

Girls'
Education
Challenge



Thematic Review

Extra and Co-Curricular Interventions

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GEC Thematic Reviews

This paper is one of a series of thematic reviews produced by the Fund Manager of the Girls' Education Challenge, an alliance led by PwC, working with organisations including FHI 360, Nathan Associates and Social Development Direct.

The full series of papers is listed below:

- Understanding and Addressing Educational Marginalisation
Part 1: A new conceptual framework for educational marginalisation
- Understanding and Addressing Educational Marginalisation
Part 2: Educational marginalisation in the GEC
- Economic Empowerment Interventions
- Community based Awareness, Attitudes and Behaviour
- Addressing School Violence
- Girls' Self-Esteem
- Extra and Co-Curricular Interventions
- Educational Technology
- Teaching, Learning and Assessment
- School Governance

For further information, contact the Fund Manager at girlseducationchallenge@uk.pwc.com

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Executive summary

This synthesis paper summarises lessons and results from Girls' Education Challenge (GEC) projects that included extra and/or co-curricular interventions as one of their main strategies for improving girls' educational outcomes. For the purposes of this paper, co-curricular activities are defined as activities and learning experiences that complement student learning in the classroom, and are connected to the academic curriculum. Extra-curricular activities are those not formally connected to the academic curriculum, although they might be coordinated by schools.

A review of external literature shows that while there is a relationship between students' participation in extra and co-curricular activities and student learning outcomes, the specifics can be unclear. Overall, extra and co-curricular activities tend to be associated with a range of positive outcomes for students, such as higher grades and test scores, decreased school dropout, and greater educational attainment.

Of the 37 GEC projects, 28 had some form of extra and/or co-curricular activity as part of their programme design. Extra and co-curricular activities across the GEC portfolio included a range of intervention types, from those with an explicit focus on learning outcomes such as tutoring clubs to those with a focus on developing a broad range of knowledge, skills and competencies including mentoring schemes and technology-supported empowerment clubs. Evidence from the GEC portfolio indicates that where academic support is explicitly part of the extra and co-curricular intervention, girls' learning outcomes are likely to be better. At the same time, projects including interventions designed to both boost learning and build personal assets such as self-esteem, also demonstrate positive outcomes for girls.

Four key lessons around the design and implementation of extra and co-curricular interventions have been drawn from the GEC portfolio:

1. Extra and co-curricular interventions provide good opportunities for promoting more gender equitable attitudes among a range of school stakeholders and are often the only opportunity for projects to introduce new teaching methods, including more student-centred approaches, and supplementary curricula.
2. Mentors can play an important role in supporting girls in school; increasing self-efficacy, improving performance in class and improving attendance.
3. Where appropriate, boys should be included in extra and co-curricular activities (even when these are focused on girls) to prevent a negative response from communities and/or families, and to prevent boys from becoming disengaged with school.
4. Demand for extra tuition and other interventions that aim to boost teaching and learning can be high, challenging projects' capacity to deliver and to target the interventions appropriately.

Finally, the paper presents four considerations for practitioners and policy makers in light of the findings:

1. Ensure that interventions are well designed, include a focus on the quality of teaching/tutoring and provide supportive learning environments.
2. Engage with government at all levels in order to ensure the sustainability of extra and co-curricular interventions.
3. Consider outcomes beyond attendance and learning.
4. Carefully designed, mixed-methods evaluations can enable a deeper understanding of how extra and co-curricular interventions support girls' learning and development.

1. Introduction

This paper summarises lessons and results from Girls' Education Challenge (GEC) projects that included extra and/or co-curricular interventions as one of their main strategies for improving girls' educational outcomes. *For the purposes of this paper, co-curricular activities are defined as activities and learning experiences that complement student learning in the classroom, and are connected to the academic curriculum. Extra-curricular activities are those not formally connected to the academic curriculum, although they might be coordinated by schools*¹.

The paper draws on information and learning from project baseline, midline and endline evaluation reports, annual reviews, and other project documentation. The vast majority (28 out of 37) of the GEC's projects have some form of extra and/or co-curricular activity as part of their project design. The portfolio covers a range of intervention types, from those with an explicit focus on learning outcomes, such as tuition classes, to clubs with a focus on developing a broader range of knowledge, skills and competencies including mentoring empowerment. Some of these interventions were planned from the outset, others were introduced later as a result of adaptive programme design, particularly when baseline research indicated that girls' learning levels were lower than initially anticipated.

Through a review of programme design documents, baseline, midline and endline evaluations, material from a GEC webinar on extra and co-curricular programming, and annual reports from projects, this paper explores how projects have designed and delivered interventions as part of their efforts to improve educational outcomes for girls. This opportunity for learning helps us to better understand how to design and deliver projects effectively.

A review of external literature² shows that while there is a relationship between students' participation in extra and co-curricular activities and their learning outcomes, the specifics can be unclear. There is compelling evidence that these kinds of interventions do have an effect both on student learning outcomes, and on their personal and social development³. While much of the external research has been conducted in North America and Europe, there is a growing body of research from contexts similar to those in which GEC projects have been implemented. There is also more recent research available examining the impact of specific activities - including sports programmes, and sexual and reproductive health interventions - on students' personal and social development. A good example of an evaluation designed in this way is Care's Power To Lead Alliance (PTLA) programme which measured the impact of various interventions on girls' leadership capacity, but not specifically on their learning outcomes (Miske Witt and Associates, 2011). Some studies have attempted to unpack the relationship between these broader student outcomes, for example self-esteem and self-confidence, and their learning progress (Bradley, J. L. and Conway, P. F. 2016). See *the Girls' Self-Esteem Thematic Review for further discussion*. In addition, the impacts of interventions such as after-school girls' empowerment clubs,

¹ These definitions are used fairly interchangeably in external literature.

² A review of academic literature, peer-reviewed journals and grey literature was updated in June 2017.

³ Massoni, 2011; Eccles et al, 2003; Mahoney and Cairns, 1997; Metsäpelto and Pulkkinen, 2012; O'Donnell and Kirkner 2014

designed to address gender inequality in school settings, tend to be under researched (Unterhalter, E., 2014).

Figure 1, thematic theory of change



A review of the theories of change of the GEC projects which include extra and co-curricular activities shows that these interventions were largely designed around a broad theory. *If* a series of assets are developed for girls - these include academic assets (learning in safe and supportive learning spaces), personal assets (values, attitudes, capabilities) and social assets (friendships, personal relationships) *then* girls' confidence, aspirations and motivation to learn are enhanced, which in turn creates shifts in their engagement with learning. This should ultimately support improved learning outcomes for girls.

Evidence from the GEC portfolio demonstrates that where academic support is explicitly part of the extra and co-curricular intervention, in other words, where the intervention is more direct in its support of improving teaching and/or learning, girls' learning outcomes are likely to be better. Projects that have included interventions designed to both boost learning and build girls' personal assets, such as self-esteem, have also tended to demonstrate positive learning outcomes.

However, there are limitations to the evidence presented in this paper. Disentangling the effects of extracurricular interventions has proven difficult, as projects often implement a number of related interventions which work together to support beneficiaries. Therefore, this paper focuses on a selection of GEC projects that either included extra/co-curricular interventions as a central part of their theory of change, or where a relationship between the extra/co-curricular intervention and learning outcomes has been established in the project's evaluation. It is supported by the inclusion of lessons learned on the design and implementation of extra and co-curricular interventions.

2. Overview of the extra and co-curricular interventions discourse

The relationship between extra and co-curricular interventions, and student learning progress

A review of external literature shows that while there is a relationship between students' participation in extra and co-curricular activities and student learning outcomes, the specifics can be unclear. Overall, extra and co-curricular activities tend to be associated with a range of positive outcomes for students, such as higher grades and test scores, decreased school dropout, and greater educational attainment⁴. A 2005 systematic review of girls' and boys' clubs found that student participants had higher grade averages and scores in reading, spelling, history, science, and social studies compared to the control group that did not participate in the project (Arbreton, Sheldon and Herrera, 2005).

There is no clear distinction in the literature between extra-curricular and co-curricular interventions in terms of students' learning outcomes, although one study concludes that school-based, structured, extra-curricular activity participation (defined as co-curricular activity in this paper), in contrast to participation in unstructured activities, is associated with a number of positive adolescent developmental outcomes, namely (a) higher academic performance and attainment; (b) reduced rates of dropout; (c) lower (to a degree) rates of substance use; (d) less sexual activity among girls; (e) better psychological adjustment, including higher self-esteem, less worry regarding the future, and reduced feelings of social isolation; and (f) reduced rates of delinquent behaviour, including criminal arrests and antisocial behaviour (Feldman, A. F., & Matjasko, J. L., 2005).

Extra and co-curricular activities and wider definitions of the student progress

In recent years, similar research into the knowledge, skills and competencies needed for students to transition into the workplace, and to become productive and engaged adult citizens, has developed further. The role of extra and co-curricular interventions has been central to discussions about these wider definitions of student progress. The interventions are designed to supplement the core curriculum, and support student engagement with academic subjects, as well as develop their broader competencies. Some studies show how involvement in extra-curricular sports activities not only improves students' academic performance, meaning higher test scores, but also leads to greater academic aspirations, higher graduation rates, and lower dropout rates. In addition, students who took part in these extra-curricular activities tended to show higher self-esteem when making choices than students who did not take part (Hartmann, 2008). Similarly, Martinez et al (2016), suggest that students' participation in extra-curricular activities can increase their connectedness and sense of belonging to their school, highlighting the possibility of a relationship between learning outcomes and student perceptions of the school environment. Metsäpelto & Pulkkinen (2012) go further to demonstrate how student participation in arts activities, sports

⁴ Farb, A. F., & Matjasko, J. L. 2012; O'Donnell and Kirkener 2014

or academic clubs led to better academic outcomes as well as a better sense of connection to their school.

Early attempts at developing a broad framework around student progress include WHO (1999) and UNESCO's (2004) work on life skills. The latter outlines five basic areas of life skills development - decision-making and problem-solving; creativity and critical thinking; communication and interpersonal skills; self-awareness and empathy; coping with emotions and coping with stress - defined as part of students' healthy psycho-social development. More recent efforts have attempted to build an even more holistic approach, designed to support the development of young people's knowledge, skills, and competencies for both work and life (SQA, 2016). Research from UNESCO (2012) demonstrates the importance of work-related soft skills including the ability to establish viable self-employment ventures; the knowledge of how to retain jobs in a rapidly changing economy; job search and readiness skills; and the capacity to make smart choices with an eye on a more prosperous future. Others have drawn from the need to develop a set of competencies and mind sets that will support young people as they navigate their way into adulthood. Schools and other learning spaces can provide safe and supportive spaces in which girls and boys can develop these essential skills and competencies, either alongside or incorporated into subject learning, or through sport and the arts.

Another prevalent framework guiding research into extra-curricular activities is the youth development approach that specifies the broad goal of extra-curricular activities as promoting positive development for children and young people (Metsäpelto & Pulkkinen, 2012). The positive youth development approach is a relatively recent field of research directed toward understanding how well-being and developmental success can be nurtured⁵. Evidence has shown that positive youth development and growth is linked to the opportunities provided by schools, communities, and other developmental settings to learn physical, intellectual, psychological, emotional, and social skills in the presence of warm and nurturing relationships that enable social integration and a sense of belonging, and offer adult guidance and limit-setting alongside physical and psychological safety. High quality extra-curricular activities have been shown to include many of these development promoting features⁶.

Adolescence is considered to be an important life stage for supporting young people's development – this is reflected in the theories behind the design of some GEC projects (and will become even more relevant in the next phase of the GEC which has a strong focus on secondary education), particularly those seeking to support the development of healthy relationships and access to information about sexual and reproductive health. There is an assumption made in the literature that reducing the risk of early pregnancy reduces the chance of early drop-out from school for girls. Research demonstrates the positive impact of proactive extra and co-curricular interventions on early pregnancy and on young people's sexual reproductive health knowledge and behaviour; using three large, nationally representative data sets, Zill et al⁷ reported that rates of teenage childbearing were lower when adolescents participated in 1 to 4 hours of extra-curricular activities per week.

⁵ Benson, Scales, Hamilton, & Sesma, 2006 cited in Metsäpelto & Pulkkinen, 2014

⁶ Mahoney, Larson, Eccles, & Lord, 2005 cited in Metsäpelto & Pulkkinen, 2014

⁷ Zill et al, 1995 cited in Feldman et al, 2002

Additional studies⁸ have found that music and drama participation were related to lower levels of sexual activity on the part of adolescents.

What does this mean for education programming targeted at marginalised girls?

Two recent systematic reviews of girls' education programming - Unterhalter et al (2014) and Sperling and Winthrop (2015) – offer important insights into the impact of extra and co-curricular interventions on girls' learning progress. These build from a broader framing of girls' educational progress beyond learning outcomes and confirm that:

- Learning outside the classroom through formal and informal activities (tutoring, after school clubs) can have a positive impact on girls' learning outcomes.
- Out-of-school formal and informal activities are important for girls' learning progress when these activities are clearly linked with formal provision in school.
- Teaching about personal, social and health issues - both in school and in extra/co-curricular programmes - may have a positive impact both on girls' participation and their knowledge acquisition.
- Complementary learning spaces provide opportunities to discuss gender equality, develop confidence and reduce risk taking behavior.
- Although widely supported among practitioners, data about the impact of 'safe space' interventions such as girls' clubs on girls' learning outcomes is inconclusive. However evidence does indicate an important role played by girls' clubs in girls' empowerment and developing their self-esteem.
- Female role models can significantly increase parents' aspirations for their daughters, and adolescent girls' own aspirations for their education and careers. There is some evidence that the gender gap in educational attainment may decrease in communities with more exposure to female leaders.

Extra and co-curricular activities can support girls' progress, particularly in the context of poor quality educational settings where, for example, literacy skills can be acquired and enhanced during after-school reading sessions and drama performances; learning and study skills can be enhanced in study clubs; and confidence can be built in the activities undertaken in girls' clubs⁹.

Factors such as girls' self-esteem and confidence in their abilities; increased knowledge of their rights (including the right to education); and an understanding of their ability to challenge gender norms/gendered expectations also appear to be important both for their personal development and for their engagement with learning. *Self Esteem is explored further in its own thematic review paper in this series.* The underlying basis of many extra and co-curricular interventions, particularly when targeted at marginalised girls, tends to be an empowerment theory, where interventions are designed to enable girls to develop agency (including their power and ability to make decisions) and to enhance their sense of achievement¹⁰. The theory is that supporting girls' personal development is likely to support their learning progress.

⁸ K. E. Miller, Sabo, Farrell, Barnes, and Melnick, 1998 cited in Feldman et al, 2002

⁹ Chambers et al 2004; Namukwaya, 2014; Uniterria, 2014

¹⁰ Kabeer, 1999; Plan, 2014

Although evidence remains limited regarding their impact on learning, access to safe spaces is widely considered to be important for marginalised, adolescent girls (Amin, 2008). These may be the only space in which they can safely acquire critical life skills, build their self-esteem and communicate openly with their peers. These spaces can also double as fora in which remedial classes, leadership training, life skills and vocational training, and financial education can be provided. In addition, the opportunity for girls to be able to develop and to challenge gender norms in safe spaces can be critical in contexts where the dominant norms do not enable girls to actively participate. Overall, safe spaces, whether formal or informal, offer an environment where girls can meet frequently, interact with their peers, mentors and positive role models, strengthen their social networks and enjoy freedom of expression and movement.

3. Extra and co-curricular interventions in the GEC

Of the 37 GEC projects, 28 had some form of extra and/or co-curricular activity as part of their programme design¹¹. Some of these interventions were planned from the outset, others were introduced later as a form of adaptive programme design, particularly when baseline research indicated that girls’ learning levels were much lower than initially anticipated. This was particularly the case for the smaller Innovation Window projects, several of whom added extra and co-curricular interventions following baseline research, as it became clear at this point that some form of remedial academic support would need to be offered in order for students’ learning outcomes to reach the GEC target levels. Across the GEC portfolio, these activities took place both in school and in the community. They targeted both in-school and out-of-school girls, and some included boys. Activities were targeted at both primary and secondary school students, depending on the target population for the project and the intended outcome for the activity. Extra and co-curricular activities across the GEC portfolio included a range of intervention types, from those with an explicit focus on learning outcomes such as tutoring clubs to those with a focus on developing a broad range of knowledge, skills and competencies including mentoring schemes and technology-supported empowerment clubs. The activities reviewed for this paper are included in the table below.

Intervention type	Detail of activity
Tutoring/homework clubs/reading corners/literacy clubs	These tended to be after school classes or learning clubs that were focused on remedial learning, specifically literacy and numeracy.
Mixed and single sex after school clubs	This included girls’ clubs, boys’ clubs or mixed clubs, usually designed to share information, knowledge and skills, and particularly for girls to build confidence and self-esteem and raise aspirations.
Life skills interventions (including sexual and reproductive health rights (SRHR) and financial literacy)	This includes interventions that supported group activity focusing on self-confidence and self-esteem, raising awareness of girls’ rights, and providing information on SRHR and/or financial literacy.
Mentoring interventions (big sister/little sister support; peer support; learner guides;	Individual girls were either paired with a mentor (an older girl, an adult, a teacher or another peer) or group mentoring was facilitated. Mentoring interventions are either informal

¹¹ Based on a review of the GEC projects’ Theories of Change and logframes.

female leaders/professional women mentors)	and tend to be designed to support self-esteem, self-confidence and life skills development, or they are linked to the formal curriculum and are designed to support learning outcomes in literacy and numeracy.
Non formal education provision (including accelerated learning programmes)	This includes accelerated learning for out-of-school girls, designed to condense a longer curriculum into a shorter timeframe. <i>A more detailed discussion about this intervention type is included in the Teaching, Learning and Assessment Thematic Review.</i>

4. Key findings

Evidence from the GEC portfolio indicates that where academic support is explicitly part of the extra and co-curricular intervention, in other words, where the intervention is more direct in its support of improving teaching and/or learning, girls' learning outcomes are likely to be better (Coffey 2017). At the same time, projects with interventions designed to both boost learning and build personal development seem to be associated with positive learning outcomes. To help draw broader lessons from the portfolio's emerging evidence, this section is followed by a discussion of key lessons learned from designing and implementing extra and co-curricular interventions in the GEC.

A small number of projects that had an extra and/or co-curricular intervention at the centre of their design reported consistently higher attendance rates in treatment groups, particularly where the intervention was designed to address the needs of a specific sub-group of girls.

A small number of these projects reported consistently high enrolment, attendance and retention rates. Where project interventions were designed to address a particular barrier to education, they were more likely to report positive and consistent progress in attendance and retention. One was the Viva-Crane project in Uganda, which was designed to remove the economic and social barriers to education for a specific sub-group, out-of-school girls, and support their return to mainstream school. This was done through the provision of an accelerated learning programme for girls who had previously had no access to a second chance education. The project's Creative Learning Centres (CLCs) reported attendance rates above both their midline and their endline targets. One strategy which may have supported these positive results was that mentors attached to each CLC followed up on girls who were absent, and made home visits to assess the situation and provide support. This was a highly individualised and targeted support system for marginalised girls and their families. The project was also able to demonstrate impressive retention figures, with a high proportion of girls transitioning from the project's CLCs into mainstream school. Motivation appeared to be a significant factor, with all girls reporting that their main purpose for attending the CLCs was to return back to school. This might explain why 100% of them went back into school compared with the 74% of girls in the control group.

The project implemented by Mercy Corps in Nepal offers another example. As was the case at midline, the attendance rate of treatment girls was higher than that of control girls at endline. Of 589 girls, 17 girls dropped out in the middle of the course, with 572 girls completing the full course. This equated to a 97% retention rate and was a significant

achievement for this group of girls, highlighting the perceived value of the project's after school clubs, which were reported on qualitatively in the project's endline evaluation.

Some projects sought to understand the effect of the extra/co-curricular interventions on attendance. Save the Children Mozambique's endline evaluation of its Literacy and Numeracy Boost intervention found that academic self-efficacy was a strong predictor of attendance. Each point increase in academic self-efficacy resulted in an average increase in attendance of 5.8%. The more a girl feels capable of completing academic tasks, the higher her attendance. This makes intuitive sense and validates the project's activity focus on empowering girls in schools, and on girls' clubs. School belonging was also a strong predictor of attendance - feeling a sense of belonging to one's school leads to higher average attendance. This finding is also reflected in the literature, and demonstrates why extra and co-curricular interventions should be designed in a way that explicitly considers a variety of factors that may influence attendance and learning outcomes.

Another project that demonstrated the link, as well as the importance of good design, is Camfed International's project in Tanzania and Zimbabwe, a central component of which was learning support provided by teaching assistants (Learner Guides), study groups, and the provision of additional teaching and learning material (Study Guides). Between midline and endline, 3% of students in Tanzania had dropped out of school. Drop-out figures were much higher in the Zimbabwean schools - nearly one fifth of the whole cohort of students (19.08%) had dropped out by endline. The evaluation's qualitative research reported observations from both teachers and students that despite the project's direct support including bursaries to cover school costs and fees, and the academic support provided through the study groups and learning support, some girls still dropped out of school. This indicates that there were underlying issues that the project's interventions were unable to address. One theory attributes the drop-out to early marriage and pregnancy, a scenario that was also observed in both of the Nepal-based GEC projects.

A small number of projects were able to demonstrate quantitatively that direct educational interventions such as tuition classes and revision clubs had a positive effect on learning outcomes.

A small number of GEC projects where an extra or co-curricular intervention formed a central part of their project were able to demonstrate a relationship between the intervention and girls' learning progress. There were also a number of projects where learning results did not meet the targets projected, but which nevertheless provided useful lessons around extra-curricular interventions. Save the Children in Mozambique was one. The project's Literacy Boost intervention did have an impact on students' phonemic awareness and on reading affinity. For numeracy, the project could demonstrate the intervention's impact on pattern completion and subtraction subtasks. In addition, Girls' Club membership, a parallel intervention, was found to positively affect both literacy and numeracy at statistically significant levels¹². An important indirect relationship between membership of the Girls' Club and literacy performance was also reported - membership of the Girls' Club seemed to increase girls' motivation, which in turn increased their literacy performance.

¹² A regression-based mediation analysis (ANOVA) was conducted.

Camfed's endline evaluation considered the proportion of girls and boys who reported that they used the supplementary learning material (provided by the project's My Better World curriculum) in after-school study clubs. The evaluator attributed its use to a behavioural change – more self-directed learning and improved school attendance. More than 90% of students surveyed at endline in both countries (Zimbabwe and Tanzania), reported that the project learning materials had led to a change in their behaviour in school or their attitude towards school, exceeding the targets set for both countries. This is thought to have contributed to students' learning results.

Qualitative research from Camfed International's endline evaluation found that the project's study groups had a positive impact on learning by promoting student-to-student learning and empowering learners by enabling them to ask each other questions, manage their own time for study, and agree together on specific topics, location and study times. These academic study groups allowed students who were behind to catch up with their studies, identify and review difficult concepts introduced in class and correct any misunderstandings. They were also reported as offering an interactive approach to learning, and promoting critical thinking and creativity.

Link Community Development in Ethiopia supported over 12,000 girls with extra tutorial classes. The classes' tutors reported an increase in girls' subject knowledge following the tutorial classes; higher test scores were also reported. Girls valued the tutorial classes because they were smaller than standard classes (which were up to 60-70 students per teacher) and the girls could get more individual help with material that they did not understand. Another factor that may have contributed to the effectiveness of tutorial classes was the fact that they were considered to be a safe learning space by girls, as they were for girls only. In the tutorial classes, girls were given the opportunity to ask questions, seek support and to do additional work, without boys present. The tutors had received specific training in conducting the classes and in teaching in a participatory way. Having this supportive space reportedly contributed to girls' improved performance and the development of their self-esteem.

Most projects delivered a life skills component through their extra or co-curricular intervention. Girls tended to report positively on learning about life skills.

The vast majority of GEC projects that implemented extra or co-curricular interventions reported that they had included coaching, teaching or training in life skills. This included developing girls' knowledge and skills in sexual and reproductive health (including menstrual hygiene management) and financial literacy, and soft skills/non-cognitive competencies such as leadership. Many of these projects included both explicit content or implicit expectations that girls' sense of self, i.e. their self-esteem and self-confidence would be developed through these specific activities (*See the Girls' Self Esteem thematic paper*). While girls themselves tended to report a positive engagement with the life skills components, it is unclear whether or how this influenced their engagement with learning.

Camfed International's project in Tanzania and Zimbabwe was one of the few that attempted to unpack the relationship between life skills development and learning outcomes. A cohort of Learner Guides (school leaving age teaching assistants) supported, mentored and provided both academic and personal support for younger girls (and boys) using the project's core curriculum, My Better World. Their work was supported by teaching and

learning material (study guides), study clubs and Teacher Mentors (trained teachers). The theory is that by supporting girls in the development of ‘soft’ skills (for example, leadership and critical thinking), as well as their academic abilities (for example, literacy) more robust pathways are developed which are likely to encourage girls’ engagement with learning. The project’s endline evaluation found that this approach was largely successful, and despite the challenge of establishing suitable assessment criteria, was able to establish a relationship between the development of life skills and learning results.

Mercy Corps Nepal was another project that attempted to assess the impact of their extra and co-curricular intervention both on girls’ learning outcomes, and on their broader competencies and sense of self. The project attributed an increase between midline and endline of a General Self-Efficacy score applied to girls to the project’s girls’ clubs. The girls’ clubs gave each member the opportunity to lead sessions. Girls also took part in what the project called a “girls-to-community” approach, where they went into their community to facilitate discussions and enact plays to demonstrate their learning from Life Skills/Sexual and Reproductive Health (LS/SRH) classes. Qualitative evidence from the evaluation demonstrated that girls felt that these active approaches not only increased their confidence but also encouraged more girls to join the project’s extra-curricular activity. Interestingly, out-of-school girls scored higher than in-school girls in knowledge, attitudes and perceptions surveys on LS/SRH, possibly because they had already had some exposure to the content. It is also possible that they were more invested in the content because they were older adolescents.

Piloting a Life Skills Intervention, PEAS Uganda

PEAS was one of the projects that refined the design of their extra and co-curricular interventions after baseline research was undertaken. The project incorporated a more explicit set of activities to support girls with menstrual hygiene management in the form of a pilot, as menstruation was identified as one of the reason girls were missing school. As well as including menstruation as a discussion topic in Girls’ Clubs and the project’s Life Skills programme, PEAS provided pads to schools. The importance of regular attendance to school and ways to manage menstruation will continue to be addressed through Girls’ Clubs and the Life Skills programme.

There have been a number of positive unintended consequences as a result of this pilot project, including engagement of male students as peer educators and supporters of girls. Boys who were part of the after school clubs delivered peer education sessions to raise awareness of the project, issues relating to menstruation and how male students can support girls. PEAS expects that this additional support for girls will help remove the stigma associated with menstruation and therefore positively impact on girls’ school attendance. Another unintended but positive consequence of running the menstruation management pilot has been that schools are now themselves recognising the benefit of making sanitary products readily available to girls. As cost is a barrier to girls purchasing sanitary products some schools in the network have started to budget for sanitary products and ensure that they are available to girls. This development is expected to support the sustainability of the intervention beyond the life-cycle of the project.

Results and effects of the teaching methods used in extra and co-curricular classes and clubs have been mixed.

Overall, reporting on teaching quality has been mixed and evaluations have been limited in reporting how well teachers and facilitators have used particular teaching methods. Classroom/activity observations have tended to measure *whether* teachers are actually using particular pedagogical methods, but there is less clarity around *how well* they might be using them or *to what effect*. However, a review of the evaluations shows that most extra and co-curricular interventions sought to promote more student-centred approaches to teaching, and were designed to improve the quality of the learning environment through lower teacher student ratios, more time-on-task, and the provision of teaching and learning material. There has also been some exploration of spill-over effects from GEC interventions into mainstream or existing classrooms, however this effect appears to be minimal in terms of teaching quality. This situation was noted in Varkey's MGCubed project evaluation in Ghana.

One project that did include positive qualitative reports from teachers themselves was Save the Children in Mozambique. Through the project's Literacy and Numeracy Boost teaching methodologies, the project has challenged traditional teaching methods and contributed to a "change of attitude and approach to education in many schools". Teachers confirmed that the project's pedagogical campaigns were helpful in supporting them to develop particular strategies for different groups of students, for example. However, the evaluation highlighted that there were some inconsistencies in implementing the project – the success of teacher training provision and engagement with district level teacher supervisors was varied, which affected the project's learning results.

Viva-Crane's endline evaluation provided useful qualitative reflections on the project's approach to numeracy teaching and learning in its accelerated learning programme, although results were weaker than their literacy results. Unlike their approach to teaching literacy, the project team relied on a wide range of methods including allowing more student participation and setting individual learning targets. The teaching materials included some specially designed tools (including Maths U See and Brainbox) and others which were created out of simple and locally available resources. An important addition to this range of methods was explicit subject knowledge training of teachers. It became obvious during the course of implementation that some teachers were having difficulties simply because they were not fully competent themselves or confident in teaching Maths. It is likely that this additional support was needed over a longer period of time and in greater intensity in order to positively influence the project's numeracy learning outcomes. *The Teaching, Learning and Assessment* thematic paper contains more details about teaching methods across the GEC portfolio.

5. Key lessons

From the analysis above, we can draw four key lessons about the design and implementation of extra/co-curricular interventions.

Lesson one: Extra and co-curricular interventions provide good opportunities for promoting more gender equitable attitudes among a range of stakeholders in schools, and are often the only opportunity for projects to introduce new teaching methods, including more student-centred approaches, and supplementary curricula.

Extra and co-curricular interventions not only have the potential to improve teaching and learning of literacy and numeracy, but provide an opportunity for introducing new concepts into teaching practice, such as gender equality in the classroom. Many GEC projects included gender responsive pedagogy as a component of teacher/tutor training specifically in order to equip teachers to lead extra and co-curricular activities. Qualitative evidence from Save the Children Mozambique notes that teachers found the methodology to be transformative both in and out of the classroom. One teacher explained that “When PAGEM trained us, I did not even know what gender was nor how to define what it is, I did not know how important this concept was”.

Link Community Development reported in their endline evaluation that the additional training for their teachers/tutors not only built teachers’ understanding of gender equality and their skill in gender sensitive pedagogy, it also improved their confidence to provide pastoral support to girls through challenges such as early marriage. Girls who took part in the project, in particular younger girls, reported experiencing a change in teachers’ skills and rated teachers as “more gender-sensitive” over the time of the project. This rating differed significantly from the control group. Varkey’s MGCubed project in Ghana attributed a change in girls’ own attitudes towards gender norms to their 'Wonder Women' after school clubs. By endline, girls in MGCubed schools were more likely to disagree with a standardised index of statements reflecting patriarchal norms, including those around marriage and decision-making in the home and education.

Camfed’s evaluation noted that through training young rural women as Learner Guides, the project has also challenged the prevalent gender norms which act to restrict girls and young women’s participation and opportunities. The evaluation’s qualitative data notes the enhanced status and increased participation of young women who, prior to their involvement with the project, had been among the most marginalised. Other projects were able, through co-curricular interventions, to introduce complementary improvements to the curriculum such as more creative approaches to teaching Maths and higher order thinking, and new teaching methods.

Lesson two: Mentors can play an important role in supporting girls' learning; increasing self-efficacy, improving performance in class and improving attendance.

A significant proportion of GEC projects included some form of mentoring as part of their extra and co-curricular intervention, for example, peer mentors working as part of girls’ clubs

and the provision of academic peer mentors supporting girls in class. These were largely successful according to qualitative evidence from various endline evaluations.

BRAC in Afghanistan developed a mentorship programme which focussed on identifying student leaders and equipping them to act as mentors to their peers. This form of support was defined as a co-curricular intervention. The peer mentors had a wide range of responsibilities including providing both social and academic assistance to academically weaker peers, ensuring classroom attendance and participation, creating an enabling classroom environment, organising sports and interclass debate competitions, publishing wall magazines with creative writing from peer groups, keeping the school environment clean, and organising weekly meetings to track progress and address issues. More than 2500 girls were mentored in government schools through this intervention. A rapid appraisal by BRAC demonstrated that both students and teachers perceived student participation and performance in class as having improved as a result of peer mentoring support. The benefits also extended to the mentors themselves, one of whom explained, “It is very encouraging for me to be a leader of my classmates. It makes me very confident and gives me the opportunity to extend support to my classmates.”

Viva-Crane reported in their endline evaluation that the impact of the project’s mentors became more significant between midline and endline, than between baseline and midline. In total, 81% of girls reported that mentoring helped them to improve their attendance either at school or at a CLC (Creative Learning Centre). Discussion with girls confirmed that the mentor was the main method by which they were recruited to the CLC and mentors scored 90% or above on the spectrum line on usefulness of the mentor. Mentors were described as “essential” “(promoting) awareness, motivation, checking at home”, “takes fear out of school” and “gives us hope”. This qualitative evidence provides a powerful narrative of the importance of targeted support for marginalised girls.

Save the Children Mozambique used regression analyses to explore various predictors of attendance. Whilst having a peer mentor was not found to be a direct predictor of attendance through a linear regression, peer mentorship was shown to be a statistically significant predictor of academic self-efficacy, which in turn can explain improvements in attendance.

Qualitative research conducted for Camfed International’s endline evaluation found that, in addition to their role in identifying marginalised girls for support, Teacher Mentors were widely credited with promoting the protection and safety of girls at school, exposing abuse, promoting behaviour management strategies that did not include corporal punishment, and highlighting the need for action plans to address early pregnancy and marriage. The relationship between Learner Guides and Teacher Mentors was also found to be significant, and many Learner Guides reported receiving support from Teacher Mentors to prepare for study groups in advance.

Improved parental engagement with education

There was some evidence of a spill over effect of improved parental attitudes towards investing in education and support for girls' learning progress from extra and co-curricular interventions. However, parental engagement was not always integrated into the design of the extracurricular intervention itself, and often interventions focussed on parental attitudes such as Mothers' Clubs which ran in parallel to extracurricular activities. Qualitative data from MGCubed's endline evaluation demonstrates the importance of parental engagement. This was suggested by all of the main project stakeholders - students, teacher/facilitators, and head teachers - to be a critical component of success and long-term sustainability. Similarly, Save the Children Mozambique found that the project's interventions played a role in mitigating the effects of negative parental beliefs towards girls' education. Girls in project schools were not affected by the gendered views of their parents when it came to literacy outcomes. In non-project schools, by contrast, negative parental attitudes towards girls' education had an effect on girls' achievement in literacy. A literacy promoter clarified that, "Even the parents themselves like to see the children participate because when they arrive at the camp they have material, pencils, books. The children draw [and] paint.....the parents leave the children to participate because they see the work that is being done".

Lesson three: Where appropriate, boys should be included in extra and co-curricular activities (even when these are focused on girls) to prevent a negative response from communities and/or families, and to prevent boys from becoming disengaged with school.

Several GEC projects, including Link Community Development in Ethiopia and MGCubed in Ghana, reported concerns from communities and from boys about the need for more support for *both* marginalised girls and boys. As extra and co-curricular activities appear to successfully boost learning in contexts where education provision is poor, offering this kind of support explicitly for girls has been a challenge for several projects. The response from parents and communities has prompted revisions to project design. MGCubed set up after-school Boys' Clubs (*Boys Boys*) to be run in parallel to their after-school Wonder Women club.

Reflections from Camfed International's evaluation illustrate that even when interventions aim to be inclusive of boys, a number of boys and their families may report feeling left out due to the emphasis of the intervention on girls. One mother commented, "I have a son who is in school, and he also comes home and tell me about what the project is doing for girls. At times he complains that the project is not supporting boys as well, and that they favour girls only". Mercy Corps Nepal's results further demonstrate the importance of careful design. At endline, the attendance rate of girls in treatment schools was higher than that of boys in treatment schools (girls - 83%, boys - 77%). While project interventions, in particular community campaigns to build support for education, should have had an impact on the families of boys as well, a larger number of boys were observed to attach less importance to education. The evaluation's qualitative data includes reports from both teachers and head teachers who confirmed that this limited engagement had led to boys' irregular attendance at school.

Box 3: Value-for-Money and Sustainability of Extra and Co-Curricular Interventions

A basic assessment conducted at midline illustrated that the GEC's mentoring programmes and girls' clubs appear to offer value for money in comparison to other intervention types. Some projects have done further analysis - PEAS in Uganda has calculated the cost-per-girl of each intervention they offer, and after school clubs offer value through sharing resources. A more nuanced return-on-investment/social impact analysis could also be useful in order to make a clearer assessment of the value of taking these kinds of interventions to scale. Overall, these types of activities not only offer value for money, but important 'added value', as extra and co-curricular interventions are often the only way for projects to encourage a more girl-friendly school environment or to introduce new teaching methods and pedagogical approaches.

Most projects were aware of the importance of ensuring the sustainability of interventions that are being implemented in parallel with government systems. Mercy Corps Nepal's innovative use of incentivising schools and districts through competitions has contributed to a sense of ownership of the project among school authorities. These awards, in the form of the provision of WASH facilities inside of schools in most cases, as well as boundary walls, match funding for district education offices, computer and science labs and solar panels for off-grid schools, could only be received once the school met certain criteria and had proven to be highly effective at both bringing about behaviour change, and engaging government officials.

Camfed worked with four non-partner districts in Tanzania to establish district level committees which focused on working with the project to identify and support the most marginalised children, and to take responsibility for the effective/efficient use of resources at school level. The development of a cohort of young female leaders also forms part of the project's sustainability strategy. All of the Learner Guides interviewed in Zimbabwe and the majority in Tanzania (74%) had taken up positions of local leadership, including on area committees, school based committees and district education committees. In Tanzania, Learner Guides were chosen as monitors in the recent national election, reportedly on the basis of the experience and respect they have achieved. In addition, a number of the Learner Guides also attained a formal BTEC qualification, potentially contributing to their long-term gains.

Lesson 4: Demand for extra tuition and other interventions that aim to boost teaching and learning can be high, challenging projects' capacity to deliver, and to target the intervention appropriately.

Demand for extra tuition appears to be high among many projects who offered this type of intervention. For the most marginalised girls and their families, the opportunity to receive additional learning support, provided free of charge, in the context of high teacher-student ratios in mainstream classrooms and limited access to teaching and learning materials, is often well-received. However, there have been challenges fulfilling demand, with projects struggling to adapt the design and reach of the intervention accordingly.

In addition, selecting students has also presented challenges for many projects. There can be a lack of clarity in the targeting strategy between high-potential students (i.e. those who might make the most progress in a remedial class) and low-performing students (i.e. those who may need the intervention the most). There can be concerns about whether the most marginalised girls are actually the ones benefiting from the interventions, as teachers and project staff attempt to select in an equitable way. For example, WUSC's project in Kenya revised the targeting process for their over-subscribed remedial learning tutorials in order to reach particular groups of marginalised girls and boys. Unaccompanied children and children from child-headed households were struggling the most academically, but were not being included according to the project's original design.

Cheshire Services Uganda's project successfully responded to a 100% increase in beneficiary numbers. Their project included remedial classes, alongside a highly individualised package of learning, social and medical/therapeutic support for girls with physical and intellectual disabilities. Other projects redesigned their target groups when the potential impact of extra and co-curricular interventions became clearer, usually after the baseline research was done. For example, MGCubed's Wonder Women empowerment clubs in Ghana were initially designed for out-of-school girls only, but post-baseline it was decided that in-school girls could also benefit from the clubs' focus on building self-esteem and self-confidence and raising aspirations.

6. Considerations for practitioners and policy Makers

This paper has synthesised how extra and co-curricular interventions have supported learning and broader educational outcomes across the GEC's portfolio, and has highlighted the main lessons learned around design and implementation. The paper finds that more direct interventions such as tuition classes are more likely to have an effect on student's learning outcomes than interventions that support girls' engagement with learning by building confidence and motivation. This paper uses qualitative evidence to demonstrate the effectiveness and lessons learned around designing and implementing extra and co-curricular activities.

The portfolio for the next phase of the GEC indicates that projects will continue to implement extra and co-curricular interventions, to improve both learning and wider outcomes for girls.

There are four key considerations for practitioners and policy makers in relation to extra and co-curricular interventions in light of this paper's findings:

- 1. Ensure that interventions are well-designed, include a focus on the quality of teaching/tutoring and provide supportive learning environments.** Many of the GEC interventions were designed as an adaptation to respond to much lower learning levels than anticipated at baseline. This review and the various project evaluations provide opportunities for projects to reflect on the design of their extra and co-curricular interventions, and to ensure that interventions are likely to support girls' capacity to engage with learning, as well as to develop as individuals and fulfil their potential.
- 2. Engage with government at all levels in order to ensure the sustainability of extra and co-curricular interventions.** As these interventions tend to be developed and implemented parallel to government systems, it is critical that there is ongoing dialogue, advocacy and capacity building to scale up successful interventions, and enable them to become better embedded into government systems where appropriate and ultimately to be more sustainable in the long-term.
- 3. Consider outcomes beyond attendance and learning.** The guidance on Life Skills as an intermediate outcome, developed for the next phase of the GEC, will enable projects and their evaluators to be more rigorous and consistent in their assessment of girls' educational progress. It includes a broader basis of assessing student progress, including several non-cognitive competencies, cognitive skills and gender equitable attitudes. It is expected that most of the work around life skills in the second phase of GEC will be delivered through extra and/or co-curricular activities.
- 4. Carefully designed, mixed-methods evaluations should enable a deeper understanding of how extra and co-curricular interventions support girls' learning and development.** Some of the limitations identified in this paper around disentangling the effects of individual interventions and early stage ceiling effects in learning results from interventions designed to boost learning can be overcome through careful evaluation design.

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