda) found at endline that disabled girls were more likely to stay in school as a result of more positive attitudes towards disability in the community.

Have changes in barriers led to an improvement in educational outcomes (attendance and learning)?

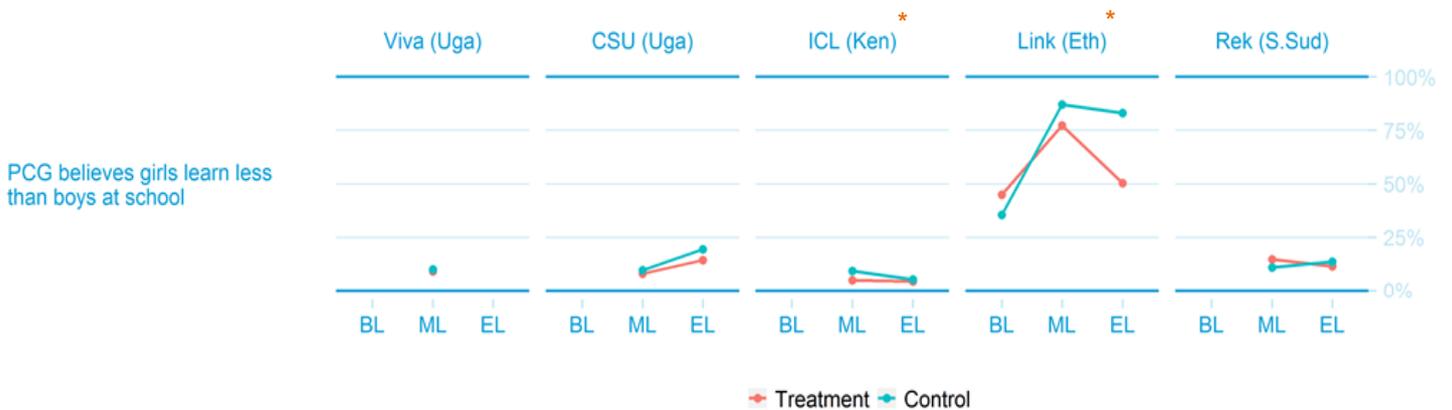
Despite positive changes in parents and communities’ attitudes towards girls’ education, **only two out of 14 projects reported a positive impact on learning** (Table 23). Eight projects reported increased attendance for girls as a result of community-based interventions.

At endline, we conclude that:

- Community-based activities such as gatherings and meetings aiming to raise awareness about girls’ education had an impact on parents’ attitudes and beliefs, leading to improved attendance for girls.
- Visits to households also changed attitudes towards girls’ education and helped develop direct and regular contacts between parents and the school.
- There is **strong evidence that addressing parents and communities’ negative attitudes towards girls’ education is linked to improved attendance.**
- **Only two projects aiming to improve attitudes towards girls’ education could demonstrate an impact on learning outcomes.**

While attitudes are still reported across projects as one of the barriers affecting girls’ education at endline, it is important to note that in four project areas (out of five projects for which we have data), negative attitudes are expressed by less than 25 percent of primary care givers, suggesting that attitudes are already relatively positive in these communities (Figure 17).

Figure 17: Perceptions of caregivers around the benefits of girls’ schooling (reanalysis from Project Datasets, five projects)



3.4.2 What other non-GEC activities and external events have happened and with what effect on barriers and intervention effectiveness?

Since baseline, several external events directly or indirectly affected GEC project delivery, and were highlighted by projects as either facilitating or hindering implementation. Among these, violence and environmental disasters led to temporary closures of schools and rendered some areas inaccessible. Poverty and a lack of supporting infrastructure in intervention areas were also identified as key constraints by several projects.

Similarly, the presence of non-GEC projects in both intervention and control areas had an impact on projects’ outcomes, either by reducing their relative impact in treatment areas (when non-GEC projects improved the situation in control areas), or by helping GEC projects attain their objectives in treatment areas.

Violence and political unrest posed important challenges to several projects

Red een Kind (South Sudan) faced challenges due to **escalating conflict in the form of inter-klan violence**, including implementation delays, school closures, threats to project staff (resulting in the death of one staff member), killing and targeting of teachers and head teachers, and threats to project activities. A culture of revenge after every death was found to be prominent among boys in project areas, resulting in continuing fighting and insecurity. Boys were and continue to be key protagonists of inter-klan fighting, often posing a direct threat to project activities. Insecurity was also identified as the main barrier to education in ChildFund’s (Afghanistan) project

areas, with parents reporting that the fear of violence often leads them to stop their children, especially girls, from going to school.

Other, smaller scale, forms of violence were reported in Nepal, where political unrest in 2015 resulted in a curfew and schools being closed down for a month (Mercy Corps (Nepal)). The Parsa district was particularly affected, with schools closed for over four months following the Terai unrest, as reported by VSO (Nepal).

Poverty, economic shocks and natural disasters affected families' ability to afford the cost of schooling and led to implementation challenges

Seven projects mentioned the negative impacts of poverty, economic or weather shocks, or the indirect costs of schooling on girls' education outcomes, as they sometimes led to girls dropping out of school and an inability to afford school fees.

For instance, PEAS (Uganda) mentioned that **drought** affected parents' ability to afford their children's school fees, due to families' dependence on agriculture and livestock for their livelihoods. Poverty was also mentioned as a key constraint in the case of ChildFund (Afghanistan). This is closely related to the conflict situation, because violence has affected pastoralists' **livelihoods** by limiting or altering their migration routes. Varkey (Ghana) mentioned that an inability to afford travel to school had an impact on absenteeism, while several parents continued to rely on their **children's housework and contribution to economic activities** to ensure the household's economic survival.

Natural disasters affected the implementation of two projects. VSO (Nepal) reported that one of the treatment schools was affected by flash floods, leading students to migrate or transfer to different schools. Some of the project areas were also hit by the 2015 earthquake, causing intervention activities to be temporarily stopped to allow local partners to deliver relief and rehabilitation work. TfAC (Malawi) also mentioned that floods and drought affected girls' ability to attend, concentrate and perform well in school due to increased hardship and hunger.

Lack of school resources and infrastructure affected the effectiveness of project interventions

Supply-side barriers posed challenges to primarily demand-focused interventions. In the case of Red een Kind (South Sudan), the project recognised the importance of barriers which were not tackled by the interventions; namely, **poor school and classroom infrastructure**. More broadly, **poor road infrastructure** was also identified as an important barrier, resulting in project delays and issues of site accessibility for project staff.

The **limited availability of qualified teachers** was mentioned by six projects. Among these, LCDK (Kenya) was affected by a long-term teachers' strike which delayed implementation. Implementation was also affected by transfers of trained teachers, teacher absenteeism, or their decision to move to private schools to teach due to the higher salaries on offer. High turnover was also mentioned by Camfed (Zambia), which highlighted the difficulties of attracting qualified teachers to one of the most remote areas of the country. TfAC (Malawi) was also affected by the lack of highly qualified teachers and difficulties in ensuring their adequate pay. Teachers faced extended periods of time without payment, due to a lack of government resources, placing additional pressure on their ability to teach, run school clubs and find other income-generating activities to support themselves.

Limited government presence and/or involvement was a key constraint for projects

Several projects targeted extremely marginalised areas, where **government presence is almost non-existent**. For instance, Red een Kind (South Sudan) commented on the fact that the education department of the project area (Rumbek East) has only two staff members and little office equipment.

PEAS (Uganda) reported having encountered difficulties receiving Universal Secondary Education (USE) funding from the Government of Uganda. The overall share of spending on education in the national budget fell from 24 percent in 1997 – when USE was introduced – to 17 percent in 2015⁸³. PEAS (Uganda) absorbed over half (53 percent) of the negative impact on student fees, so that the majority of additional costs have not been transferred to students. Despite this, several schools had to increase fees above inflation in 2015 to cover their operating costs.

ICL (Kenya) and LCDK (Kenya) have operated in a complex political system since a **new constitution establishing education as a decentralised function** was enacted in 2010. Although local governments have

⁸³ A. Lenhardt, E. Page, M. Sarward, and A. Shepherd (2016). Anti-discrimination measures in education: a comparative policy analysis, *Chronic Poverty Advisory Network*, United Nations University.

been entrusted with implementing the policies as directed by the Ministry of Education, they face a number of challenges in exercising these responsibilities, such as lack of adequate human, financial and material resources⁸⁴.

In some cases, a favourable policy environment facilitated project delivery

Government policy was sometimes identified as facilitating project activities. LCDK (Kenya) pointed out that the Free Primary Education policy facilitated programme implementation, as target communities were already aware that school attendance was mandatory. The project also reported that there was a general increase in the awareness of child protection, basic rights of children, and the needs of people with disabilities. Similarly, CSU (Uganda) mentioned that implementation was facilitated by the **government’s commitment to issues of disability, gender and education**, and consequently ownership of the project by government departments.

Non-GEC projects contributed to improving girls’ education outcomes in some project areas

Five projects reported that other girls’ education projects were active in their treatment or control areas. Some organisations – such as the World Food Programme and the National “Keep Girls at School” programme (HPA (Rwanda)), Tearfund, BRAC and Africa Education Trust (Red (South Sudan)), and USAID (TfAC’s (Malawi)) – were active in treatment or control areas and **may have contributed to improving education outcomes**.

In Kenya, the Tusome Early Grade Reading activity⁸⁵ trains teachers in early grade reading and is progressively being implemented in every primary school in the country. ICL (Kenya) reported that this has resulted in an improvement in teachers’ capacity. Similarly, in the case of Link (Ethiopia), the project supported the implementation of gender-sensitive policy in treatment *woredas*, but due to a government policy, gender-sensitive training was also provided in control schools. VSO (Nepal) attributed increases in attendance to a government-led campaign on enrolment, while other organisations were also reportedly conducting activities aiming to improve community attitudes to girls’ education.

⁸⁴ International Institute for Education Planning (UNESCO), 2014, *Decentralization in Education: Overcoming challenges and achieving success – the Kenyan experience*, <http://unesdoc.unesco.org/images/0022/002298/229832E.pdf>.

⁸⁵ <https://www.usaid.gov/documents/1860/tusome-early-grade-reading-activity>.

3.4.3 What effects have IW interventions had on boys?

Although the GEC aims to improve marginalised girls' lives through education, boys were also impacted by project interventions, as they attend the same schools, live in the same households and belong to the same communities exposed to GEC interventions.

Table 19: Learning beneficiaries across IW projects⁸⁶

Learning beneficiaries		Boys	Girls	Projects' comments
Eco	Uganda		15 058	
PEAS		6 296	6 760	Many of the GEC interventions in PEAS schools target general improvement to school facilities and curriculum that benefitted girls' and boys' learning outcomes.
Oppty		791	20 679	Boys in school participating in financial literacy training activities.
Viva		2 757	2 107	Brothers of target girls benefiting from family mentoring activities.
CSU		0	2 024	According to the endline report, there were no direct beneficiaries among boys.
LCDK	Kenya	833	2 485	Boys with disabilities who benefited from the improved training of teachers in inclusive education.
ICL		5 674	9 170	Boys were taught by the same teachers that had been trained on gender responsiveness. Some were involved in mentorship activities.
Link	Eth	84 225	90 495	Boys at schools that benefited from the systemic changes.
HPA	Rwa	13 625	14 607	Boys are learning from school businesses and also benefiting from the ECOSAN toilets. Boys are also participating in exchange visits, clubs, theatre competitions and Urunana radio soap opera.
ReK	S. Sudan	6 119	3 361	Boys having access to project activities (enrolled in school in project Payams).
BRAC	Tan	1 681	15 314	Boys taking part in peer mentoring sessions.
Camfd	Zam	11 161	6 828	Boys are directly benefitting from the class- and school-based interventions.
TfAC	Mal	0	9 000	No direct beneficiaries among boys.
Varkey	Gha	6 766	4 274	Boys are receiving interventions alongside girls in Math and English in all 70 intervention schools.
VSO	Nepal	261	9 839	Extremely marginalised boys who were low performing and at risk of dropping out were enrolled in Learning Support Classes.
Mercy		0	5 534	No direct beneficiaries among boys.
ChFnd	Afgh	654	1 488	Boys are also benefiting directly from the intervention.

Boys also benefited from projects' activities, some directly and some indirectly

As shown in Table 19, 12 of the 17 IW projects reported **directly benefiting boys** via their interventions.

Some projects explicitly targeted boys. For instance, ChildFund (Afghanistan) provided community-based mobile education in nomadic communities to boys and girls between grades one and three, and accelerated learning programmes (ALP) for boys and girls aged 11 to 18. In the case of ICL (Kenya), the benefits of teacher coaching, mentorship and life skills clubs extended to boys. Mentorship activities were, in some cases, led separately, so as to focus on gender-specific issues. Mentorship with girls focused on early pregnancy, while counselling with boys centred on preventing drop-out to engage in commercial activities, such as *boda boda* driving⁸⁷.

In some projects, boys **directly benefited from a 'portion'** of the interventions, such as participation in competitive literacy and sport leagues with other schools, as well as mentoring and counselling activities (Viva (Uganda)), satellite transmitted classes (Varkey (Ghana)) and school transportation (CSU (Uganda)).

⁸⁶ The figures for boy beneficiaries and indirect girls have been compiled using project data as included in beneficiary tables (Annex 5 of endline reports). These figures may not always be accurate, as indicated by the FM. No other gender-disaggregated data was provided by the projects or the FM.

⁸⁷ *Boda bodas* are motorcycle taxis, commonly found in East African countries, including Kenya.

In other cases, boys were **indirectly targeted**, by being able to access improved school facilities, learning resources or better trained teachers. PEAS (Uganda), Link (Ethiopia), HPA (Rwanda), and Red een Kind (South Sudan) all contended that boys benefited from systemic changes within their schools. In Camfed's (Zambia) intervention model, treatments were equally available to all students, including boys, as the interventions were school- and classroom-based (implementing *Escuela Nueva* principles of democratic school governance and child-centred pedagogy). Boys were also impacted by community sensitisation: disabled boys benefited from the improved attitudes of non-disabled children following CSU (Uganda) activities.

Several projects made **changes to their intervention model** in order to better reach and involve boys. In the case of Varkey (Ghana), monthly Boys' Sessions with male role models were introduced, following the realisation that most of the topics discussed in after-school sessions were relevant for boys. Although boys were not originally part of Mercy Corps' (Nepal) project design, they were specifically targeted for certain interventions at the beginning of the second year, such as life skills and sexual health events. In the case of Opportunity (Uganda), 791 boys directly benefitted from GEC support, by being involved in financial literacy training activities.

Some projects found a positive impact on boys' learning outcomes

PEAS (Uganda), Link (Ethiopia) and Varkey (Ghana)⁸⁸ observed that **boys benefiting from activities also improved their learning and/or attendance outcomes**, along with the gender gap favouring boys diminishing between baseline and endline. PEAS (Uganda) found an effect on boys' learning, with their pass rates rising above the national average every year since 2014. Link (Ethiopia) found an increase in boys' retention since baseline, although not as high as that observed for girls.

By contrast, Red een Kind (South Sudan) observed a drop out of 31 percent in boys' enrolment in treatment and control communities between baseline and midline, although the situation improved at endline, due to increased security. Clan-based fighting had previously led boys to feel more protected at home or at cattle camps, where guns were available, than at school. The custom of revenge for each death also induced some boys to drop out in the event of the killing of a family or clan member.

Some interventions had a positive impact on relationships between boys and girls

Relationships between boys and girls have been affected by IW interventions. In some cases, boys were found to **have improved their attitudes towards girls**. Red een Kind (South Sudan) found that life skills education led boys to more positive and supportive behaviour towards girls. BRAC (Tanzania) and Link (Ethiopia) found evidence that, after the intervention, boys were more likely to help girls with their school work. In Ethiopia, boys also became more concerned with girls' safety, accompanying them to and from school. They also started to take responsibility for some household chores.

Similarly, VSO (Nepal) found that boys increasingly stated that education is equally important for boys and girls, and, in some cases, identified cultural practices, such as *Chhapaudi*⁸⁹, as detrimental to girls' education. ICL (Kenya) commented on improved relationships between girls and boys. For instance, they mentioned an increased tendency for girls and boys to sit together in class, and to share learning materials such as textbooks. They also provided examples of boys and girls helping each other; for instance, in a secondary school in Mombasa, boys started helping girls in science classes, while girls supported boys in language classes.

Negative consequences were mostly feelings of jealousy and resentment

Despite these reported improvements, ten out of the 17 projects mentioned that the interventions caused **jealousy and resentment** among boys. Feelings of exclusion and discrimination were mentioned by several projects, including VSO (Nepal), TfAC (Malawi), PEAS (Uganda) and Opportunity (Uganda).

Viva (Uganda) reported that interviewees suggested working with boys for two reasons: firstly, they are also seen as being marginalised; and secondly, they can act as a barrier to education by luring girls away from going to school. ICL (Kenya) reported that the lack of involvement of boys caused discontent in some of the target communities, at times resulting in high levels of boys' drop-out or absenteeism. Boys complained about the project being biased, arguing that those from marginalised families were as disadvantaged as girls. This sometimes

⁸⁸ Either using data collected on boys or official pass rates from intervention schools.

⁸⁹ *Chhapaudi* is a traditional practice according to which girls are not allowed to move freely outside the home – and attend school – during menstruation.

resulted in hostility and vandalism of project equipment. VSO (Nepal) also mentioned that some boys became violent due to what they felt was a biased intervention, damaging sports equipment provided for girls.

There were many cases where **boys or the community requested that the intervention begin to focus on boys as well as girls**. In the case of Link (Ethiopia), boys requested assistance with their school work. LCDK (Kenya) reported that several respondents pointed out that boys with disability also face important challenges in attending school. Similarly, CSU (Uganda) was often confronted with questions regarding ways of including boys within project activities, as disabled boys and their families felt discriminated against.

Boys also face their own specific barriers to education

Some of the projects recognised that boys also face gender-specific issues which lead to them dropping out or not performing well in school. In Kenya, boys were found to be likely to drop out of school to engage in economic activities, such as *boda boda* driving. As pointed out by Red een Kind (South Sudan), boys in Rumbek East are more likely to engage directly in inter-clan violence, with an impact on their enrolment and attendance. In the context of rural Afghanistan, household migration impacts both boys and girls, as pointed out by ChildFund (Afghanistan).

Mercy Corps (Nepal) found that the attendance rate of girls was higher than that of boys in treatment schools, and that a larger number of boys attached less importance to education. Teachers and head teachers reported issues of absenteeism among boys, sometimes resulting in drop-out. The endline report found an increased drop-out rate compared to baseline among boys (8%), more than double that of girls (4%). The project began advocating for a more gendered response to educating marginalised children throughout the programme.

3.4.4 What were the unintended consequences of IW interventions? To what extent have projects adapted their activities since baseline to improve their effectiveness?

Several projects reported unintended consequences for adults in the community, including teachers and parents

The most frequently mentioned unintended consequence was a **positive impact on teachers, parents or other adults in the community**. Link (Ethiopia) mentioned that female teachers' self-confidence increased as a result of the project. They also reported efforts in project schools to promote female teachers to management positions, as well as an improvement of their status in intervention schools. Benefits to project facilitators were also mentioned by Varkey (Ghana). They reportedly gained teaching skills, due both to their training and the opportunity to work with MGCubed studio teachers. This increased their capacity to teach better prepared classes.

Link (Ethiopia) reported a positive impact on the mothers of girls attending project schools, some of whom decided to continue their education. According to the project, 509 mothers and married women returned to mainstream education in the four target *woredas*. In the case of Opportunity (Uganda) parents learned from their daughters' saving behaviour and altered their financial decisions as a result. Some teachers also mentioned having opened savings accounts and having started income-generating activities to further increase their salaries.

Some projects mentioned broader impacts on communities. According to HPA (Rwanda), engaging communities in the construction of school infrastructure enhanced not only community ownership of the facilities, but also improved the skills of local men, thus increasing their employability. Opportunity (Uganda) reported that school improvement loans created jobs, not only among teachers, but also for cooks, security guards and administrators. They also reported growth in local businesses providing transport, books and other school-related materials.

Negative unintended consequences are mostly related to a backlash from control schools or from groups not participating in the intervention

Some projects reported on experiences of **backlash and jealousy in the control schools**, who felt left out from the intervention activities and discriminated against. As mentioned in [Section 2.1.2](#), one of the five PEAS (Uganda) control schools refused to be part of endline research, because they felt "*left out*" by the project. Similarly, ICL (Kenya) mentioned that control schools, especially in Mombasa, refused to participate in the research. Mercy Corps (Nepal) also reported having encountered resistance on the part of control schools.

Some projects also experienced issues of **jealousy among non-beneficiary girls** (and boys) in treatment areas (TfAC (Malawi)), at times resulting in taunting and stigmatisation of project beneficiaries (CSU (Uganda)). In Malawi, there were reports of in-school girls purposely dropping out of school so as to receive project back-to-school packs. In the case of Opportunity (Uganda), treatment school girls who were not randomly selected to

receive the intervention felt left out, although some adjustments were made by the project to reach additional marginalised girls at a later stage.

Some **issues with teachers** were also mentioned. VSO (Nepal) spoke about issues with the Big Sisters intervention, because teachers felt that their role was being taken over, and therefore paid less attention to the Little Sisters in class. CSU (Uganda) described how the project resulted in an increase in the teacher-to-student ratio, with teachers finding themselves unable to pay sufficient attention to disabled girls.

Another type of unexpected consequence was the **raising of expectations** of project beneficiaries. Some expected the project to repair assistance devices in case they broke down, while others expected comprehensive support for children – including food, medical bills and transportation (LCDK (Kenya)).

Changes in project interventions have been common since baseline, with some projects making changes in their target groups and/ or outcome targets

Most of the projects adapted their activities since baseline because new barriers were identified, or because planned interventions were difficult to implement or inefficient (Table 20).

Table 20: Changes to project interventions, target groups and outcome targets since baseline

Changes to interventions, target groups and outcomes since baseline	Eco ⁹⁰	PEAS	Oppty	Viva	CSU	LCDK	ICL	Link	HPA	ReK	BRAC	Camfd	TfAC	Varkey	VSO	Mercy	ChFnd
	Uganda				Kenya			Eth	Rwa	Sou	Tan	Zam	Mal	Gha	Nepal	Afgh	
Evidence challenges assumption about:																	
Barriers		✓	✓							✓		✓	✓		✓	✓	✓
Interventions		✓	✓	✓	✓	✓	✓	✓	✓		✓			✓		✓	✓
Project adjustments to:																	
Target groups					✓					✓			✓	✓	✓		
Outcome targets					✓		✓					✓					
Intervention design		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Specific adjustments to interventions:																	
Economic interventions		✓	✓	✓			✓	✓	✓	✓		✓	✓		✓	✓	
Infrastructure and resources		✓		✓				✓				✓	✓		✓		
Teacher training and support		✓	✓	✓			✓					✓	✓	✓		✓	
Community interventions		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓
Extra-curricular activities									✓			✓				✓	
School management			✓					✓								✓	

Eight projects identified additional barriers they were not addressing between baseline and endline

Red een Kind (South Sudan) found that mothers were very involved in girls' education and their (negative) judgment could be a barrier in the same way as their fathers' judgment. The project therefore adapted the interventions by including mothers in awareness-raising meetings. They also realised at endline that **excessive focus had been placed on demand-side barriers**, ignoring the importance of supply-side barriers related to infrastructure.

Additional barriers found at the school level include a lack of support for head teachers (TfAC (Malawi)), a lack of scholastic materials (PEAS (Uganda)), as well as teachers' absenteeism (Camfed (Zambia)). Finally, some external events – namely, the 2015 earthquake in Nepal – affected VSO and Mercy Corps by destroying schools and

⁹⁰ Changes are not reported in the Eco Fuel (Uganda) report.

villages. This resulted in changes to VSO's (Nepal) interventions, which then focused on setting up semi-permanent learning spaces.

All projects except Eco Fuel adjusted their interventions between baseline and endline

Most changes or additions were made to economic and community interventions. Among these, HPA (Rwanda) intended to produce sanitary napkins, but the production was not allowed by the Rwanda Bureau of Standards and the Ministry of Health due to difficulties encountered in reaching the required manufacturing standards. As a response, the project rolled out other income-generating activities to buy sanitary pads. Similarly, Link (Ethiopia) found that the reusable sanitary napkins provided by the project could not be used as the girls lacked suitable underwear, which they therefore started providing as well.

PEAS (Uganda) adapted its interventions following evidence that communities valued girls' education more than had been anticipated, and re-focused community engagement work in order to address other attitudinal barriers. They also recognised the importance of the lack of school materials as a barrier to education, and made changes to their intervention to increase the provision of learning materials to girls in intervention schools.

Similarly, ChildFund (Afghanistan) found that families' migration patterns were not as lengthy or frequent as they had initially understood them to be, which led them to make changes in the mobile component of their intervention.

For BRAC (Tanzania), as many girls at government schools live far away, it was difficult for them to travel to BRAC clubs to attend the LSBE (Life Skills Based Education) sessions after regular school hours and then return home, so the trainings were eventually arranged at school. BRAC (Tanzania) also had to recruit *school teachers* for their out-of-school girls' clubs, following their poor performance in alternative exams organised between baseline and midline.

Key findings – What has worked, why and with what effects?

Identified as a key constraint to girls achieving education outcomes, tackling poverty has been at the centre of the design of most IW projects. The cost of schooling and significant housework commitments of girls in particular have an effect on girls' attendance and learning. At endline, we find that many girls benefitting from IW interventions continue to face challenges associated with poverty. Inability to pay for transport to school, school fees, or needing to ensure that girls keep contributing to housework still keep them away from regular schooling.

Paying for school fees and the provision of school kits and sanitary pads helped reduce the cost of schooling and improved attendance for girls. There is also encouraging evidence that 'time poverty' and domestic responsibilities have improved as a result of raising parents' awareness about the benefits of a more equal distribution of tasks within the household.

Increasing income through loans, savings and income-generating activities did not directly improve girls' access to education and learning. While household income sometimes increased as a result of projects' interventions, this type of economic intervention, as opposed to the direct provision of school material or access to scholarships, did not always lead to an increase in spending on girls' education.

The quality of teaching improved as a result of project interventions and had a positive impact on girls' learning. Improved teaching practices led to learning improvements as girls benefited from a classroom environment that proved more conducive to learning. Regular teacher training involving on-the-job feedback and a focus on engaging in constructive interactions with students had a positive impact on learning. Schools working with parents improved their engagement with education and also increased girls' attendance. As teachers actively followed up on girls' performance, parents received advice and counselling with regards to education and discussed the reasons behind girls not regularly attending school.

Girls' self-confidence and aspirations also improved since baseline, although it is unclear whether this effectively improved girls' attendance or learning. Support from mentors, female community members and other (older) girls have improved girls' aspirations and self-confidence. Similarly, tutorial classes helped girls increase their confidence in their ability to learn. Girls valued tutorial classes as these were smaller, provided them with individual help and enabled them to ask questions that they may not have dared to ask in front of boys or in front of the whole class.

Community-based activities such as gatherings and meetings to raise awareness about girls' education had a positive impact on parents' attitudes and beliefs, leading to improved attendance for girls. Visits to households also changed attitudes towards girls' education and helped develop direct and regular contacts between parents and the school. But community-based interventions did not systematically improve learning.

External factors and unintended consequences

Since baseline, external events directly or indirectly affected GEC project delivery. In some cases, a favourable policy environment facilitated project delivery. Non-GEC projects also contributed to improving girls' learning in some project areas. But **negative circumstances often limited the effects of interventions from projects**, which sometimes adapted their design in the face of external and contextual factors.

For instance, some projects ignored the **importance of supply-side barriers** related to infrastructure (schools, availability of qualified teachers) and realised during implementation that they had had an excessive focus on demand-side barriers such as those related to community attitudes. As projects deepened their understanding of the environment they were operating in, they understood that some of the barriers they had been trying to improve were not always the most crucial barriers to girls' learning.

Many projects inadvertently caused **jealousy and backlash among non-beneficiary groups**, both boys and girls. This led some of them to adapt their intervention model and involve boys in the project activities. The reasons cited by projects for engaging with men and boys were mostly related to the level of marginalisation boys experience in the communities targeted by projects. Disability projects also pointed out that boys with a disability faced similar challenges in attending school as girls with a disability. Boys also face their own specific barriers to education.

Lessons learned

- Through the challenge fund design, the GEC encouraged organisations to develop their own theories of change and intervention mechanisms to address (some of) these barriers in specific contexts and for specific populations of marginalised girls. **Where projects had clearly identified the most important barriers to girls' learning, their interventions proved more successful at improving learning.** And as projects deepened their understanding of the environment they operate in during implementation, they sometimes understood that some of the barriers they had been trying to improve were not always the most important barriers to girls' learning (e.g. demand versus supply side barriers).
- There is strong evidence that **addressing the cost of schooling is linked to improved attendance for girls.** However, aiming to offset the cost of education does not immediately influence girls' learning. Without a functioning schooling system with qualified teachers, girls' learning does not improve.
- **Interventions at the school level improve both attendance and learning.** The quality of teaching is particularly important in ensuring girls learn more. Teachers' limited subject knowledge can hinder girls' learning. Teacher trainings in literacy and numeracy are crucial to improving teaching quality and eventually girls' learning. Facilitation skills as well as the use of participatory methods help ensure that students understand what is being taught.
- Relationships between boys and girls were affected by project interventions, both positively and negatively. While this could be expected from a programme that primarily focuses on girls, the extent to which **projects considered gender dynamics in their activities** should have been reinforced at the design stage. Several projects concluded that they should include interventions to target boys in the future.

3.5 In what ways have IW projects demonstrated innovation and with what effects?

As reported at midline, IW projects have been innovative in two ways: (1) by using existing resources in an innovative manner (e.g. forming partnerships with local and international organisations; utilising community structures; and partnering with government), and (2) by providing new products or establishing new systems (e.g. developing new technologies; providing new structures, and introducing methods used elsewhere to a new context).

Working with local organisations and/or bringing in the expertise of specialised organisations has led to positive results, producing better designed interventions and potentially increasing sustainability. Working with the national governments who have concretely bought into projects' activities has also led to positive results and some sustainability prospects. The implementation of new structures using innovative pedagogical skills to interact with marginalised girls generally showed positive effects on learning.

By contrast, introducing new technologies as a way of enhancing educational outcomes has had mixed effects, mainly related to the extent to which technology-based solutions are adapted to specific learning needs and contextual conditions. The failure to ensure constant support and maintenance, for example, as well as limited access to well-trained and committed in-person facilitators has, at times, limited the technology's impact.

The GEC business case expressed the necessity for a balanced approach across the GEC between providing support for projects with a proven track record, and supporting more risk-prone, small-scale pilots. Although innovative projects are riskier in terms of their capacity to deliver expected outcomes, their inclusion is based on the assumption that impact can be greater if projects are able to experiment, work with new partners, and leverage funds from new sources, rather than solely rely on existing channels and methods.

During the Inception Phase, the FM defined 'innovation' in the context of the IW as:

- the application of a proven approach, for the first time, in a country or area;
- the adaptation of an existing initiative to a new context;
- the development of a sustainable solution to an existing problem;
- the formation or the improvement of new partnerships across sectors in support of girls' education;
- the development of ideas that come from girls and the involvement of the latter in project;
- the research and application of sustainable solutions that lead to long-lasting change; and
- the demonstration of the impact of new and existing innovative models so that the results can be shared.

In our analysis of innovation across the IW we distinguish between: (i) **innovation achieved by using existing resources and the immediate environment in an innovative manner** (e.g. through partnerships with local organisations, adapting skills training to issues faced by marginalised girls, mobilising communities, using existing media and means of communication); and (ii) **innovation by providing new products or establishing new systems** (e.g. implementing new technologies, designing new structures). As Eco Fuel (Uganda) did not report on the performance of its innovative approach at either midline or endline, this section discusses innovation findings reported by the other 16 projects.

Innovation by using and improving existing resources in the environment

Most of the IW projects were implemented by tapping into resources which already existed in their target areas. Although those interventions did not include the testing of new products or technologies as such, resources were mobilised in ways that made project implementation more efficient, and can therefore be considered innovative.

Some established **partnerships with local organisations and /or structures that projects used were already present in their target communities**. HPA (Rwanda) tapped into existing community structures, known as

Ubudehe⁹¹, to construct and collectively manage its ECOSAN units. This reportedly led to a strong sense of community ownership of the new facilities. Viva (Uganda) similarly worked with a network of local schools, churches and community-based organisations, seeking to improve results by sharing resources and jointly advocating for changes in government policy. Twenty partners worked together to present new models to education authorities, share a resource library and support a competitive league which allowed children to develop their skills in sports and the arts. Working with community-based organisations made initial work at the community level easier, and helped increase local ownership. Drawing on an existing network also made the process of referring girls facing specific challenges (such as disability or pregnancy) to specialised centres easier. There are some positive signs of government buy-in and support; however, concrete policy change proved severely constrained by a lack of resources across the education system.

Other projects established **partnerships with national and international organisations with expertise in education**. Partnerships with Teach a Man to Fish, an organisation specialised in business-oriented education, helped PEAS (Uganda) and HPA (Rwanda) set up and manage school businesses in target schools. PEAS (Uganda) also partnered with Mango Tree on the development and delivery of life-skills education. Through a partnership with Urunana Development Communication (UDC), HPA (Rwanda) also used **radio broadcasts** to distribute messages on girls' education. With a weekly broadcast on Radio Rwanda, the project was able to reach a large audience with a radio soap opera discussing challenges and barriers to girls' education. In addition to its local partners, Viva (Uganda) also collaborated with international organisations and teachers in the UK, who provided technical advice to design and deliver CLC training to teachers, with a positive impact on teaching quality.

Some projects **worked closely with national governments** to help ensure the sustainability of interventions or some of their components. In Kenya, LCDK (Kenya) and ICL (Kenya) collaborated with the Ministry of Education (MoE). LCDK (Kenya) worked with the MoE and UNICEF to add disability indicators to the education monitoring system. The new indicators are expected to be used by the MoE to track the number of children with disabilities to improve targeting. However, any policy change is yet to materialise. Similarly, ICL (Kenya) assisted the MoE with the implementation of the Biometric Student Information Management System (BioSIM)⁹², which aims to generate data on attendance at the national level. ICL supported the overall development of the system and helped some schools improve their enrolment and attendance records, particularly those reporting transfers to other schools as 'drop outs'. As a result of this partnership, a Joint BioSIM Committee was established, which conducted a 'pilot' census of all students in Laikipia County. This provided information to the government about the potential improvements from BioSIM technology for education management and planning. The project is now proposing a scale-up of BioSIM as a nation-wide enrolment monitoring system. On a less positive note, PEAS (Uganda) also initiated a partnership with the Ministry of Education and Sports in the context of the government's Universal Secondary Education (USE) programme, with the objective of reducing school fees. However, this initiative did not lead to the intended effects due to a large decrease in the government budget, as discussed in [Section 3.4.2](#). Overall, using existing resources from the targeted communities' environment has led to varied results. Working with specialised organisations has led to positive results, due to better designed interventions through the inputs from the technical support and expertise accessed. Government buy-in proved useful for implementation, but only in a few cases led to concrete signs of sustainability and potential scale-up.

Innovation by providing new products or establishing new systems

Some projects also chose to **provide and test new products, technologies or educational structures**. Other projects introduced a methodology or technology that had been successful elsewhere to a new context.

Several IW projects focused on the introduction of new educational structures. For instance, PEAS (Uganda) opened secondary schools in marginalised rural areas, bringing access to affordable, quality secondary education to these communities for the first time. In those schools, girls (and boys) received a condensed version of the national curriculum, and achieved a 100 per cent pass rate in the national exams. Viva's (Uganda) Creative

⁹¹ As outlined in the HPA (Rwanda) endline report, *Ubudehe* refers to a community practice where members come together to solve problems of collective action. It is a process whereby the community comes together to assess their current situation and decide on the ways to most effectively and efficiently promote participatory development, democracy, reconciliation and unity.

⁹² The Biometric Student Information Management System (BioSIM), developed by Data Vault System Enterprises in partnership with ICL (Kenya) is a web-based application designed to automate the attendance of students by iris recognition. This device provides the ability to manage data from enrolment, students' attendance, students who are late, educational performance, school fees payment, teachers' attendance, teachers who are late, and parents' attendance during school meetings. BioSIM also offers the Ministry of Education Science and Technology a platform that assesses schools and generates a report in real time.

Learning Centres allowed out-of-school girls to follow a six-month creative catch-up programme, enabling them to enrol in regular schools. Similarly, CSU (Uganda) set up mobile health assessment facilities to help girls with disabilities to be assessed and enrolled in school, instead of waiting for parents to bring their children to health centres.

Some projects developed new technologies to address barriers to attendance and learning. ICL's (Kenya) BioSIM technology, when used correctly, allowed school staff to collect accurate attendance data and identify girls at risk of dropping out. The system was also used to reassure parents that their daughters were in school and safe, by sending a text message as soon as attendance was registered at school. Although the evaluation found no significant impact of the BioSIM technology on attendance, it qualitatively reported improved parental involvement in students' education. ChildFund (Afghanistan) set up MLearning, a mobile-based literacy and numeracy programme for illiterate community members. However, target communities reported limited use of the platform, with some households unable to afford a mobile phone, struggling with the technology, and /or receiving insufficient support from project staff to resolve such issues. Varkey (Ghana) was more successful in its use of technology. As previously explained in [Box 4](#), its main innovation consisted of the MGCubed distance learning platform, which was used to deliver English and mathematics sessions, as well as girls' empowerment classes, known as Wonder Women sessions⁹³. The technology also facilitated interactions with the remote instructors and with peers from other schools. Remote teachers delivered classes in an innovative, student-centred and interactive way, with a focus on oral skills. The role of facilitators was also crucial, as outlined in [Box 5](#) and identified as a key explanatory factor for improved education outcomes.

Box 5: ICT in education – importance of in-person support

One of the main success factors for technological solutions was the availability of sufficient resources for training, together with the support provided to end users. A main strength of the MGCubed programme implemented by Varkey (Ghana) was the in-class support provided by facilitators. Facilitators were identified as the 'vital link' between distance and in-school learning, helping students access the technology by bridging language barriers with remote instructors. Facilitators' involvement in their communities also helped reinforce the attitudinal changes to girls' education promoted by the technology. Moreover, the spillover effect on their own teaching methods was found to improve the quality of education more broadly.

On the contrary, taking End-user capacity fully into account proved challenging for several projects. In the case of ChildFund (Afghanistan), one of the main factors which explained the issues faced by the MLearning component was the failure of Social Mentors to provide effective support to users and to troubleshoot issues that the central office faced in a timely manner. The Kabul team was also ill-equipped to provide support remotely. The failure to resolve technical issues led several users to stop using the platform altogether. Similarly, the BioSIM software developed by ICL (Kenya) at times proved problematic in that teachers felt insufficiently trained to use the software, and, in some cases, chose to revert back to traditional pen and paper methods. In some instances, limited internet connectivity also limited reliability of the software. Moreover, community distrust and misinformation about the product hindered implementation in some project locations.

It is therefore essential for projects to ensure that technological innovations are complemented by in-person support and follow up, ensuring that users feel comfortable with using the technology in their day-to-day activities and that the community better understands its purpose and utility.

In some cases, **existing methodologies or products** were introduced in new contexts, as in the case of Camfed (Zambia), which brought the pedagogy developed by Fundación Escuela Nueva to the Zambian context for the first time. The *Escuela Nueva* pedagogy was developed in Colombia to provide primary education in rural schools, using methods which move away from conventional teacher-centred practices towards child-centred, active, participatory, cooperative and personalised learning approaches. However, some issues were faced in adapting the curriculum to the local context. Teacher guides were not fully adapted to the Zambian curriculum, leading to challenges for teachers, who at times found them difficult to use in class and saw them as an added burden.

⁹³ Varkey's (Ghana) long-distance MGCubed system provides English and mathematics lessons two hours per day, five days a week in 72 schools in the Volta and Greater Accra regions of Ghana. Two classrooms in target schools are provided with solar-powered computers and projectors, through which real-time, two-way interactive distance lessons occur. Lessons are taught by a remote 'master' teacher and facilitated by in-class facilitators, who engage in demonstration, lecturing or discussion with the students.

Overall, innovation involving establishing new systems demonstrated some positive effects. Introducing **new structures and using innovative pedagogical skills** generally showed positive effects on learning. Developing **new technologies** as a way to enhance educational outcomes led to mixed effects, mainly because the ways in which they were implemented did not always address specific needs or account for environmental constraints and the capacity of users.

3.6 How scalable and sustainable are the activities funded by the IW?

Key Findings

Without the support of GEC-T it is unlikely that many IW activities would have continued. No projects were found to be fully sustainable and there is little evidence of concrete plans being in place to continue activities without the support of projects.

A few projects provide evidence of fundraising and there have been some successful bids to replicate elements of GEC projects in different contexts.

All projects have engaged with government education agencies at national, regional or local levels. There has been some success in projects' advocacy for policy change, and some success in incorporating GEC materials into curricula and teacher training. However, no activities have received ongoing funding from government.

Projects are overly reliant on schools, teachers and community volunteers to continue to implement activities without further support, remuneration or funding. While there is evidence of commitment to do this, in the longer-term this is unlikely to be sustained. In some cases, projects have established local focal points or committees tasked with sustaining particular activities, but these are unlikely to continue without further support or resources. However, there is some evidence of schools and communities taking ownership of activities and finding ways to continue them.

Approach to assessing sustainability in the IW

The business case recognises that for all windows (not just the IW) there was a risk that there would be a trade-off between sustainability and achieving short-term results. The business case states, *“Achieving sustainability (systemic change) from interventions is very hard to do, and so there is a risk that funds naturally flow to organisations who are able to clearly demonstrate short-term results, but are less able to articulate the long-term sustainability of interventions.”* It notes that *“in practice, there will need to be an understanding of how funding will be sustained beyond the programme period, which will require some implicit commitment to sustain support until alternative sources are in place.”*⁹⁴

This suggests that DFID considered that projects would only achieve sustainability if the programme was extended beyond the programme period.

From the outset, DFID and the FM expected IW projects to identify and report on the mechanisms that they would put in place to sustain their activities beyond the end of the GEC. The GEC programme ended in March 2017. DFID and the FM have established **GEC Transitions (GEC-T)** as a successor programme to the GEC. The aim of GEC-T is to provide further funding and support for those GEC projects that are able to meet and deliver GEC-T's objectives, with a focus on continuing to provide support for the cohort of girls who benefited from the first phase of the GEC. As such, GEC-T potentially provides some IW projects with more funding (and time) to enable them to find alternative resources to continue and sustain the activities and benefits delivered during both the GEC and GEC-T programmes. As the EM for the GEC only, we have not been involved in the development of GEC-T to date, which means that we are not able to comment further on the potential sustainability of GEC projects through this successor programme.

This section relies exclusively on the projects' endline reports. In their endline reports, projects were asked to respond to the following questions:

- Has the project put in place mechanisms that allow changes to marginalised girls' attendance and learning to be sustained?
- How likely is it that the projects' benefits will be sustained?
- To what extent has the project leveraged additional investment to sustain its activities?

All of the project reports included a section on sustainability, and most followed the guidance about what to report. However, the quality and depth of reporting varied a lot across reports. We have also drawn on evidence from each

⁹⁴ DFID (2012), Girls' Education Challenge, Business Case Version 4; London: DFID.

reports' effectiveness sections. There was generally a lack of definitive evidence for us to use to draw firm conclusions about sustainability across the IW projects. Projects' evaluation reports would have benefited from carefully considering the challenges projects face and including more feedback directly from project staff, beneficiaries, and stakeholders. It is important to note that projects' endline reports do not include all their activities in the sustainability sections. There was less reporting by activity than we found in other GEC windows, so it is likely that projects themselves have further unreported insights about the potential sustainability of their activities. We have assessed and synthesised the evidence provided, and highlighted the most useful insights into the opportunities and challenges that the projects faced in trying to sustain their activities, as well as some of the typical characteristics IW projects demonstrated in doing so.

[Annex D](#) provides summary tables assessing the evidence about sustainability that we harvested from each of the projects' endline evaluation reports. We used the following criteria to harvest and analyse evidence of projects' sustainability at endline:

- Information about which **type of activities proved most effective** and as a result should be sustained;
- The cash or in-kind **resources that the project has leveraged** specifically to sustain activities after the end of the project;
- Information about **who would be responsible** for sustaining key activities;
- Evidence of **key drivers** sustaining the project's activities;
- Evidence of **key barriers** to sustainability;
- A **judgement** about how likely it would be for each of the activities identified to be sustained, given the evidence available; and
- A judgement about the **sustainability of the project as a whole**.

We also categorised different aspects of projects' sustainability strategies at global, national, regional, school and community levels. We have presented our judgements of the projects' overall sustainability by using a RAG (Red/ Amber/ Green) rating system. As indicated in [Table 21](#), a green rating indicates strong evidence of sustainability, a fully sustainable project with strong support and funding in place; whereas a red rating indicates that no viable evidence of sustainability for most of the activities was presented in the project's endline report. The RAG ratings are not particularly scientific. Rather, they allow us to make reasonable evidence-based judgements about the general direction of projects' sustainability strategies as they stand now, to inform a general finding about the sustainability of the IW portfolio as a whole. In [Annex D](#), we provide the sustainability ratings for each individual project. Our overall assessments of the projects' sustainability are broadly in line with the assessments made by the FM in the GEC Project Completion Report⁹⁵, which emphasise the need for a more comprehensive approach to sustainability for GEC-T.

⁹⁵ We have used a RAG rating approach to enable us to systematically assess the sustainability of the IW portfolio as a whole. We note that the FM has not assessed the sustainability of each project in the same way, which may lead to differences in the judgements made by the EM and FM.

Table 21: Definition of sustainability ratings for IW projects

Rating Symbol	Rating description
	Green: Strong performance by project. Evidence of a fully sustainable project with support and funding in place to continue all desired activities.
	Green – Amber: Project performed well. Evidence of support and /or funding in place to support major (or a majority of) activities, or evidence of beneficiaries independently running activities.
	Amber – Red: Underperformance by project. Evidence of work towards sustainable activities but major or a majority of activities are not sustainable.
	Red: Poor performance by project. No viable evidence of sustainability for any project activities.

A key pre-condition to sustainability is an evidence-based understanding of which activities or interventions are the most effective in delivering an impact on marginalised girls' education outcomes, and as a result are the most critical to sustaining the delivery of these benefits in the long term. Only one project, PEAS (Uganda), acknowledged that they did not expect to continue with the full bundle of activities undertaken as part of the GEC after the completion of the project.

Key sustainability findings across the IW

Projects' engagement with government had some influence on policy, but had little impact on leveraging additional resources

All of the projects reported that they **engaged with governments at national, regional and district levels** to support the delivery of their activities. Projects had some success in aligning their activities with government policy and influencing policy change. However, this engagement has translated into few concrete plans for ongoing government funding of activities or government takeover of project activities. It is important to note that the full incorporation of project activities into national systems was not realistic within the three-year delivery timeframe of the GEC.

As discussed in more depth in [Section 3.4.2](#), some IW projects operated in challenging contexts. Red een Kind (South Sudan) reported that the education department in their project area was not at all functional, while projects in Kenya (ICL and LCDK) faced challenges around the implementation of national education policy through under-resourced local governments. There were few examples of projects benefiting from particularly positive policy environments and only one example of a project's proposals being directly integrated into national systems (i.e. the incorporation of LCDK's (Uganda) suggestions for changes to the national curriculum framework and teachers' education policy, as well as the inclusion of disability indicators in the national Education Management Information System (EMIS)).

Generally, IW projects have not been able to achieve enough government buy-in to the extent that activities can continue through government support after the end of the GEC. PEAS (Uganda) discussed their engagement with the Ugandan Government and securing an amended Public Private Partnership (PPP). They had originally aimed

to reduce their fees to “near zero” by securing additional funding from the government. However, the pace of these negotiations has been slow and they report that the government currently prefers a more comprehensive process of amending the PPP across the education sector. In Afghanistan, Child Fund had planned to secure a commitment from the Ministry of Education (MoE) and Ministry of Finance to take over their classes and reported that they were developing a handover process. However, midway through the project it became clear that the MoE would not take over the classes and they developed an alternative plan for children in the project’s classes to transition to MoE schools close to their communities instead, or where not possible, to another NGO’s community-based education classes in the same communities.

Projects also report participation in national policy and advocacy networks. For instance, BRAC (Tanzania) reported that they were elected as Director of the Tanzania Education Network, and Camfed (Zimbabwe) reported their membership of a National Advisory Committee. In Uganda, Opportunity and CSU reported positive engagement with government. Opportunity (Uganda) reported that they had signed three MoUs with the government to support the project. While the impact of these activities is not yet clear at endline, this engagement is important to build support for the activities delivered by GEC projects and to support future activities delivered through GEC-T.

At local or district levels, officials may have expressed support for project supported changes to schools, but often lacked the authority and resources needed to make decisions to provide support for projects’ activities to continue after the GEC:

“We can only handle supervision and monitoring, basically the technical part. Without the funding, there will be a problem. For instance, what will happen to transport? Sanitation we are sure can be sustained because the schools can budget for water to maintain the toilets. However, what about the support to parents? Though we can continue with training for the teachers but all these other areas need funding. I am afraid there might be a sudden change, which will turn out to be more frustrating to these children.”

Key Informant Interview, Endline Evaluation Report, CSU (Uganda)

As discussed in more detail in [Section 3.4.1](#), several projects successfully linked families with national programmes. These will potentially reduce the cost of school beyond the lifetime of the projects: LCDK (Kenya) enrolled 350 households in a government cash transfer programme, which includes resources to support children with disabilities; and Mercy Corps (Nepal) informed parents about scholarships available through a government scheme. There is a concern, however, that once information about these schemes stops being provided parents will not be able continue to access them.

IW projects are reliant on communities to continue activities

Projects are **widely reliant on schools and communities** to provide long-term voluntary support to continue to support activities, maintain facilities and ensure that new teaching and management practices continue to be implemented. Projects have helped change attitudes towards girls’ education, but from the evidence available, it is hard to assess the extent to which households and communities will sustain these changes in the absence of ongoing messages or support that continues to reinforce the value of girls’ education. This is a challenge that is largely unaddressed in projects’ reports.

IW projects presented a **mixed picture of community engagement** and how likely it is that activities related to attitude changes will continue beyond the short-term. At midline and endline, BRAC (Tanzania) found that communities were tired of contributing to project activities. Attendance at bi-monthly community meetings was low despite repeated visits from project staff. Parents had also stopped contributing, leading to a lack of materials and meals at schools. Some projects have established Focal Points or Local Committees with responsibility for maintaining specific activities (BRAC (Tanzania), HPA (Rwanda) and Camfed (Zimbabwe)). While some of these actors have received specific training in sustainability, they have taken on many ongoing responsibilities without additional resources or support.

VSO (Nepal) included examples of particularly strong support from the community and there is evidence of individuals independently taking on and extending project activities. Examples include: a “Big Sister” in Surkhet who procured free sanitary pads from the local Red Cross organisation to give to schools so that girls could attend school during their periods; Big Sisters and Adult Champions who mentored girls who were not Little Sisters to support them to go to school; and one facilitator who provided free tuition to children outside her Learning Support

Class students. Big Sisters have also begun to develop new activities. In Surkhet for instance, Big Sisters initiated a community savings fund that they will use to support marginalised girls in their community to go to school. Big Sisters themselves have paid NDP50 a month into the fund and have encouraged community members to make contributions, and reported that they plan to meet with local government officials to discuss how the fund can be best mobilised.

TfAC (Malawi) provides another example of community members' desire to continue to support girls as evidence that Agents of Change (AoCs) are willing to continue running the clubs after the project ends:

“We can see a lot of benefits from the Girls' Club so will continue to mentor these girls ... To our side as AOCs and other stakeholders like head teachers, we think we can manage.”

AoC Focus Group Discussion, Evaluation Endline Report, TfAC (Malawi)

The project has delivered sustainability training to 100 AoCs to build their skills to develop their own workshops, work with communities and community structures, as well as build skills in child protection. TfAC (Malawi) demonstrated an adaptable approach to delivering Girls' Clubs to make them more manageable to deliver. AoCs are now able to run a reduced number of clubs, and run clubs on any day of the week. After the first month without incentives or support, AoC reported that the approach had been successful, running 241 clubs with 8021 girls attending after the project had finished.

Another common community-based type of activity related to income generating projects. These activities are not widely reported in the sustainability sections of the IW endline reports. However, it is possible that these will continue independently of the GEC. To achieve this, activities needed to have had a large enough impact on participants' incomes and participants needed to have had training in how to continue to manage the groups or businesses. CSU (Uganda) demonstrate the importance of profits. They report that almost 70% of parents were running profitable enterprises at endline, but parents did not see the level of profits that they made as enough to support girls' transition to secondary school and due to low returns on their investments, participants are unlikely to continue to try to fit these activities around other commitments.

Planning and resources to retain teachers and maintain new facilities in schools are not often reported

School management and teachers expressed support for projects, and support changes in teaching practices. However, there is little evidence across the IW endline reports of planning to ensure that schools are able to retain the knowledge and skills that they have gained. Two endline reports comment on this: Opportunity (Uganda) reported that there was no evidence of plans in place to deal with teacher transfers; and Camfed (Zambia) reported that the project had only trained a small number of teachers in a school, making it harder for new knowledge and the use of new practices to be consolidated in the longer term. IW endline reports do not comment on the challenges caused by high levels of teacher transfers in their schools. Despite working in a particularly challenging context, Red een Kind (South Sudan) reported that they believe it is likely that the majority of trained teachers will stay in their current schools for a long period. Where organisations continue to run schools as low-cost private school (PEAS (Uganda)), these are likely to be better able to maintain and continue to support changes within schools and incorporate lessons learnt into the ongoing development of their own teaching materials and training.

There was generally **little evidence of planning for the continued delivery of in-kind support** to girls, which has enabled them to attend school or has facilitated learning. The provision of sanitary pads had the greatest impact on reducing the cost of schooling and improving attendance. However, the continued provision of sanitary towels is a challenge for IW projects who schools and communities expect to continue providing sanitary products. PEAS (Uganda) tackled this at midline by identifying local providers of sanitary products to supply school shops, and ICL (Kenya) found that schools were putting in place their own measures to source and distribute sanitary pads.

Mercy Corps (Nepal) facilitated girls' access to Solar Lamps to increase their study time. However, there is no discussion of the need for ongoing maintenance of these lamps. In contrast, WUSC (Kenya) and RI (Somalia) in the SCW provided Solar Lamps and found at endline that lamps were beginning to require maintenance or replacement and as a consequence reported that their ongoing use without securing additional resources was unlikely.

Regarding school buildings themselves, the majority of IW projects undertook improvements to school infrastructure, as discussed in [Section 3.4.1](#). These are associated with improvements in girls' attendance (PEAS

(Uganda), CSU (Uganda), LCDK (Uganda) and Link (Ethiopia)), and have improved school safety (CSU (Uganda) and LCDK (Kenya)). However, **there is no evidence of strategies in place to maintain or renovate facilities.** HPA (Rwanda) built changing rooms for girls alongside ECOSAN facilities. The endline report stated that schools were already struggling to maintain these toilets. There was a plan that goes some way towards ensuring that girls are able to continue to use the facilities (involving one teacher in each school trained to maintain the facilities and the MoE providing funds for supplies for existing changing rooms from June 2016).

Fundraising for replication or extension of some IW activities has been successful

Some IW projects will continue to receive support through the successor programme to the GEC, the GEC Transitions (GEC-T) programme. Without this support it is highly unlikely that many IW activities would have continued as they stand now, and very few would have continued beyond the immediate short-term. The extent to which girls, schools, and communities will continue to benefit from GEC-T will depend on the subsequent design of the projects who DFID and the FM have now tasked with continuing to support the same girls as they did in the GEC.

The endline reports contain some evidence of fundraising activities to secure new funds for the continuation of project activities beyond the life of the GEC programme, or to replicate and scale-up projects. An innovative example of efforts to raise funds was a Dragons Den style forum organised by Varkey Foundation at the Global Education and Skills Forum. HPA (Rwanda) also described how their pitch did not lead to any immediate offers of funding, but there was strong interest in elements of the project from funders such as the Dubai Cares Foundation and the Bill and Melinda Gates Foundation. Reports of **successful fundraising focus on the replication of GEC activities** in new contexts or builds on lessons learnt during the programme. Reported examples include:

- PEAS (Uganda) received funding from DFID Uganda to expand the School Tool information system to all remaining PEAS schools;
- Link (Ethiopia) describes GEC activities as essential in attracting additional funding from Banyan Tree Foundation for additional training for teachers in teaching English;
- BRAC (Tanzania) mentions that NORAD funded the replication of the out-of-school element of the project with an emphasis on the lessons learnt during the GEC;
- Red een Kind (South Sudan) have been asked by UNICEF to run a teacher training course over six months in 2017; and
- Varkey (Ghana) have received funding from Dubai Cares for a separate project using the same technology infrastructure to broadcast to around 500 schools in Ghana's Eastern Region.

Projects report fewer challenges around fundraising that is closely linked to an existing business. OPUL will continue to offer financial products from Opportunity (Uganda) and they are confident that the cost of delivering products, even on a larger scale, will continue to be sustainable. The report also mentions how the data collected during the GEC has significantly helped expand their business into other contexts. Other organisations mentioned advocacy efforts to raise the profile of their projects and assist them to raise funds – for example, TfaC (Malawi) mentions the production of a film advocating for girls' education and running learning events in both London and Malawi.

3.7 To what extent does the IW represent good value for money?

IW projects prioritised their investments in interventions that address the most pressing needs facing girls' education, i.e. school-related barriers and poverty. A significant share of IW expenditure also went towards *extra-curricular activities and non-formal education* to, broadly speaking, address barriers to girls' aspirations.

When grouped together, expenditure on school-related interventions (including: *school management and governance; teacher training and support; infrastructure and resources*) appear to be linked to the greatest number of learning beneficiaries.

Expenditure on *economic* interventions addressing poverty-related barriers are associated with delivering the most learning beneficiaries compared to other individual types of interventions. This is consistent with our findings that suggest that paying for school fees or ensuring girls have access to scholarships has helped reduce the cost of schooling and helped increase attendance (as an intermediary outcome supporting girls' learning).

The ranking of the most and least cost-effective interventions is different for literacy and numeracy outcomes. For literacy, *economic* interventions are the most cost-effective at on average £86.50 per literacy beneficiary.⁹⁶ Investment in *infrastructure and resources* (£212 per beneficiary), *teacher training, and support* (£211 per beneficiary) are the least cost-effective. For numeracy, *extra-curricular activities and non-formal education* are the most cost-effective, at on average £96 per numeracy beneficiary. *Economic* interventions are the least cost-effective (£159 per beneficiary).

The most cost-effective interventions to improve the *learning* (average of literacy and numeracy) of one girl by 0.5 Standard Deviations are *extra-curricular activities and non-formal education* (£68 per beneficiary). The very direct effects of tutoring clubs and accelerated learning classes offering tailored literacy and numeracy support to girls could explain this. Surprisingly, *teacher training and support* interventions are the least cost-effective at on average £116 per learning beneficiary.

Approach to assessing value for money

At midline, we based our value for money (VfM) assessment of the IW solely on the VfM assessments projects included in their endline evaluation reports. These were generally of very poor quality. So, the FM, EM and DFID agreed that projects' endline evaluations would not need to include a VfM assessment. Instead, the EM would use the available impact data (reported by projects) and programme finance data (reported by the FM) to conduct a VfM assessment at the window level.

Our approach to this VfM assessment is as follows:

- **We focus on VfM at the window level.** This means that we are looking at different types of interventions, their relative effects, and costs. We have not reported on the cost-effectiveness of individual projects to identify which projects delivered best value for money overall. The differences in: their contexts; the types of marginalisation they are tackling; type of girls they are targeting; the type of interventions they are delivering; and the different scales of their interventions makes it difficult to make accurate and meaningful VfM comparisons between projects. This is especially the case when using cost-effectiveness analysis. We did however explore VfM at the project level and for reference purposes only we have included our analyses in [Annex D](#).
- **We have used cost-effectiveness analysis to assess VfM at the window level** by comparing the efficiency of different ways (i.e. types of interventions) in which projects have used resources across the IW to impact on marginalised girls' literacy and numeracy outcomes. We could not use cost-benefit analysis due to a lack of relevant and accurate data to measure the lifetime social and economic returns on different types of investments in marginalised girls' education across diverse contexts.

⁹⁶ We calculated the unit cost by dividing total expenditure per intervention by each project's literacy impact relative to 0.5 Standard Deviations – each project's baseline to endline target – and then dividing by the total number of beneficiaries reached. We undertook the same exercise to calculate numeracy unit costs.

- We assess VfM by:
 - reviewing the **scale of investments** across different types of interventions;
 - assessing the **scale of the impact** in terms of the number of girls benefiting from learning gains;
 - assessing the **cost-effectiveness of different types of interventions** through analysis of the average unit cost of improving the literacy and numeracy of one girl by 0.5 Standard Deviations over and above the control; and
 - using these assessments together with key findings about the effectiveness and sustainability of the SCW to **draw broad conclusions** about the VfM of DFID's investment in the IW.
- **We recognise that this approach is crude and imperfect** and as such, the analysis and findings should be interpreted with caution. The key methodological limitations are as follows:

- *Metrics data was missing and /or incomplete for some projects*, most notably for LCDK (Kenya), Varkey (Ghana), VSO (Nepal), ICL (Kenya), BRAC (Tanzania), and Camfed (Zambia) who only provided baseline to midline data. Furthermore, no quantitative impact data was available for Eco Fuel (Uganda). There were also some disparities between the actual expenditure reported by the FM and the VfM data provided by the projects (see [Table 24](#) in [Annex D](#)).
- *Standardising the degree of girls' marginalisation* – in this assessment we assume that the level of effort necessary to increase the learning of girls is the same across all projects' contexts. This is of course not true. Girls are subject to various types of factors that marginalise them from education in different ways and to different degrees of severity. A standard level of improvement in learning for one girl will most likely require a different level of effort (and cost) compared to the same level of improvement for another girl in another context. This affects the type and scale of costs that are necessary to achieve the same level of improvement for each individual girl or group of girls.

This is a key reason why it is important to collect *data about the characteristics of different subgroups* to help us evidence and understand what works, for whom, under what conditions and at what cost. There is currently an insufficient amount of data about subgroups to conduct analysis of the differences in effects on girls who are marginalised in different ways and to different extents.

- *Not all learning tests are comparable* – we have to rely on projects' impact achievements which, as shown in [Sections 3.2 and 3.3](#), are not necessarily comparable across projects because they use different methodologies (different tests, different evaluation designs).
- *Assumption that cost categories are mutually exclusive* – the same types of activities do not necessarily fit solely into one type of intervention or the other. Moreover, projects have holistic and often complex approaches to their theory of change (ToC). This may distort the relative scale of investments in different types of investments at the window and project levels.

The main difficulty in analysing costs was classifying different types of expenditure activities. Inevitably, activities could only fall into one category, which was a subjective judgment on our part (although we did harvest this information from projects' endline evaluation reports). This might distort the projects' intended ToC. For instance, we decided to associate 'Community-based interventions' with attitudes to align with the way we structured our evaluation of the effectiveness of the IW.

- *Scale of investment does not necessarily correlate to an effective intervention* – it is possible that relatively small investment in some types of interventions may have a large effect or that some projects had competitive procurement practices and operational strategies in place to achieve the best price for inputs. Projects did not report on their decision-making about the costs they incurred, and we did not find explicit evidence of differences in effect sizes between expenditure on different types of interventions. Therefore, we need to be careful in assuming that the scale of investment correlates with the scale of effect or benefits realised by the targeted girls.
- *We have not captured wider 'value' (effects and benefits)* – value is defined in this assessment as the reported impacts on girls' literacy and numeracy. Unlike cost benefit analysis, cost-

effectiveness analysis is not the right tool for aggregating and comparing all lifetime costs with all lifetime benefits. For practical reasons, projects have not systematically quantified indirect benefits, spillover effects or multiplier effects, or conversely displacement and substitution effects. Furthermore, we have not captured less tangible (qualitative) benefits through this type of VfM assessment.

- *We have not captured future benefits that may be realised after a longer period of time* – some types of interventions may take longer to result in an observable effect on learning than others.
- *We have not captured the persistence effects of different types of interventions* – this relates to the extent to which a girl will continue to benefit after benefiting from the initial intervention. To some extent, this may be affected by whether or not activities are likely to continue after the end of the project. But it also relates to the type of capacity a girl has developed as a result of an intervention and the extent to which this enables her to progress at the same trajectory through her schooling and beyond into adulthood. Typically, persistence effects decay over time as other non-project related factors potentially have a greater effect on girls' education progression as they get older.

Despite these limitations, we believe that this assessment provides a useful overview of the VfM of the IW as a whole and complements the findings presented throughout the rest of the report.

IW expenditure by type of intervention

Figure 18 shows the relative investments made in different types of interventions across the IW. We have grouped these types of interventions by the barriers that have framed our evaluation of the effectiveness of the IW. We are then able to compare our VfM analysis with what projects reported worked well or less well. It is important to note (as above) that in categorising different types of activity costs we have had to make some subjective judgements, which may distort the actual picture of what projects invested in and delivered on the ground.

DFID invested £42.5m in the IW, which breaks down as:

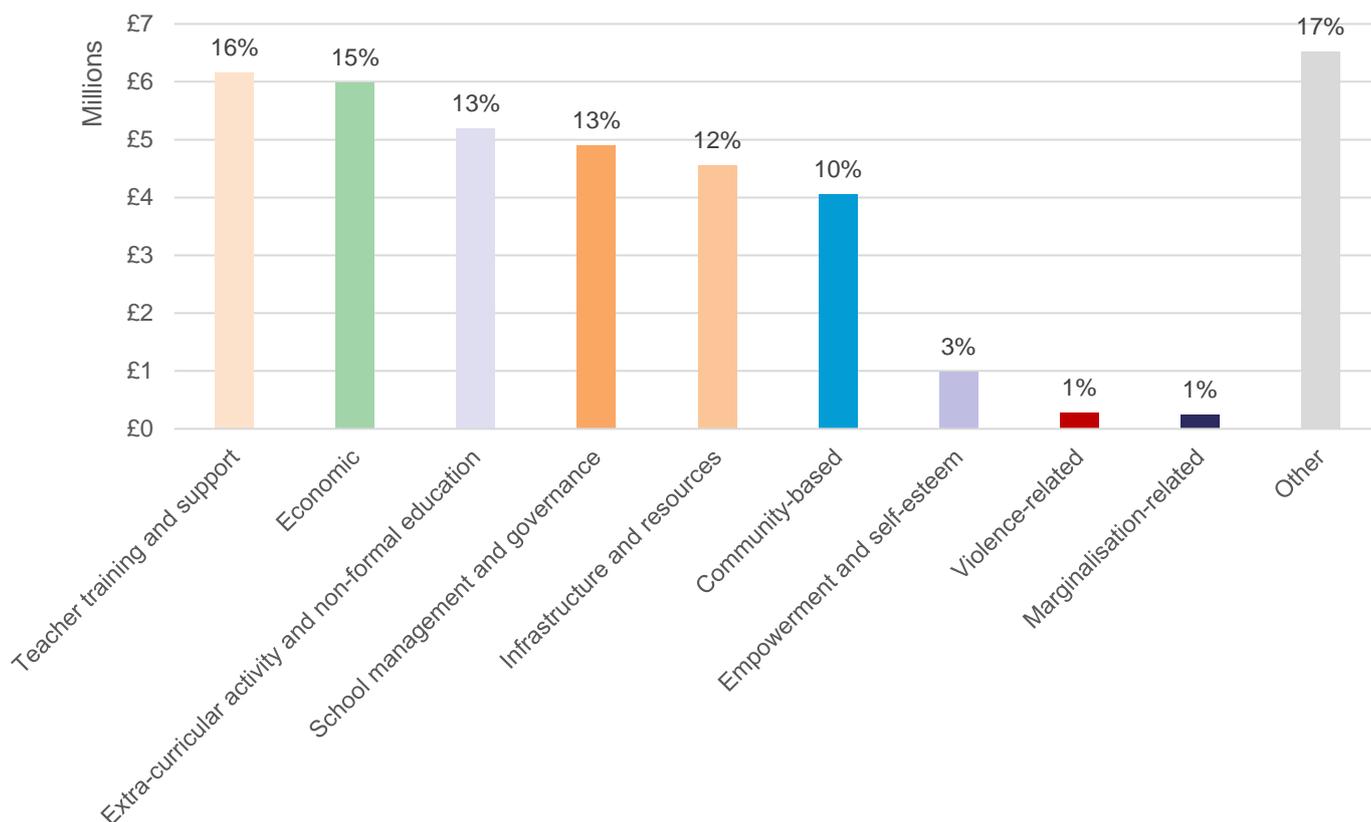
1. **40% (£15.7m) on school-related barriers**, consisting of:
 - a. 16% (£6.2m) on *teacher training and support*.
 - b. 12% (£4.6m) on *infrastructure and resources*.
 - c. 13% (£4.9m) on *school management and governance*.
2. **16% (£6.2m) on barriers relating to girls' aspirations**, consisting of:
 - a. 13% (£5.2m) on *extra-curricular activities and non-formal education*.
 - b. 3% (£1m) on *empowerment and self-esteem* interventions.
3. **15% (£6m) on poverty and livelihoods barriers**, consisting of *economic* types of interventions.
4. **10% (£4m) on attitudinal barriers towards girls' education**, consisting of *community-based* types of interventions.
5. **2% (£0.5m) on marginalisation-related⁹⁷ and violence-related interventions**

When grouped together, IW projects invested in interventions intended to address school-related barriers. This is consistent with the prevalence of these types of barriers reported by projects at endline as well as with expenditure patterns in the SCW. *Economic* interventions addressing poverty-related barriers accounted for the second highest level of expenditure across the window, at 15% (compared to 25% in the SCW). Combined, *extra-curricular activities* and *empowerment and self-esteem* activities broadly addressing barriers to girls' aspirations comprised 16% of IW projects' budgets (compared to 6% in the SCW). The *Other* category represents operation and overhead expenses, human resources, salaries and administrative costs, M&E and other types of activities.

⁹⁷ Marginalisation-related interventions in the context of the IW refers projects' expenditure on: interventions in remote or nomadic locations; interventions addressing cultural/ linguistic exclusion; interventions addressing disability; and interventions with specific other marginalised groups.

While the total budgets for SCW projects ranged from £3.6m to £28.4m, IW projects’ budgets ranged from £998,000 to £4.2m, delivered by organisations that tended to be smaller than those delivering SCW projects. The scale of projects across the IW along with expenditure patterns perhaps reflects the general tendency of organisations with smaller budgets not to focus on larger scale scholarships, bursaries, and teacher training programmes. Instead, projects tended to deliver more tailored support, which affects the cost-effectiveness analyses of interventions across the window.

Figure 18: IW relative expenditure by type of intervention



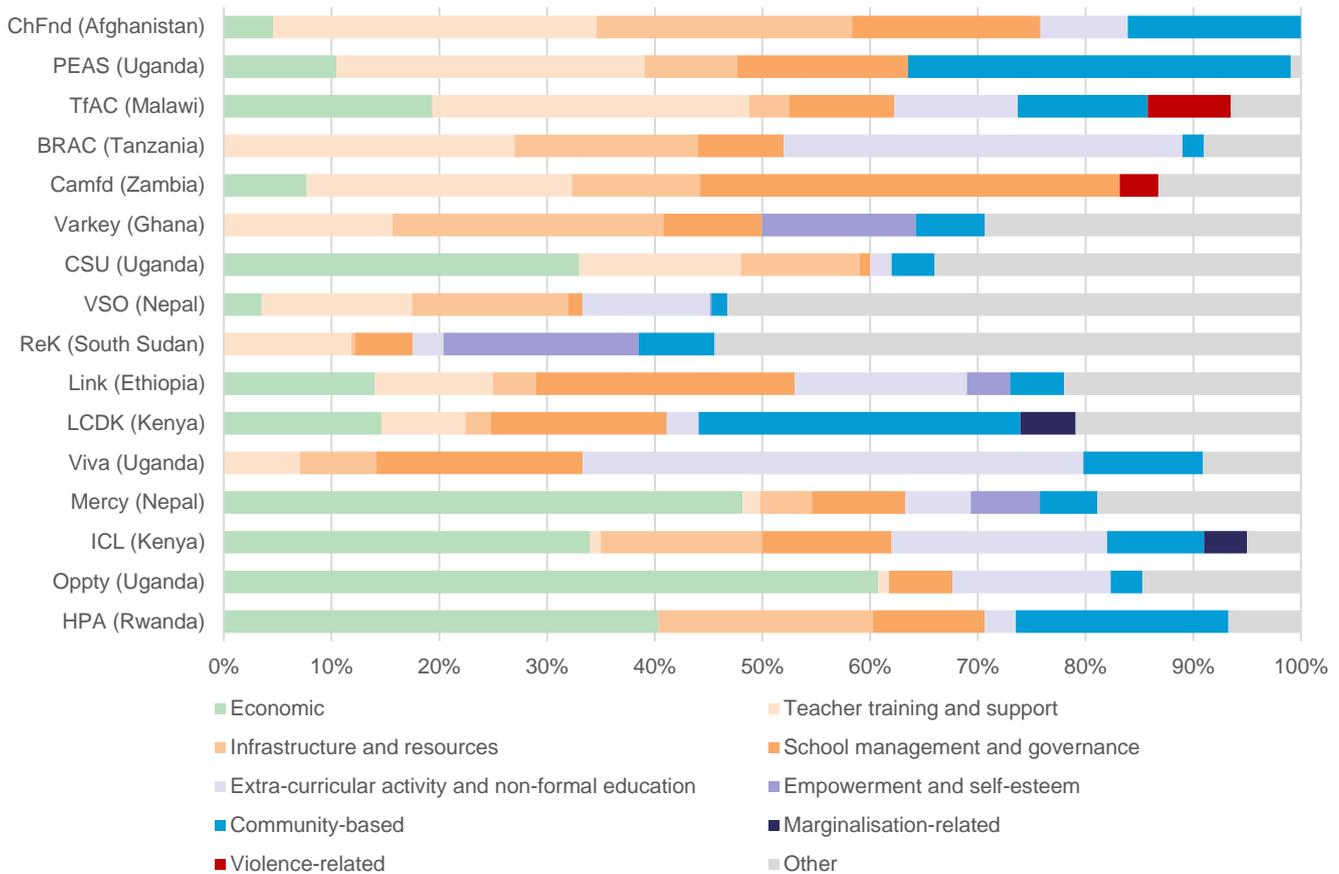
* Camfed (Zambia data to Q12 (midline))

† Other = operation and overhead expenses, HR, salaries & admin costs, M&E activities, 'other'

Figure 19 shows the individual investments made by each of the projects by intervention type. Sixteen out of the 17 projects provided VfM metrics data. Eco Fuel (Uganda) did not provide any data and the metrics data for Camfed (Zambia) was only available for baseline to midline. Project expenditure data simply confirms the pattern of expenditure at the window level showing that roughly half⁹⁸ of all projects’ expenditure was on interventions targeting poverty and school-related barriers. Our qualitative analysis shows that these remain the two most important barriers to marginalised girls’ education since baseline. This data also confirms that IW projects prioritised their investments in interventions that address the most pressing and evident needs facing girls’ education across the IW.

⁹⁸ As opposed to the Step Change Window in which roughly two-thirds of all expenditure was on interventions targeting poverty and school-related barriers.

Figure 19: IW relative project expenditure by type of intervention



* Camfed (Zambia) data baseline to midline, no data from Eco Fuel (Uganda)
 † Other = operation and overhead expenses, HR, salaries & admin costs, M&E activities, 'other'

It is worth recapping here on the key findings from our evaluation of what worked (Section 3.4) based on the evidence submitted by projects in their endline evaluation reports:

- *Economic interventions*, such as paying for school fees and in-kind support (e.g. the provision of school kits and sanitary pads) helped reduce the cost of schooling and improved attendance for girls.
- *Improvements in Infrastructure and facilities* have increased access to school and girls' attendance.
- The *quality of teaching* improved because of projects' interventions and had a positive impact on girls' educational outcomes. Improved teaching practices led to learning improvements as girls benefited from a classroom environment that proved more conducive to learning. Regular teacher training involving on-the-job feedback and a focus on engaging in constructive interactions with students had a positive impact on learning.
- *Schools working with parents* improved parents' engagement with education and increased girls' attendance. As teachers actively followed up on girls' performance, parents received advice and counselling about education and the reasons behind girls not regularly attending school.
- *Community-based activities* such as gatherings and visits to households raised awareness about girls' education and had a positive impact on parental attitudes and beliefs, leading to improved attendance for girls. However, community-based interventions did not directly improve learning.
- *Extra-curricular activities* have improved girls' self-confidence and aspirations, with some improvements in learning outcomes through tutorial classes, which helped girls increase their performance and confidence in their ability to learn.

- Interventions addressing *violence* have not had conclusive effects on girls' attendance or learning.

Our qualitative analysis of the evidence reported by IW projects suggests that interventions designed to address school-related and poverty-related barriers were most effective at improving learning and attendance, respectively. Across the IW, projects have spent the most on these types of activities, so it is logical that projects' endline evaluations would report the most evidence for them. As the Evaluation Manager conducting secondary data analysis of reported evidence, it is difficult to distinguish which types of activities have been most or least effective when this has not been the focus of the analysis and when faced with a potential reporting bias or deficit. However, it appears that projects have reported the types of activities they spent the most money on as being the most effective.

However, in analysing cost-effectiveness it is important to consider the scale of impact (or in other words, the number of girls reached and benefiting from different types of IW interventions), assuming that it costs more to reach and benefit more girls.

The number of girls benefiting from literacy and numeracy gains in the IW

Figure 20 shows the total number of *learning* beneficiaries reported by the FM as an average of the baseline to endline impact on literacy and numeracy (percentage achievement against target) multiplied by the number of girls reached by each type of intervention according to the target figures provided by projects and confirmed by the FM.⁹⁹

When grouped together, expenditure on school-related interventions (including: *school management and governance; teacher training and support; infrastructure and resources*) appears to be linked to the greatest number of learning beneficiaries. Projects' evidence about their effectiveness suggests that this may be because school-based interventions tend to reach all of the girls in the targeted schools. Projects counted and reported all girls as beneficiaries by targeting all girls in these schools.

Expenditure on *economic* interventions addressing poverty-related barriers are associated with delivering the most learning beneficiaries by individual intervention, followed by school-based interventions. This is consistent with our findings in Section 3.4 that in-kind support improved attendance. Paying for school fees or ensuring girls have access to scholarships has helped reduce the cost of schooling and helped increase attendance (as an intermediary outcome to learning). There is also encouraging evidence that the effects of time poverty and domestic responsibilities have improved because parents have greater awareness about the benefits of distributing tasks in a fairer way within the household. However, none of the projects delivering these types of interventions could demonstrate an impact on learning outcomes at endline. It is possible that this is the result of a reporting deficit (in that projects and their external evaluators have treated attendance as an end in itself), which is perhaps understandable given that it is a GEC outcome. Projects' qualitative research did not explore the extent to which improved enrolment or attendance had an impact on girls' learning.

Notably, **interventions designed to improve *school management and governance* are associated with the next largest number of learning beneficiaries** after *economic* type interventions, even though expenditure on these types of interventions ranked fourth across the IW. It is important to note, though, that this may be largely attributable to the results of one project, Link (Ethiopia), which spent most of its budget on activities associated with improvements in *school management and governance*. Table 25 in Annex D shows that Link targeted the highest number of beneficiaries (51,801) out of all IW projects, with Opportunity (Uganda) targeting the next highest number of girls (20,679). At endline, Link achieved 77% of its literacy target and 222% of its numeracy target, meaning that on average Link benefited all of the girls it set out to reach (51,801), which is substantially more than the next project, HPA (Rwanda) who reported 18,499 learning beneficiaries. The calculation of the number of girls who benefit from improvements in their learning is sensitive to the number of girls that a project sets out to target and reach at the start. So, **when a single project like Link has delivered a much greater (and disproportionate) number of learning beneficiaries than any other project across the portfolio, we need to**

⁹⁹ We calculated the number of learning beneficiaries for each type of intervention by dividing the total number of learning beneficiaries (calculated by the FM through its learning outcome logframe reporting methodology) by the percentage of the total expenditure by all projects on each type of intervention from the FM's metrics data. 'Other' overhead types of costs were distributed proportionately across the different types of interventions according to the proportion of expenditure on each type of intervention.

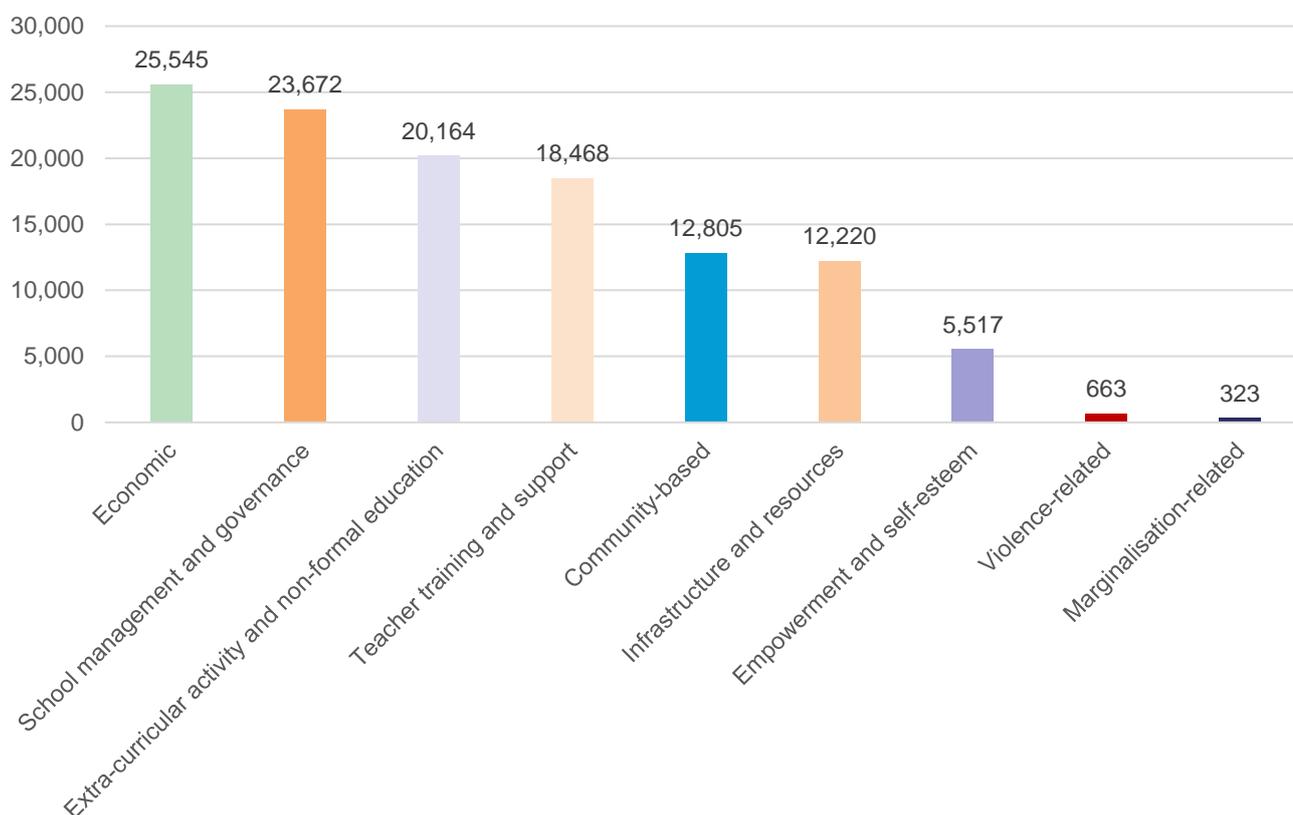
take care about making generalisations associating expenditure with the scale of impact across all types of IW interventions.

Perhaps surprisingly, *extra-curricular activities and non-formal education* are associated with the third highest number of learning beneficiaries, more so than *teacher training and support*. This is contrary to the pattern of expenditure across the window, with the most budget invested in teacher training and support (16%). This could be explained by the very direct effects of tutoring clubs offering tailored literacy and numeracy support to girls compared to teacher training, which may have a longer impact chain (time lag) in that teachers first need to be trained and become proficient in using new teaching methodologies before girls’ learning benefits from improved teaching in the classroom.

Contrary to the SCW, in the IW the number of learning beneficiaries per type of intervention was not consistent with the corresponding pattern of budget expenditure. The ways in which projects targeted girls may explain these differences, for example, if projects counted all girls in schools as potential beneficiaries from activities designed to improve school governance.

While it is useful to examine which interventions reached the most beneficiaries, it is also important to combine our analyses of costs and the number of girls benefiting to explore which interventions resulted in the most learning gains at the least cost.

Figure 20: Relative number of learning beneficiaries by expenditure on each type of intervention



*Extra-curricular activity and non-formal education

Cost-effectiveness of IW interventions

Figure 21 and Figure 22 shows the average unit costs per literacy and numeracy beneficiary, respectively, relative to expenditure on each type of intervention. This was calculated by dividing for each project the total cost of each intervention, adjusted for overhead costs¹⁰⁰, by the number of learning beneficiaries – calculated as the number of girls reached multiplied by twice¹⁰¹ the impact achieved in standard deviations – and then averaging across the window.¹⁰²

What has worked well at the least cost?

Interestingly, the ranking of the most and least cost-effective interventions is slightly different between literacy and numeracy. For literacy outcomes, the most cost-effective interventions were *economic*, which had a unit cost of about £87 per girl beneficiary, followed by *community-based* activities (£123 per beneficiary) and *school management and governance* interventions (£130 per beneficiary).

Conversely, for numeracy the most cost-effective interventions were *extra-curricular activities* (£96 per beneficiary) and *teacher training and support* (£102 per beneficiary), with *economic* activities achieving the highest unit costs by far at £159 per beneficiary.

The implications of these findings suggest that common approaches to teaching and improving girls' literacy and numeracy may not be as effective as approaches that specifically meet girls' numeracy learning needs (as opposed to their literacy learning needs).

It appears that interventions aimed at addressing barriers to girls' participation in school (e.g. poverty-related, attitudinal activities) are the most cost-effective for improving literacy. We found that activities such as paying for school fees and the provision of school kits and sanitary pads helped reduce the cost of schooling and improved attendance for girls (an intermediary outcome to learning), as did interventions targeting parental and community attitudes. However, for numeracy, more targeted activities aimed at improving learning directly, namely through *extra-curricular activities* such as tutorial or accelerated learning classes, and improvements in teacher subject-matter knowledge and methodological practices (from *teacher training*) were the most effective in improving girls' numeracy outcomes. This is consistent with projects' reported evaluation findings that girls valued tutorial classes as these were smaller, provided them with individual help and enabled them to ask questions that they may not have asked in front of boys or the whole class. Similarly, across the window, projects reported that teaching teachers 'how to teach', in addition to supporting teachers to gain subject knowledge 'hard skills', improved girls' learning.

The relative cost-effectiveness of tailored learning interventions is in line with findings from various meta-analyses and narrative reviews of the effectiveness of different strategies for improving learning. Various studies have found that interventions that individualise instruction (e.g. matching teaching to students' learning) as well as tailored teacher training can be highly effective in improving educational outcomes.¹⁰³ However, the studies also find that it is not the case that pedagogical programmes are inherently more effective than other interventions, but rather that they have to be implemented well and targeted enough to affect students' learning experiences.¹⁰⁴

Nevertheless, projects across the IW have not shown themselves to be more cost-effective in achieving improvements in literacy than numeracy. With the exception of the two least cost-effective interventions for literacy (*teacher training and support* and *infrastructure and resources*), unit costs for the remaining interventions are on average comparable to those for numeracy.

¹⁰⁰ 'Other' overhead types of costs were distributed proportionately across the different types of interventions according to the proportion of expenditure on each type of intervention.

¹⁰¹ This was a means of calculating the cost of a 0.5 Standard Deviation (SD) improvement for a single girl. We use 0.5 SD because this was equal to the most commonly used baseline to endline (lifetime) targets that were set for IW projects.

¹⁰² Our value for money analyses exclude CSU (Uganda) and Camfed (Zambia), whose impact data was inconclusive. These projects should in theory have 'infinite' unit costs, and were therefore omitted so as not to skew our calculations. Given this, average unit costs across the IW are understated, both at the aggregate and unit cost levels.

¹⁰³ J-PAL recently conducted a cost-effectiveness analysis using randomised evaluations of 29 programmes aimed at improving student learning. They found that teaching children according to their learning needs was the most consistently effective strategy at improving learning, in addition to being relatively cost-effective. (Access from: <https://www.povertyactionlab.org/policy-lessons/education/increasing-test-score-performance>) Similarly, Kremer, Branner & Glennerster (2013) provide cost-effectiveness results for a subsample of 18 studies and find pedagogical interventions that match teaching to students' learning levels to be among the most cost-effective interventions.

¹⁰⁴ Evans & Popova (2015); McEwan (2014); Murnane & Ganimian (2014)

Finally, while cost-effectiveness calculations suggest that *violence-related*, *marginalisation-related* and *empowerment and self-esteem* interventions are the most cost-effective, the scale of their impact in terms of the number of girls benefiting from improved learning was relatively small. *Violence-related* and *marginalisation-related* interventions each accounted for less than 1% of total expenditure, and only 0.6% and 0.3% of all learning beneficiaries across the window, respectively. *Empowerment and self-esteem* activities accounted for 2.5% of total expenditure and only 4.6% of total learning beneficiaries. Therefore, while these interventions are the most cost-effective, for the purposes of bringing about improvements in literacy and numeracy for a reasonably large number of girls it is unlikely they would proportionately scale to higher magnitudes of learning beneficiaries as a result of greater investment.

Least cost-effective interventions

Infrastructure and resource interventions along with *teacher training and support* stand out as the least cost-effective types of activities for literacy, while *economic* activities appear to be the least cost-effective way of intervening to improve numeracy. This may seem contrary to the evidence reported by projects about the types of interventions that they found to be more or less effective in delivering learning outcomes; however, projects' endline evaluation reports did not disaggregate learning outcomes (by literacy and numeracy) and explicitly explain which interventions worked well or not for each.

While improvements in infrastructure can affect the whole of a school, this is an indirect intervention primarily focusing on improving attendance and is typically reliant on other factors such as the availability of good quality teaching, teaching materials, a safe water supply etc. to improve girls' learning. In some projects' contexts, the quality of the education system is better than in others, which suggests that if girls stay in school longer their learning outcomes are likely to improve. However, in contexts where the quality of teaching is poor, this theory of change will not necessarily achieve improved learning outcomes without complementary interventions to improve teaching.

Intuitively, *teacher training and support* can have a more immediate effect on the quality of teaching, which over three years could benefit a larger number of girls and result in greater learning gains. However, even these types of interventions may be subject to a time lag in their effects on girls' learning, as students will only benefit once teachers are proficient in the new teaching methods that they have acquired. This also assumes that they are not transferred to another school or area, which was a key finding from our sustainability assessment.

For numeracy, *economic* interventions appear to be the least cost-effective. *Economic* interventions such as bursaries and scholarships support individual girls, but cost more on average to support each girl compared to interventions that benefit larger groups of girls. In their meta-analysis of learning interventions, Evans and Popova (2015)¹⁰⁵ find that cost-reducing interventions (such as school fee reductions or monetary grants) are the least effective programmes for improving student learning outcomes as measured by test scores. Nevertheless, there is substantial evidence that these interventions can effectively increase enrolment and attendance and are effective when coupled with activities proven to improve learning.

While *economic* interventions are expensive in that they are limited in the number of girls who can benefit from this type of support, this in itself does not explain why these types of interventions would be the most cost-effective means of improving literacy and the least cost-effective way to improve numeracy. At midline and endline, we found that projects had less impact on numeracy compared to literacy. The evidence suggested that this might be due to poorer quality numeracy teaching in schools. Projects that have an impact on enrolment and attendance through *economic* interventions may indirectly lead to improvements in girls' literacy more than their numeracy, which would explain the differences in cost-effectiveness between the two from expenditure on the same type of intervention.

In terms of improving learning within the relatively short three-year timescale of the IW, providing *infrastructure and resources* (for literacy outcomes) and *economic* interventions (for numeracy outcomes) is relatively less cost-effective compared to targeted interventions that are designed to more directly improve girls' learning. However, interventions improving access to *infrastructure and resources* and *economic* activities may take longer to lead to learning gains and as such are not apparent within this programme period.

¹⁰⁵ Evans, D. & Popova, A. (2015) 'What Really Works to Improve Learning in Developing Countries? An Analysis of Divergent Findings in Systematic Reviews'. Policy Research Working Paper 7203. The World Bank Group.

Overall, it is difficult to explain the patterns we found in cost-effectiveness by intervention across the IW for literacy and numeracy. It is most likely that they are the result of different combinations of interventions that projects have delivered as part of their holistic approaches and the different contexts in which they work.

Figure 21: Literacy Cost Effectiveness: Average unit cost (£) to improve the literacy of one girl by 0.5 SD over and above control – excluding CSU (Uganda) and Camfed (Zambia)

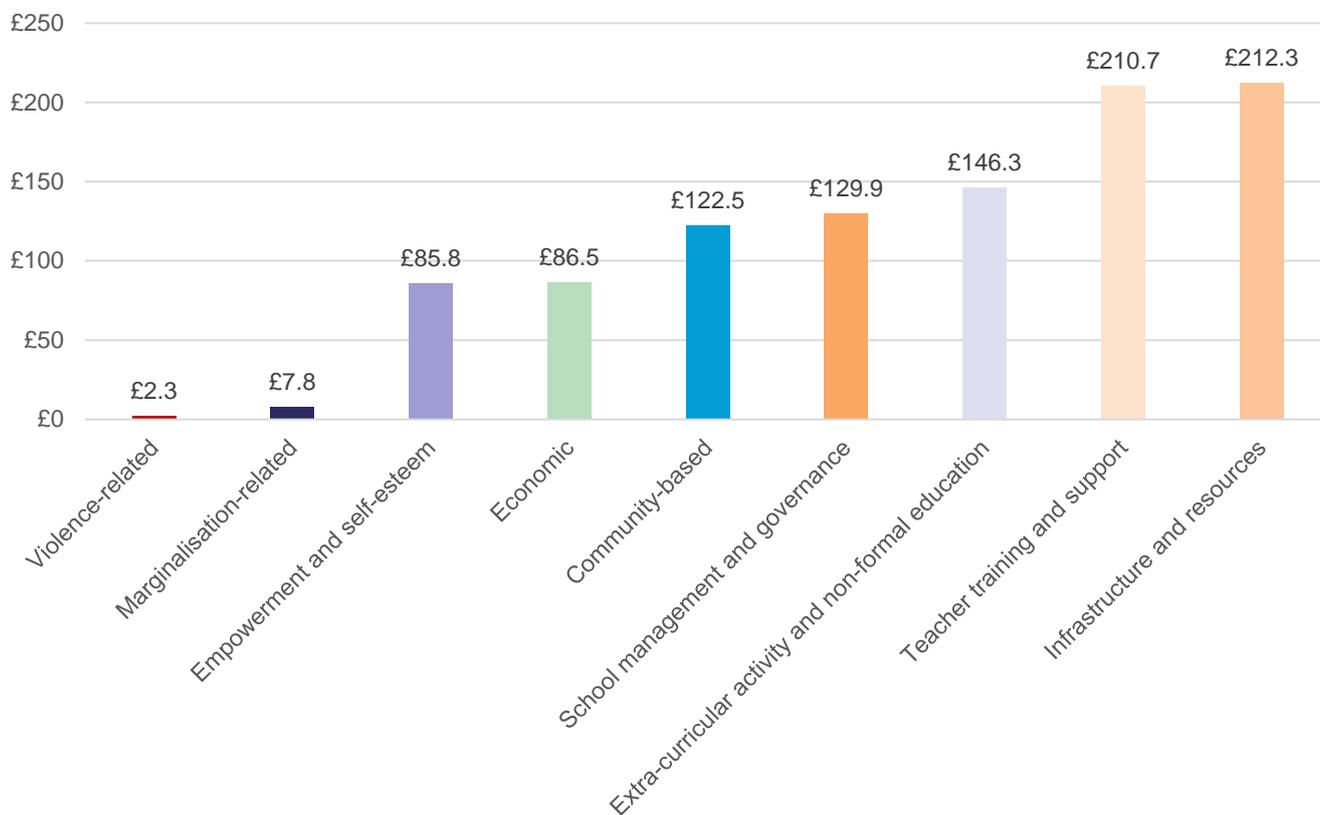
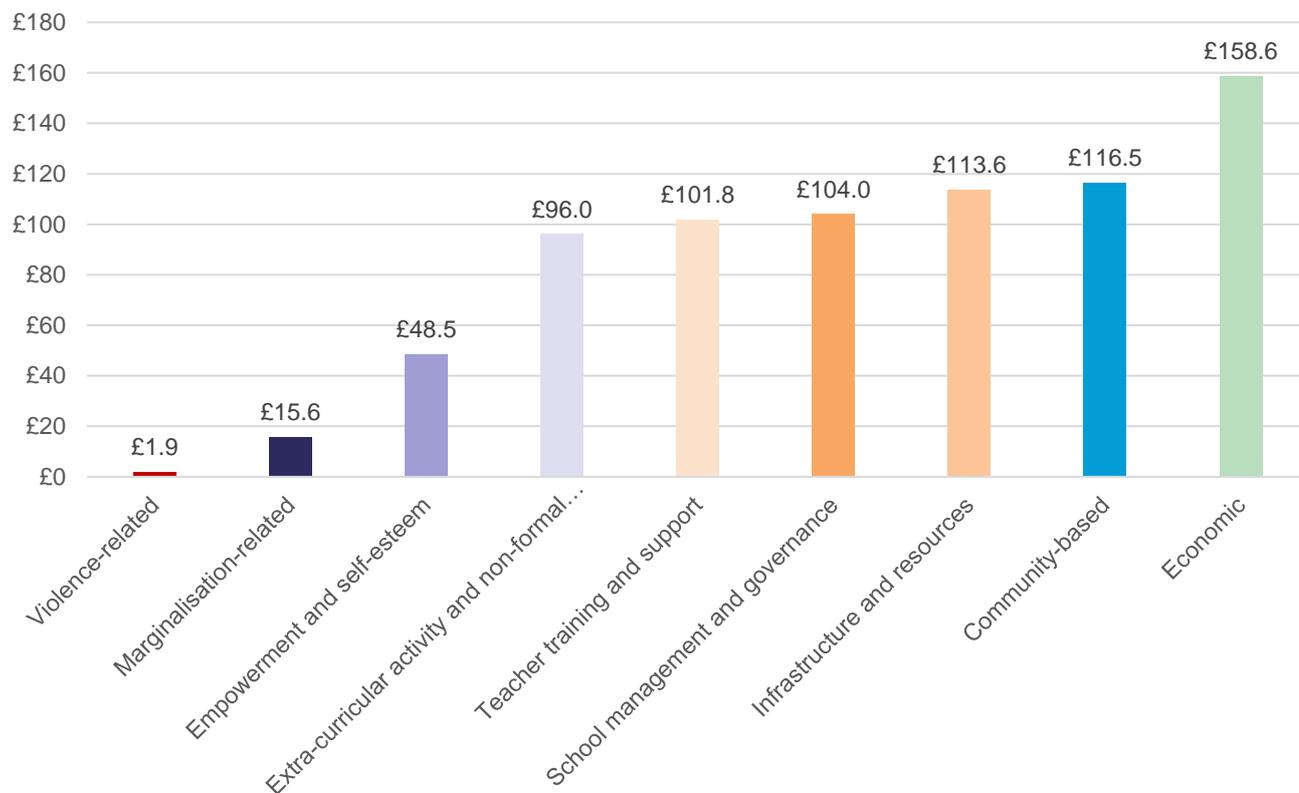


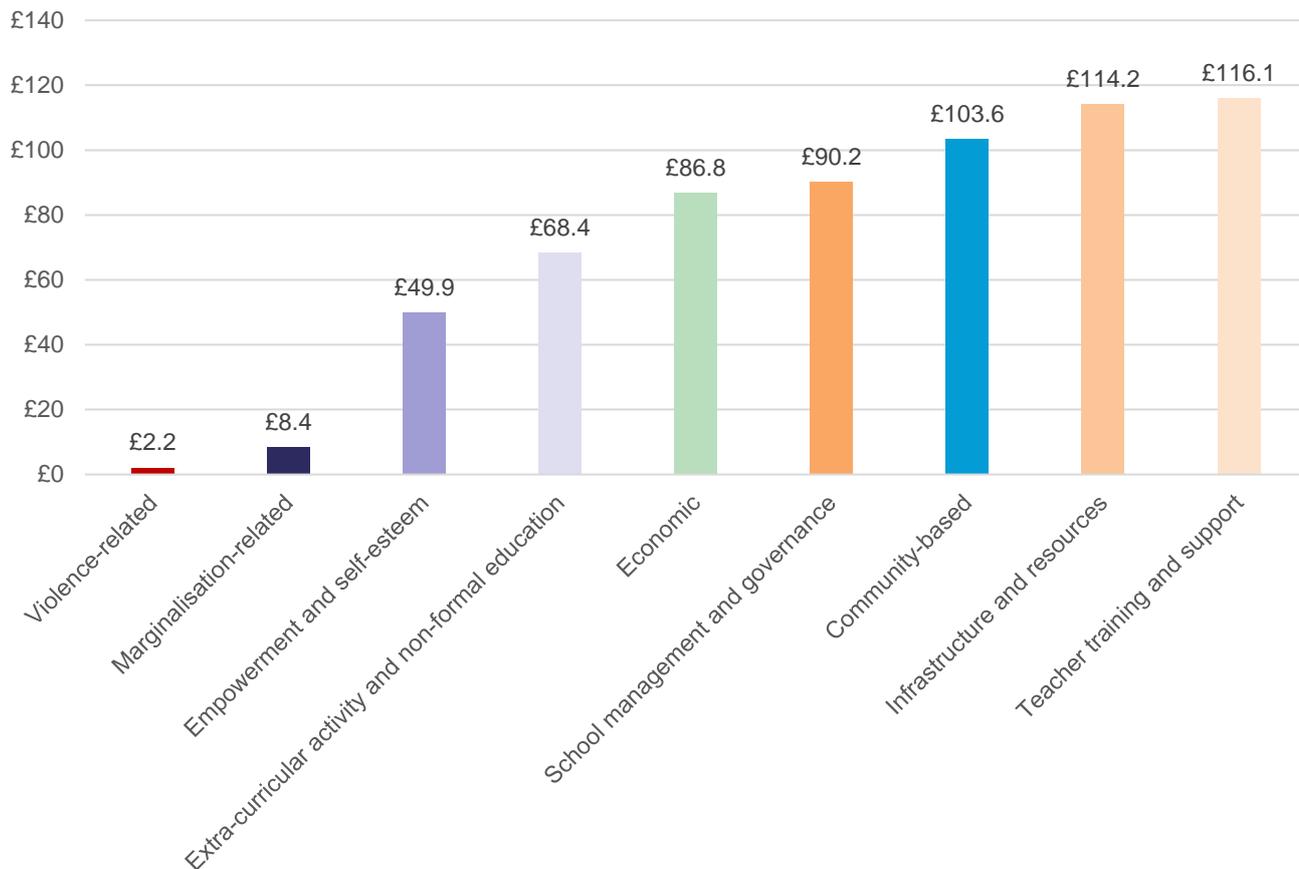
Figure 22: Numeracy Cost Effectiveness: Average unit cost (£) to improve the numeracy of one girl by 0.5 SD over and above control – excluding CSU (Uganda) and Camfed (Zambia)



Given the variation in cost-effectiveness interventions for literacy and numeracy, [Figure 23](#) shows the average unit costs for each *learning* beneficiary (averaged across literacy and numeracy), relative to expenditure on each type of intervention. This analysis enables us to compare more broadly what type of interventions were cost-effective after taking into account projects’ qualitative findings about which activities were more or less effective in improving girls’ learning, which did not differentiate between literacy and numeracy.

Extra-curricular activities, non-formal education and *economic* activities stand out as the most cost-effective interventions. As shown in [Figure 20](#), *extra-curricular activities and non-formal education* are associated with delivering the third largest number of learning beneficiaries by intervention type, representing 17% of all learning beneficiaries across the IW, while *economic* interventions delivered the greatest number of learning beneficiaries at 21%. Surprisingly, *teacher training and support* interventions are shown to be the least cost-effective when examined by learning outcomes.

Figure 23: ‘Learning’ Cost Effectiveness: Average unit cost (£) to improve the learning of one girl by 0.5 SD over and above control – excluding CSU (Uganda) and Camfed (Zambia)



Conclusions about the VfM of the IW

We based our VfM assessment on analysis of what projects across the IW have spent their budgets on, what effect this has had on improvements in literacy and numeracy, and the scale of impact on the number of marginalised girls benefiting associated with projects' expenditure on different types of interventions.

We acknowledge that there are limitations to the conclusions that we are able to draw from this type of assessment. However, the evidence suggests that at the window level, *extra-curricular activities and non-formal education* are the most cost-effective types of intervention after taking into account the number of girls benefiting from improvements in their learning and the level of improvements in their learning.

In broad terms, school-related interventions and poverty-related interventions appear to have had the greatest effect and benefited the greatest number of girls. However, our assessment of sustainability across the IW suggests there are significant issues in sustaining these activities, which potentially constrains the long term or lifetime benefits that could be realised from these interventions.

Our cost-effectiveness analysis suggests that *extra-curricular activities and non-formal education* are the most cost-effective interventions for improving learning. However, it is difficult to explain the differences in the cost-effectiveness of particular types of interventions given the complexity of: projects' holistic approaches; the relationship between delivering at scale (in terms of the number of girls benefiting) and the size of effect (in terms of 0.5 Standard Deviations); and the effect of individual projects that have had a disproportionate effect on the number of girls they have reached and benefited. In fact, evidence reported by projects suggests that the most effective intervention models have sought to simultaneously address multiple constraints to learning – including the low level of training among teachers, the lack of structured curricula/learning content, and the lack of adequate facilities. Projects need to gather better evidence about the effectiveness of individual interventions and sub-interventions, specifically relating to improvements in literacy compared to numeracy.

At the end of the IW our analysis of the impact of IW projects suggests that these interventions have not delivered the amount of improvement in literacy and numeracy to make them more cost-effective, despite demonstrating some effects that have resulted in benefiting a reasonably large number of marginalised girls across the window. It may be that projects need more time for some of these interventions to deliver the necessary increase in literacy and numeracy. Overall, our analysis suggests that projects need to make significant changes in their designs and delivery processes to increase the learning gains for girls through interventions that projects assess as the most cost-effective going forward.

4 Conclusions

What was the impact of the IW after three years?

Projects have had difficulties improving learning outcomes for girls during the lifetime of the programme.

The FM reports that the IW ‘substantially met’ its learning outcome target by reaching and benefiting 153,352 girls with improved learning outcomes^[1], a 98 percent achievement against the endline target. While the IW has reached and benefited a substantial number of marginalised girls, several projects did not have enough of an effect on girls’ learning to achieve their targets.

Achievement against target

The FM defined IW learning targets as an improvement of 0.5 Standard Deviation (SD) over the three-year implementation period of the GEC. Projects’ achievements takes into account the progression in control areas and the specific learning distributions among projects’ target populations. At endline, five out of sixteen projects achieved their literacy targets, and two projects achieved their numeracy targets. Some IW projects have struggled to reach their learning improvement targets, particularly in numeracy. It is possible that since projects aimed to target marginalised girls, learning improvements for these specific populations were more difficult to secure and may take more than three years of support to materialise.

Increase in words per minute (EGRA) and percentage points (EGMA)

Nine out of sixteen projects reported reading fluency in words per minute (EGRA) and provided data for baseline, midline and endline. Among these projects, treatment group scores are on average two words per minute above control groups’ scores at endline. Across the ten projects using EGMA, treatment group scores are on average four percentage-points above control groups’ scores at endline. Finally, contrary to our findings from midline, for projects that implemented interventions with both in-school and out-of-school girls, out-of-school girls’ scores did not find greater improvement than the scores for in-school girls at endline.

Projects were not always prepared for the challenges in reaching particularly marginalised subgroups.

Projects were not always prepared for the challenges in reaching particularly marginalised subgroups, such as girls living with disability or out-of-school girls, who required additional support to attend school and learn effectively. Some of the girls targeted by projects needed more support than others. Projects sometimes had to adapt their interventions to either include or exclude particular subgroups of girls from their original design. This suggests that projects could not always reach and benefit the range of marginalised girls they had originally intended to, possibly due to the variety of barriers to education different sub-groups of girls were facing. This also reflects the difficulties in targeting and designing projects tailored to the needs of heterogeneous populations.

As a result, the effects of IW projects on specific subgroups of girls within their target populations are unclear. Although various identification methods were used to select marginalised girls in target communities, resulting in a better understanding of the girls most in need, this does not seem to have translated into better learning gains for these girls. For instance, it is unclear at endline whether IW projects had a larger impact on girls with a disability compared to girls with no disability. Similarly, projects for which data is available do not seem to have had a greater impact on the poorest among their target communities, except for one project, Link (Ethiopia). Subgroup analysis also revealed that the learning improvements of out-of-school girls did not significantly differ from the learning improvements of girls who were in school.

It is important to note that unclear results at the subgroup level do not necessarily imply that some groups of girls did not improve their learning more than other groups. Some projects did not define or track subgroups, and even when projects identified subgroups in their data, associated sample sizes are usually not large enough to draw any meaningful conclusion on girls’ learning progress. Besides, there is no consistent definition of subgroups across the

^[1] Defined by PwC for logframe reporting purposes as *improvements in literacy and numeracy by GEC-supported girls that exceeds improvements by non-GEC supported girls, to an agreed target.*

IW and projects often ended up using their own definitions, which makes any window-level comparison even more difficult.

What worked well and less well in the IW?

The evidence suggests that projects struggled to improve girls' learning when they found it difficult to anticipate which barriers were most critical in preventing girls from improving their learning.

Within their sets of interventions, projects sought to address the barriers they assessed as important in their specific contexts and to their specific populations of marginalised girls. Projects achieve greater success in improving learning when they clearly identified the most important barriers that girls faced. As projects deepened their understanding of the environment in which they operated, they understood that some of the barriers they had been trying to improve were not always the most crucial barriers to tackle in order to improve girls' learning within the timeframes given.

Some projects sometimes overlooked the importance of supply-side barriers, such as poor school and classroom infrastructure, or the limited availability of qualified teachers. For instance, Red Een Kind (South Sudan) realised during implementation that they had had an excessive focus on demand-side barriers, such as those related to community attitudes. Similarly, across the IW, we found that increasing income through loans, savings and income-generating activities did not directly improve girls' access to education and learning, at least within the timeframe of the programme. While household income sometimes increased because of projects' activities, this type of economic intervention did not always increase access to education or improve learning results. Finally, girls' self-confidence and aspirations also improved since baseline because of projects' activities, although it is unclear how effectively this improved girls' attendance or learning. Support from mentors, female community members and other older girls improved girls' aspirations and self-confidence. Tutorial classes helped girls increase their confidence in their ability to learn. However, girls' learning did not improve as a direct result of tackling these barriers unless school-based barriers and issues around the quality of teaching were addressed simultaneously through other types of interventions.

Another example of the difficulty of identifying and addressing the most important barriers to girls' education is projects' work with households, parents and communities to convince them of the value of girls' education. Raising awareness about the importance of girls' education changed attitudes and behaviours in IW target communities. For instance, there is encouraging evidence that 'time poverty' and domestic responsibilities have improved because parents are more aware about the benefits of distributing chores and tasks in fairer ways within the household. However, it seems unlikely that this type of intervention benefited households who already valued girls' education, but did not have the means to substitute for the housework or earnings of the girls in the household (especially when hit by external shocks such as drought, flooding or conflict). For girls in these households, the most important barrier to education was not negative attitudes among parents and community, but the effects of poverty and their inability to meet basic needs severely constraining the household's capacity to send them to school. This suggests that projects did not systematically anticipate which barriers were most crucial in preventing girls from improving their learning, or in which order projects should address different but related barriers to enable girls to access school.

Interventions at the school level improved both attendance and learning. A range of activities designed to improve the quality of teaching were most effective.

IW projects that intervened at the school level and addressed issues around the quality of teaching worked best. Projects found that teachers' limited subject knowledge hindered girls' learning. Teacher training in literacy and numeracy was therefore crucial to improving teaching quality and eventually girls' learning. Improved facilitation skills as well as the use of participatory methods helped ensure that students understood what teachers were teaching.

As a result of projects' interventions, the quality of teaching improved and had a positive impact on girls' learning. Improved teaching practices led to learning improvements as girls benefited from a classroom environment that proved more conducive to learning. Regular teacher training involving on-the-job feedback and a focus on engaging in constructive interactions with students also had a positive impact on learning. Schools working with

parents improved their engagement with education and increased girls' attendance. As teachers actively followed up on girls' performance, parents received advice and counselling about education, including discussions about the reasons behind girls not regularly attending school.

Creative teaching methods in particular were reported by Viva's (Uganda) teachers as having changed their teaching style (more group work, clearer lesson plans, alternative disciplinary measures), contributing to improved relationships with students, positive discipline changes and more engaged students helping each other learn in the classroom. TfAC (Malawi) also highlighted the importance of facilitation skills as well as the use of participatory and interactive methods. ChildFund (Afghanistan) reported a substantial improvement in teaching competencies at endline, with most teachers now using lesson plans, checking students' understanding and promoting student participation.

Another example of the importance of quality classroom interactions was evident in Varkey's (Ghana) project. The distance-learning model supported by digital content and a student-centred pedagogical design aimed to address the barriers students typically face in Ghanaian classrooms, specifically teacher absenteeism and insufficient time-on-task. Classroom observations at endline emphasised the role of the facilitators in the classroom. For about 45 percent of the time, the remote 'master' teacher is not actively teaching, as the facilitators engage in classroom management, demonstration, lectures, discussion, or providing verbal instructions to the students. As such, facilitators were a key enabler to ensuring that remote teaching achieved its objectives in the classroom.

There is strong evidence that addressing the cost of schooling leads to improved attendance for girls. However, poverty and other structural barriers remain key obstacles to girls' education and learning.

Without a functioning schooling system with qualified teachers who are able to teach effectively, girls' learning appears to have stagnated during the course of the programme. However, the binding constraint to improving girls' education among projects remains, above all else, the effects of poverty on the target girls' households. While parents may understand and appreciate the benefits of schooling girls, they are seldom able to overcome the obstacles related to poverty and the constraint this places on girls accessing school. The cost of schooling and significant housework commitments of girls in particular has an effect on their attendance and learning.

At endline, projects provided strong evidence that paying for school fees, ensuring girls have access to scholarships, and providing school kits and sanitary pads helped reduce the cost of schooling and improved attendance for girls. There is also encouraging evidence that 'time poverty' and domestic responsibilities have improved because parents are more aware of the benefits of a more equal distribution of tasks within the household. However, despite projects widely attempting to address poverty, we find that many girls benefitting from IW interventions continue to face challenges associated with poverty. An inability to pay for transport to school or to cover school fees, or needing to ensure that girls keep contributing to housework still keep them away from regular schooling.

This suggests that three-year long projects working in dysfunctional and under-resourced education systems and with poor communities will find it difficult to address such deeply entrenched and pervasive structural issues. Viva (Uganda) reported this in their endline evaluation as, "the main concern expressed about this work is the relatively small scale of the interventions compared with the extent of need". The scale and timeframes of IW projects did not always allow projects to design and implement the type of systemic interventions needed to influence policy change and mitigate for the effects of poverty and inadequate national education systems.

Projects realised over the course of the programme that interventions including boys should be part of the solution to address gender inequalities.

Projects' interventions affected relationships between boys and girls, both positively and negatively. While the GEC set out to primarily focus on girls, the extent to which projects considered gender dynamics in their activities appears to have been limited, especially at the design stage. Several projects concluded at endline that they should include interventions to target boys in the future.

There is strong evidence that boys also face their own specific barriers to education. Some of the projects recognised that boys also face gender-specific issues, which lead them to drop out or not perform well in school. In target communities across the IW, boys from marginalised families are often as disadvantaged as the girls targeted by projects. For instance, Mercy Corps (Nepal) found that the attendance rate of girls was higher than that of boys

in treatment schools, and that a larger number of boys attached less importance to education. As a result, the project began advocating for a more gendered response to educating marginalised children throughout the programme. This suggests that a more systematic approach to including boys in the design of interventions focused on improving girls' education should be part of programmes such as the GEC.

Measuring the impact and effectiveness of the IW

The limitations of IW projects' evaluation designs and their implementation hindered our capacity to evaluate what worked well or less well in improving girls' learning outcomes.

Data quality is of concern for a large number of IW projects. Despite the provision of an extensive amount of guidance and technical support aiming to achieve a sufficient level of standardisation of approaches and research tools, various issues with the evidence presented at endline suggest that the findings across the IW may not reflect the full (positive or negative) picture and should be interpreted with caution. This is due to a number of factors, including the difficulty in collecting data in challenging contexts and in some cases the lack of qualified external evaluation firms to conduct sound analysis and reporting. Furthermore, external evaluators did not always thoroughly assess the effects of attrition and contamination on measuring the impact and effectiveness of the IW. As a result, the reliability of project evaluation data remains questionable in a number of cases.

Our intention at the start of the GEC, as the EM, was to aggregate project datasets for meta-analysis. Unfortunately, due to the variable quality of projects' quantitative data and the insufficient level of consistency, this was not possible either at baseline, midline or endline. Unlike the SCW, we did not collect any primary data to evaluate the IW due to budget considerations and a decision to prioritise the SCW. As a consequence, we were solely dependent on the quantitative and qualitative evidence submitted by projects. Projects' quantitative data frequently suffered from a lot of missing or incorrect values, as well as issues with labelling or coding that either made it hard or impossible to interpret and relate to the instruments they used. Data also did not often link to the previous waves of data collected at baseline and midline. Data was also inconsistent because of variations in the household survey instruments and learning tests that different projects used. Additional primary data collection by the EM would have helped analyse the aggregate effects across the window, but in the absence of this then more prescriptive guidance and requirements around the type of research instruments and data collation methods used would also help improve the quality and consistency of data submitted by projects.

Generally, projects provided little qualitative evidence of the links between changes in a particular barrier (at the output level) and the contribution this makes to improving education outcomes, in particular girls' literacy and numeracy. Projects were not required to quantitatively assess which interventions had the greatest impact and this would not have been feasible or desirable. A large number of reports though failed to present a coherent qualitative narrative about the effectiveness of different types of interventions in terms of their specific effects on learning outcomes. This implies that projects need to more systematically capture and present analysis in their reports that shows how, why and to what extent their activities contributed to reducing barriers to girls' education, and how changes in these barriers linked to learning outcomes, especially referencing the intermediate steps between outputs and outcomes.

A key learning point that emerges from our review of projects' evidence throughout the evaluation is the importance of rigorous qualitative research to establish the intermediate links between outputs and outcomes. Few projects managed to demonstrate strong qualitative research and analytical approaches in their endline evaluation reports. Especially at endline, we found that the quality of the qualitative evidence presented in reports was generally weaker than at midline. In some cases, projects re-used quotes from their midline research and suggested they emerged from their endline research. Projects were not asked to submit the transcripts of qualitative interviews and focus group discussions, so the FM or the EM could not assess the quality of the qualitative data and analysis.

The successes and limitations of different implementation processes are likely to have affected the results delivered by IW projects.

An important learning point is the need for external evaluators to conduct a process evaluation at the project-level according to a common understanding of what this involves. The fact that projects struggled to present a coherent narrative with regards to the effectiveness of their interventions in delivering learning outcomes relates to the lack

of documentation about the external factors that influenced project delivery, as well as the lack of information about local actors and communities, including those actors that worked in control areas. Some of the improvement in education outcomes may be attributable to other activities, either complementing or duplicating projects' activities. Conversely, contamination between treatment and control groups implies that external evaluators may not have fully captured some impacts.

Sustainability and value for money of the SCW

There is little evidence that many activities would have continued without further support. Severely under-resourced education systems and poverty makes it very difficult for projects to achieve sustainability.

At the outset, projects were asked to report on the mechanisms they had put in place to enable marginalised girls to complete a full cycle of education. The FM reports that all projects have put these mechanisms in place. Projects' endline evaluation reports focused on the extent to which these mechanisms could continue to support girls without further support through the GEC. At this stage, without the support of the successor to the GEC programme, GEC-T, it is highly unlikely that many IW activities would have continued as they stand now and very few would have continued beyond the immediate short term. This is perhaps not surprising. The business case recognises that for all windows (not just the IW), it was likely that there would be a trade-off between sustainability and achieving short-term results, especially given the short timeframe and the delays experienced by many projects. Many of the situations in which IW projects are working are extremely challenging. Girls and their households face severe poverty while government education systems are woefully under-resourced. In these conditions, projects have had to work closely with the schools, communities, government officials and agencies in order to get their projects off the ground and deliver results within a three-year implementation timeframe. In response, there is strong evidence of stakeholders' commitments to actively engaging and supporting the activities projects delivered, as evident in the match funding raised across the IW exceeding its target by 145 percent to lever in £8.2 million against a target of £5.7 million¹⁰⁶.

At midline, we reported that projects planned, mobilised and implemented their sustainability strategies too late in their project implementation periods. There is no evidence to suggest that this conclusion does not hold true now at endline. However, projects first needed to prove to communities and government officials that their activities worked. Without some form of 'proof of concept' it would have been hard for projects to get buy-in beyond the end of the projects' lifetime. This has taken time. As projects progressed, they should have gradually translated their community and stakeholder and engagement plans into more concrete sustainability plans once it became clearer what worked, how, why and under what type of conditions. At endline though, there is little evidence of these plans being in place at any level, which suggests that projects are overly reliant on communities, schools or government ministries to take responsibility for continuing activities without much further support or funding.

Projects have effectively engaged and mobilised government, schools and communities at multiple levels to deliver their activities. However, in the context of household poverty and severely under-resourced schools and education systems it is unlikely that these stakeholders would have the capacity to sustain a significant amount of activities within the time available.

Projects reported that they engaged with governments at national, regional and district levels to support the delivery of their activities, with some success in terms of aligning with policy and influencing change. However, engagement with government has typically not translated into concrete plans for ongoing funding of activities or government takeover of activities. It is important to note that the full incorporation of project activities into national systems was not realistic within the timeframe of the GEC. Even if projects had planned and implemented their sustainability strategies earlier, it is clear now that some barriers to girls' education are extremely difficult to address without further financial support from outside local or national education systems.

High levels of teacher transfers and a lack of resources in schools and education authorities to be able to maintain the training that teachers need to continue their professional development have compromised the long-term benefits of training teachers and improvements in teaching. These structural issues are largely outside the control

¹⁰⁶ PwC (August 2017) "Girls' Education Challenge Programme Completion Report – Reporting Period 16 April 2012 – 30 April 2017"

of the type of projects delivered through the IW, which are generally delivering relatively small-scale school-based activities. Under-developed education systems lack the resources and capacity to quickly adapt the ways in which they work and resource education within a relatively short timeframe of three years. The underlying causes affecting the supply of teaching and school infrastructure are systemic and as such take much longer and much larger investments to address in a sustainable way than IW projects could reasonably afford.

Projects are widely reliant on schools and communities to provide long-term voluntary support to continue activities, maintain facilities, and ensure that new teaching and management practices continue. Projects have helped change attitudes towards girls' education, but from the evidence available it is hard to assess the extent to which these changes will be sustained in the absence of ongoing support. Furthermore, despite their commitment to the activities projects are delivering, there is little evidence to suggest that communities have access to the resources and capacities needed to sustain activities without further physical and emotional support from projects. IW projects are working with poor families and communities, some of whom face extreme poverty and experience shocks to their livelihoods because of conflict, drought, flooding and political unrest. The combination of household poverty and severely under-resourced schools and education systems makes it highly unlikely that activities requiring a significant amount of time, effort and resources could be sustained.

The IW has substantially met its target for the number of marginalised girls benefiting from improved learning. However, the learning gains that projects have achieved are relatively low, in that girls are still progressing slowly through school phases. In the next phase, projects need to refocus their designs to have a more intensive and immediate effect on girls' learning gains, enabling them to progress more quickly through their schooling.

The IW improved the learning outcomes of 153,352 marginalised girls achieving 98% of the target number set in the GEC logframe.¹⁰⁷ The IW has delivered these results under challenging conditions while simultaneously facing under-resourced schools and education systems. At baseline, girls' learning levels were generally low – primary school-aged girls, on average, were three years behind international norms while the literacy gap for secondary school-aged girls was the equivalent of five years of schooling. Girls were progressing increasingly slowly as they moved through school phases. At endline, these girls are still progressing slowly.

The IW has reached and benefited a large number of girls. However, the improvements in girls' learning levels are small. It may be that projects need more time for some types of interventions to deliver a greater impact on girls' literacy and numeracy. However, this does not sufficiently explain why many projects have not achieved their targets and why the learning gains are relatively modest. In the next phase of the GEC, projects need to refocus their designs and delivery processes on those interventions that will be most effective in delivering a more intensive impact to enable girls to catch up and progress through their schooling.

¹⁰⁷ PwC (2017) 'Girls' Education Challenge, Programme Completion Report' to DFID

5 Recommendations

The following recommendations have been developed with a view to specifically informing the next phase of the GEC, which was launched in June 2017, and consists of the GEC ‘Transitions’ Window and the ‘Leave No Girl Behind’ Window. We have framed these recommendations primarily for DFID to consider. However, the actions required to deliver them potentially involve DFID, the FM, projects and the future independent Evaluation Service Provider.

Recommendations about the design and implementation of the GEC

- 1. Projects need to focus more on those barriers that are most critical in preventing girls from learning.** Projects have relatively short timeframes to deliver improvements in girls’ learning. In the next phase of the GEC, projects need to increase the magnitude of girls’ learning gains by clearly identifying the most important barriers to girls’ *literacy and numeracy*. Projects also need to address school-based barriers and the quality of teaching when implementing interventions that can only have an indirect effect on learning, for example, activities intended to improve enrolment and attendance. This recommendation builds on that made at midline, which highlighted the need for projects to focus on interventions that can have the greatest impact on girls’ learning levels within the given timescales.
- 2. Projects should consider refocusing their designs to ensure that the teaching in school is of sufficient quality to deliver the learning gains that girls need.** IW projects that intervened at the school level and addressed issues around the quality of teaching had the largest effects on girls’ learning levels. Improving teachers’ limited subject knowledge, training teachers in literacy and numeracy, and promoting the use of facilitation skills as well as participatory methods to ensure that girls understand what they are being taught, were particularly effective. This strongly supports the case for projects to consider refocusing their designs to include support that improves the quality of teaching that girls receive in school.
- 3. Projects need to reflect on how best to support different needs of marginalised girls.** Projects often treated marginalised girls as a homogeneous group, under the assumption that marginalised subgroups have similar educational needs and require similar types of intervention. However, girls living with disability or out-of-school girls engaging in income-generating activities often required additional, sometimes individualised support to attend school and learn effectively. This reflects the difficulties in targeting and designing projects tailored to the needs of heterogeneous populations, which projects could not always accommodate.
- 4. Gender dynamics should be a key focus for projects in the next phase of the GEC.** Gender is more than a cross-cutting issue. Gender relations are at the core of a programme specifically focusing on improving girls’ education. There is strong evidence that boys also face their own specific barriers to education, and projects’ interventions affected relationships between boys and girls, both positively and negatively. We recommend that projects consider including boys as part of their solutions to addressing gender inequalities, which most projects have raised in their reporting during this first phase of the GEC.
- 5. Projects should base their sustainability strategies on a realistic understanding of the barriers that they are able to overcome by the end of the project compared to those that need much larger investments over a longer period.** Many projects’ sustainability strategies were overly reliant on communities, schools or government ministries to continue activities. In part, this was because projects developed their sustainability strategies too late. However, projects’ sustainability strategies were unrealistic in contexts characterised by a pervasive lack of resources among the communities, schools, and education systems that they were working with. Sustainability strategies should explicitly recognise the trade-offs between addressing symptomatic effects to achieve short-term learning gains, versus the longer-term objective of addressing structural causes of poor education outcomes for marginalised girls to achieve sustainable changes in learning.

Recommendations about measuring the impact and effectiveness of the GEC

- 6. Projects should regularly monitor attendance as an intermediate indicator of improvements in learning.** Attendance proved very difficult to track and measure across the IW. While household-based measures are not precise enough to capture small changes in attendance levels, projects often found that school registers and records were not sufficiently accurate or reliable ways of measuring attendance. Household surveys may not be the most appropriate tool to capture attendance data. Measuring attendance requires strategies and tools adapted to the school context and project design, as well as the involvement of staff in the field to conduct regular follow-ups and spot checks throughout the course of the programme.
- 7. Projects need to improve their capacity to evidence, explain and report *how* and *why* their interventions have worked well or less well, with what effects on learning, for whom and under what different types of conditions.** In the next phase of the GEC, projects require a more prescriptive approach and greater technical oversight to deliver good quality quantitative and qualitative data and analysis across the programme. For instance, projects could be required to provide qualitative data in the form of redacted transcripts (or notes) of interviews and focus group discussions. A more prescriptive approach to the type of quantitative research instruments and data collation methods that projects are required to use would also help improve data quality and consistency across the IW. The intention is to improve the external validity of both quantitative and qualitative analysis and findings produced by external evaluators, and enhance the quality of learning from significant investments in these evaluations.
- 8. Projects need to be able to identify and track the extent to which specific subgroups are marginalised from achieving education outcomes.** At the design stage, projects should collect evidence of which socio-economic subgroups are the most disadvantaged in their operating context, including whether girls are significantly disadvantaged compared to boys. Once projects have defined their subgroups, they should track their outcomes throughout the life of the programme ensuring they measure the impact on these different subgroups as well as the overall target population.
- 9. Projects should monitor, evaluate, and report their implementation challenges and successes.** A key reason projects struggled to present a coherent narrative about what worked well or less well in delivering their learning outcomes relates to the lack of evidence and documentation about the internal and external factors that influenced project delivery. In particular, contextual factors have had a significant effect on projects' success, and projects need to take into account the effects of wider structural constraints that potentially threaten the validity of their theory of change and undermine their achievements. Projects should more systematically track and report the exogenous factors that influence their project design and delivery, as well as the wider effects of their interventions on local actors and communities. This would help projects capture spillover effects and their complementarity (including potential duplication) with other actors, to inform the ways they could adapt and strategically enhance the impact of their interventions.