

Project Evaluation Report

Report title:	Educating Nigerian Girls in New Enterprises (ENGINE II): GEC-T Baseline Report
Evaluator:	Oxford Policy Management
GEC Project:	Educating Nigerian Girls in New Enterprises (ENGINE)
Country	Nigeria
GEC window	GEC-Transition
Evaluation point:	Baseline
Report date:	August 2018

Notes:

Some annexes listed in the contents page of this document have not been included because of challenges with capturing them as an A4 PDF document or because they are documents intended for programme purposes only. If you would like access to any of these annexes, please enquire about their availability by emailing uk_girls_education_challenge@pwc.com.



Girls'
Education
Challenge



Educating Nigerian Girls in New Enterprises (ENGINE II)

GEC-T Baseline Report
Final Version

August 2018

Oxford Policy Management Limited
Registered in Nigeria: RC 1223590

House 2
16 Mafemi Crescent Utako,
Abuja
Nigeria

Tel: +234 8030 000 603
E: info.nigeriaoffice@opml.co.uk
Website: www.opml.co.uk

Contents

Acronyms	vii
List of tables	ix
Executive Summary	1
1 Background to programme	7
1.1 Programme context.....	7
1.2 Programme Theory of Change and assumptions	9
1.3 Programme Activities	10
1.3.1 Learning	10
1.3.2 Transition.....	12
1.3.3 Sustainability	12
1.3.4 Intermediate Outcomes.....	13
1.4 Target beneficiary groups and beneficiary numbers.....	19
2 Baseline Evaluation Approach and Methodology.....	21
2.1 Key evaluation questions & role of the baseline	21
2.1.1 Impact: What has been the impact of the ENGINE programme?	21
2.1.2 Relevance: How relevant is the ENGINE II programme?	21
2.1.3 Effectiveness: Has ENGINE II programme achieved its objectives?	22
2.1.4 Efficiency: How efficient has ENGINE II been in achieving its objectives?	22
2.1.5 Sustainability: Does the ENGINE II programme have sustainable approaches?	23
2.2 Outcomes and Intermediate Outcomes	23
2.2.1 Learning Outcomes.....	24
2.2.2 Transition Outcomes	24
2.2.3 Intermediate Outcomes.....	25
2.2.4 Sustainability Outcomes.....	25
2.3 Assumptions between Intermediate Outcomes and Outcomes.....	30
2.4 Evaluation methodology.....	31
2.5 Baseline data collection process.....	36
2.6 Challenges in baseline data collection and limitations of the evaluation design	43
2.6.1 Methodological Challenges.....	43
2.6.2 Field observations and challenges.....	45
3 Key Characteristics of Baseline samples	48
3.1 Programme beneficiaries	48
3.2 Representativeness of the learning and transition samples	48
3.3 Educational Marginalisation	50
3.4 Intersection between key characteristics and barriers.....	56

3.5	Appropriateness of programme activities to the characteristics and barriers identified.....	59
4	Key Outcome Findings	62
4.1	Learning Outcome.....	62
4.2	Subgroup analysis of the Learning Outcome.....	75
4.3	Transition Outcome.....	80
4.4	Sub-group analysis of the transition outcome.....	85
4.5	Target setting for the learning outcome	88
4.6	Cohort tracking and target setting for the transition outcome	89
4.7	Sustainability Outcome	90
5	Key Intermediate Outcome Findings	94
5.1	Attendance	94
5.1.1	Link to Outcomes	94
5.1.2	Tools for Measurement	95
5.1.3	Sampling	95
5.1.4	Attendance as reported by girl	95
5.1.5	Disaggregated Attendance Data.....	96
5.1.6	Attendance as reported by the household	97
5.1.7	Factors affecting attendance.....	98
5.1.8	Baseline Values.....	101
5.2	Quality of teaching	101
5.2.1	Link to Outcomes	101
5.2.2	Tools for Measurement	102
5.2.3	Sampling	102
5.2.4	Using PALS tool to assess teaching	102
5.2.5	Girls' perception on teaching quality	103
5.2.6	Disaggregation of Girls perception on teaching quality	103
5.2.7	Household perception on teaching quality	104
5.2.8	Baseline Values.....	106
5.3	Economic empowerment.....	107
5.3.1	Link to Outcomes	107
5.3.2	Tools for Measurement	107
5.3.3	Sampling	107
5.3.4	Girl's economic empowerment.....	107
5.3.5	Disaggregated Economic Empowerment Data	109
5.3.6	Household Questionnaire.....	111
5.3.7	Baseline Values for Economic Opportunities.....	112
5.4	Life skills and Decision-making skills	112

5.4.1	Link to Outcomes	113
5.4.2	Tools for Measurement	113
5.4.3	Sampling	113
5.4.4	Decision-making Skills	113
5.4.5	Disaggregated Decision-Making Data	114
5.4.6	Self Esteem	116
5.4.7	Menstrual Hygiene and Management	117
5.4.8	Baseline Values.....	119
5.5	School governance and management – SBMC.....	120
5.5.1	Link to Outcomes	120
5.5.2	Tools for Measurement	120
5.5.3	Sampling	120
5.5.4	School Survey	121
5.5.5	Knowledge of girls on the activities of SBMC/PTA	122
5.5.6	SBMC Questionnaire	122
5.5.7	Disaggregated SBMC Activities	123
5.5.8	Baseline Values.....	125
6	Conclusion & Recommendations	126
6.1	Conclusions.....	126
6.2	Recommendations	129
	References.....	153

Educating Nigerian Girls in New Enterprises

August 24, 2018

Final Version

By



For



Acronyms

AME	Agency for Mass Education
ANCOPs	All Nigeria Confederation of Principals
BCC	Behaviour Change Communication
CAC	Community Action Committee
CBMC	Community-based Management Committee
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ENGINE	Educating Nigerian Girls in New Enterprises
FCT	Federal Capital Territory
FGD	Focus group discussions
FLHE	Family Life and HIV Education
FM	Fund Manager
GEC	Girl Education Challenge
GEC-T	Girl Education Challenge Transition
HHS	House-Hold Surveys
JCCE	Joint Consultative Committee on Education
KII	Key Informant Interviews
LGA	Local Government Area
MC	MercyCorps
MDE	Minimum Detectable Effect
MIS	Management Information Systems
MoE	Ministry of Education
MoWA	Ministry of Women Affairs
MTs	Master Trainers
NCE	National Council on Education
NERDC	Nigerian Educational Research and Development Council
NIMC	National Identity Management Commission
NYSC	National Youth Service Corps
OPM	Oxford Policy Management
PPI	Poverty Probability Index
PPS	Probability Proportional to Size
PTA	Parent Teachers Association
RH	Reproductive Health
SBMC	School Based Management Committee

SEGMA	Secondary Grade Mathematics Assessment
SEGRA	Secondary Grade Reading Assessment
SUBEB	State Universal Basic Education Board
UNICEF	United Nations Children’s Fund

List of tables

Table 1: Programme Sustainability Matrix	14
Table 2: Programme design and intervention	16
Table 3: Impact	21
Table 4: Relevance	21
Table 5: Effectiveness.....	22
Table 6: Efficiency.....	22
Table 7 : Sustainability	23
Table 8: Outcomes for measurement	27
Table 9: Sustainability outcome for measurement.....	29
Table 10: Learning and transition benchmarks.....	34
Table 11: Evaluation sample breakdown (by region).....	48
Table 12: Evaluation sample breakdown (by grade)	48
Table 13: Evaluation sample breakdown (by age).....	49
Table 14: Evaluation sample breakdown (by disability).....	50
Table 15: Girls' characteristics	51
Table 16: Potential barriers to learning and transition	53
Table 17: Potential barriers to learning and transition for girls with disabilities	55
Table 18: Examples of barriers to education by characteristic	58
Table 19: Outline of subtasks by key sub-groups	62
Table 20: Literacy (EGRA/SeGRA) scores including only girls who scored at least 1 on the respective subtasks	64
Table 21: Literacy (EGRA/SeGRA) scores including total sample size.....	64
Table 22: Numeracy (EGMA/SeGMA) scores including only girls who scored at least 1 on the respective subtasks	65
Table 23: Numeracy (EGMA/SeGMA) scores including total sample size	65
Table 24: Life skills.....	66
Table 25: Out-of-school numeracy skills gaps including only girls who attempted.....	68
Table 26: Out-of-school numeracy skills gaps including total sample size.....	68
Table 27: In school numeracy skills gaps including only girls who attempted.....	69
Table 28: In school numeracy skills gaps including total sample size.....	69
Table 29: Out-of-school literacy skills gaps including only girls who scored at least 1 on each subtask ...	70
Table 30: Out-of-school literacy skills gaps including total sample size	70
Table 31: In-school literacy skills gaps including only girls who scored at least 1 on each subtask	71
Table 32: In-school literacy skills gaps including total sample size	71
Table 33: Life skills gaps – Learning to learn (Reported as percentage stating strongly agree or agree) .	72
Table 34: Grade Achieved EGRA/SeGRA	75
Table 35: Grade Achieved EGMA/SeGMA	75
Table 36: Learning scores of key subgroups (ISG)	77
Table 37: Learning scores of key subgroups (OSG)	78
Table 38: School Drop Out Grade	78
Table 39: Learning scores of key barriers.....	79
Table 40: Transition pathways	80
Table 41: Benchmarking for the Transition Outcome	82
Table 42: Transition outcome for ISG in the intervention group	83
Table 43: Transition outcome for ISG in the comparison group	83
Table 44: Transition outcome for OSG in the intervention group	84
Table 45: Transition outcome for OSG in the comparison group	84
Table 46: Transition outcomes by In-School Girls' characteristics	85

Table 47: Transition outcomes by Out-of-School Girls' characteristics	86
Table 48: Transition outcomes by key barriers to transition among In-School Girls	87
Table 49: Transition outcomes by key barriers to transition among Out-of-School Girls	88
Table 50: Target setting for learning outcome	88
Table 51: Target setting for transition	89
Table 52: Sustainability indicators	90
Table 53: Changes needed for sustainability.....	92
Table 54: Attendance rates from Girl Questionnaire	95
Table 55: Girls' attendance rate in the last 30 days before survey by key characteristics	96
Table 56: Girls' attendance rate in the last 5 days before survey by key characteristics	97
Table 57: Attendance rates from Household Questionnaire.....	98
Table 58: Factors affecting school attendance from girl questionnaire	98
Table 59: Factors affecting school attendance from household questionnaire	99
Table 60: Assessment of teaching methodology using PALS scale.....	103
Table 61: Perception of girls on teaching quality	103
Table 62: Girls' perception on teacher's absenteeism by key characteristics	104
Table 63: Household perception on teaching quality.....	104
Table 64: Business characteristics of OSG in the intervention group	108
Table 65: Income expenditure of OSG in business	108
Table 66: Access to economic opportunities	109
Table 67 Girls' currently in business by key characteristics	109
Table 68: Girls that report improved income by key characteristics	110
Table 69: Girls on vocational training as reported from the household	111
Table 70: Girls ability to make decisions.....	113
Table 71: ISG Decision making skills by key characteristics	114
Table 72: ISG Decision making skills by key characteristics	115
Table 73: Knowledge of girls on menstrual health hygiene and management.....	118
Table 74: Presence of school governance structure	121
Table 75: SBMC/PTA activities.....	122
Table 76: Knowledge of girls on SBMC/PTA Activities.....	122
Table 77: SBMC/PTA activities to facilitate conducive learning environment in-school.....	123
Table 78: SBMC activities by key characteristics	123
Table 79: CBMC activities to facilitate conducive environment for OSG.....	124
Table 80: Output indicators.....	134
Table 81: Baseline status of output indicators	138
Table 82: Output indicator issues	141
Table 83: Direct beneficiaries.....	143
Table 84: Other beneficiaries.....	144
Table 85: Target groups - by school	144
Table 86: Target groups - by age.....	145
Table 87: Target groups - by sub group.....	145
Table 88: Target groups - by school status.....	146

Executive Summary

Background

The Educating Nigerian Girls in New Enterprises (ENGINE) II programme seeks to transform the future of marginalised Nigerian girls by fulfilling their potential in education and work. The programme has three major outcomes which are; improving learning outcomes (literacy, numeracy and life skills), supporting girls to transition through key stages of education, training and employment, and ensuring sustainability of changes that are in line in transition. The intervention targets 17 and 23 years old in-school and out-of-school girls FCT, Kano, Kaduna and Lagos states. They will be supported for three years starting in April 2017 through March 2020.

The programme design assumes that when marginalised ENGINE girls are provided with an ecosystem of support, they are able to successfully navigate key transitions. The programme's theory of change is two-fold. First, the programme assumes that in-school girls (ISGs) will successfully transition to the next phase of education or complete their current education cycle and enter the workforce through enhanced learning experiences and an improved enabling environment. Second, the programme assumes that with the right support mechanisms in place, girls whose schooling has been interrupted will have the opportunity to build their functional literacy and numeracy, while building assets and diversifying income sources. In doing so, girls will place themselves on a path to greater success and transition to employment and demand-driven entrepreneurship opportunities.

This evaluation tests the overall theory of change for the programme, and assesses whether inputs, outputs, and outcomes determined to operationalise the theory of change were relevant, effective, and would promote sustainability upon completion of the programme. Sub-questions were designed to ensure that the assessment addresses main questions raised at the programme (GEC-T) level as well as measure the progress made by the programme over time.

Methods

To better align with the programme design and maximise efficiency, ENGINE II beneficiaries are grouped into 4 independent populations - a control and treatment group for ISGs, and a control and treatment group for OSGs.

Using the quasi-experimental design, the minimum detectable estimate for the sample size was calculated to include an annual attrition rate of 30%, having considered the challenges due to loss of follow-up that was reported on ENGINE I. Two different intra-cluster correlations were applied to both the ISG and OSG populations. Several survey instruments were administered to respondents in-school, at the household and community levels. Both qualitative and quantitative data collection process was embarked upon by trained research assistants deployed for the purpose of the research.

Results

Evaluation Sample

The evaluation sample targeted 46 treatment schools and 46 comparison schools. In each school, about 10 girls were sampled across JSS 3 – SSS 2 to make up the in-school girls cohort. This yielded about 460 and 458 girls that were surveyed in the treatment and control schools respectively. For the out-of-school girls, the contiguous communities to each of these schools were surveyed and 8 girls per community except

for Lagos state where 10 girls per community were selected to make the required sample size. In summary, about 463 and 465 girls were included in the OSG survey sample in the intervention and comparison groups respectively.

Girl Characteristics

Most of the households that the ISG and OSG belong to, have the likelihood of living below the poverty line is 53.4% with a Poverty Probability Index score ranging between 30 and 31. This is in line with the findings that most girls were out-of-school because households could not afford the cost of education, and she has to work, earn some money to support on the home front. More so, decisions about important life choices such as education is often made by 4 out of every 5 parents/caregivers on behalf of the girls.

For girls who go to school, some of the key barriers affecting them were related to safety to and from school as well as within the school. Infrastructural facilities such as adequate seating arrangement, toilet and drinking water facilities as well as ease of mobility around the school environment were also mentioned. Anecdotal evidence shows that indirect programme beneficiaries e.g. boys sometimes contribute to safety issues (e.g. cultism and fights) that affect girls' attendance and learning in schools. Other barriers include poor teaching quality and absenteeism of teachers during lesson periods.

Although findings from the qualitative research indicates that the school governance structures e.g. school leadership and school/community-level management committees are working at facilitating a conducive environment for girls, however this baseline findings suggest that a lot more can be done to improve child safety with their neighbourhood.

Child Functioning

Using the Washington Group of questions, girls were assessed to understand any form impairment they have that could affect learning capabilities and this includes; vision, hearing, mobility, cognitive, self-care and communication impairments. From the evaluation sample, about 5% and 9% of the in-school girls in the intervention and comparison cohorts respectively reported to have a lot of difficulty or completely unable to carry out these basic functions. However, among the OSG population, about 3% of the girls in the intervention group and 4% in the comparison group had at least one form of impairment.

Within the intervention group, the proportion of girls with at least one form of impairment was lower by two percentage point among OSG (3%) than what was observed in the ISG (5%) intervention group.

Learning Outcome Findings

The mean scores are calculated as the mean among the subtasks of each learning assessments. The overall mean literacy and numeracy scores for all girls in the intervention group is 16 and 6 respectively. For the out-of-school population, the mean literacy score for the intervention and control group was 32 and 30 respectively. A much higher proportion was observed in the numeracy mean score with the intervention OSG group having 61 and the control OSG group, a mean score of 58. Difficulty increased with progression across subtasks across the different subgroups. Impairment was observed to have effect on the learning of girls who participated in the study. Learning outcomes also differed between states with FCT recording the highest score among in-school and Lagos state among those out-of-school.

Transition Outcome Findings

The transition benchmark sample included girls that were selected from the intervention areas but outside of the programme beneficiaries. The age range of the girls in the benchmark sample was from 17 years up

to 25 years which is indicative of the age range that cohort girls will grow into by the endline. The overall transition rate for the benchmark group is about 54% and decreases as age increases. The transition outcome of the benchmark sample is comparable to that of the evaluation sample in the successful and unsuccessful pathways.

Transition pathways among ISG and OSG differs with the former being assessed based on progress through academic grades and the latter based on the economic opportunities available to them. Girls in-school recorded 97% and 98% in the intervention and control groups respectively. On the other hand, higher transition rate of 49% was observed in the OSG intervention group compared to those in the OSG control group (25%). This could be because of the residual effect of the programme activities lasting from ENGINE I, when girls were exposed to diverse economic opportunities.

Factors that affect the rate of transition among all girls was explicitly on the household living standards, particularly those that belong to the lowest wealth quintiles and those that live with a sick household member. Among in-school girls, about 9 out of 10 girls who reported to have high-chore burden (1 hour or more) in their households were mostly unsuccessful in making progress to the next academic grade. Further to this, poor school infrastructural facilities was found to affect girls' transition rate. Among the out-of-school girls, 1 in every 3 girls who was an orphan were observed not to have made any progressive outcome in the last 12 months to the time of the survey. Other characteristics common to OSGs who did not make a successful transition include those who were married and those who had children before the age of 18 years.

Sustainability Outcome Findings

Sustainability is essential to the programme for it to achieve its set objectives. From the baseline findings, sustainability efforts by the programme is yet to fully kick-off. A review of the programme documents indicates that minimal level of engagement had started with government stakeholders like relevant state government agencies and the National Youth Service Corps but there was no indication of the State Advisory Group taking any action to address gender and child protection issues in any of the intervention states. This review also suggests that the programme is yet to engage with the community-level stakeholders so that they are empowered to advocate for girls right to quality and complete education as well as address gender issues.

However, from our findings it was evident that governance structures at school level were seen to be taking innovative steps that are in line with some of the programme objectives e.g. enrolment and attendance drives, monitoring of school activities, etc. Also, at the community level, gatekeepers such as traditional leaders, parents and caregivers reported that they are already addressing communal issues such as child protection independent of the programme.

Our findings also show that most of the girls' primary caregivers or spouses (for those that are married) opined that they are in support of the girl's education or business, as may be applicable to each of them. About 1 out of 3 schools have developed and are using the code of conduct document to address gender and child protection issues in the schools. There was no evidence of programme replication in non-ENGINE schools.

Intermediate Outcome Findings

In addition to the three main project outcomes, intermediate outcomes such as attendance, teaching quality, knowledge about menstrual health hygiene and management, life skills and governance structures such as the SBMC, PTA and CBMC/CAC and factors that affect them were explored.

Attendance Findings

From the quantitative survey data, a high proportion of girls in school reported to have been in attendance for more than half of the time in the last 30 days from the day of survey. Further analysis shows that attendance rate as reported by the girls was also high in the last 5 school days from the day of the interview. This was also corroborated by the household respondents who affirmed that girls regularly attended school.

Regardless of this regular attendance that was reported by the girls and their primary caregivers, factors such as having a sick household member or own illness was found to be a challenge (53% in the treatment population and 66% in the control population). The inability to pay school fees was another dominant reason why girls missed school, this was common to both the intervention (16%) and control (14%) groups. Other factors that were elicited during the qualitative research alluded to high chore burden or the need for girl to run errands or go to the market to make sales.

Teaching Quality Findings

As at baseline, none of the teachers were found to be using a learner-centred teaching methodology. Across each of the 7 factors described on the Principles of Adult Learning Scale (PALS) tool, the teachers recorded a score lower than the standard mean score, 96.3 in the intervention group, and 100.4 in the control group, indicating that there is the need to improve teaching style to become more learner-centred. The OSG LSCs in the intervention group had a similar mean score of 96.3 and thus need to improve.

This view was contrary to the perception of the girls and the household respondents as they reported that teachers were performing well in the classrooms. Over 90% of sampled in-school girls strongly agreed or agreed that their teachers make them feel welcome in class. Similarly, about 80% of all the girls said their teachers were rarely absent from class when they are to take a lesson and that they use different local languages to help them understand better whenever they are teaching. About 4 in 10 household respondents agreed that the teachers provide excellent teaching service but almost twice that number perceived that teachers pay attention to the specific learning needs of the girls.

Economic Empowerment Findings

It was observed that almost half of the out-of-school girls that enrolled on ENGINE I are still in business and this is twice the proportion of their counterpart in the control population. Near-equal proportion of girls in the treatment population reported to be making a profit margin of >1000 – 10000 naira have higher earning power compared to girls in the control population. However, it is noteworthy that slightly above 1 percent but less than 2 percent of the girls in the intervention group compared to none in the control group are making business profit that ranged from 10001-35000 naira monthly.

Most of the girls reported that the income they make from their business is often spent on family and personal needs. Some also said they replenish their stocks from the profit made while a few others mentioned that they put such money into a savings account. Majority of the girls in the treatment (56%) as opposed to those in the control group (41%) therefore agreed that there has been tremendous improvement in their income.

Overall, good and profitable opportunities available to girls were similar across the treatment and control groups. The prominent ones as reported by both groups include food retail, hairdressing and catering businesses. However, there were some differences. A higher percentage of girls in the intervention group reported Coca-Cola sales as a lucrative business and this could be because ENGINE I exposed beneficiaries to Coca-Cola sales.

From the household data, it is evident that there are more girls in the intervention areas (65%) who were enrolled in a skill acquisition training be it paid or unpaid compared to their peers in the control areas (22%).

Life skills, including Menstrual Health and Hygiene Findings

The findings on life skills focused on the essential abilities of girls to be able to make informed choices about important life decisions. It is evident that girls are less involved to independently make major life decisions such as whether or not to go to school (26%). This is in contrast to making minor decisions such as how time is spent with friends (60%). Self-esteem was measured using the Cantril Ladder of Life scale (Cantril 1966). About one-quarter of the girls reported that they felt they were at step 6 in their current lives.

Majority of ISGs (68% in the treatment cohort and 66% in the control cohort) reported that they learned about menstruation before they started menstruating at. Among the ISG, about 40% of girls reported that their mothers were their most important source for information about menstruation, followed by schoolteachers or LSCs at about 20%. Similarly, about 50% of the OSGs reported that their mothers were their most important source for information about menstruation, followed by schoolteachers or LSCs at about 18%.

There were several nomenclatures used to describe the monthly menstrual flow among girls. Some of these are period, time of the month, menses, mother's nature gift and monthly visitor. This description was common to both the ISG and OSG in the treatment and control areas.

Several iterations from the focused group discussions with target girls indicate that majority have developed the right attitude towards menstrual health hygiene and management. Some of these changes could be attributed to the learnings they acquired since they joined the ENGINE programme. This is in line with the findings from the girls' questionnaire indicating that more girls reported desirable hygienic menstrual practices.

School Governance and Management Findings

Results from the school survey suggest that the SBMC/PTA is mostly active in the provision of infrastructural facilities with 92% and 84% of principals in treatment and control schools respectively making such reports. A higher percentage of principals in the treatment population (61%) also said that their SBMC/PTA were actively involved in addressing gender issues such as bullying and sexual harassment compared to the control population at 44%. Interestingly, a higher percentage of principals in the control group (75%) reported that their SBMC/PTA was involved in improving attendance compared to the treatment group (54%).

Most girls acclaimed that the school governance structures were actively involved in improving enrolment, attendance, teaching quality, gender issues, and facilities and infrastructure. Although these activities were reported by more girls from the intervention schools compared to their counterparts in the control schools.

Contrary to what was observed among the in-school population, the community-based management committees, also referred to as the community action committees were not functional in most of the OSG communities that were visited. Of the few that were interviewed, they reported to have been involved in encouraging parents to allow their girls to attend the learning centres, conduct door-to-door mobilization, monitor girls' attendance and performance at the learning centres and facilitate an enabling environment for the girls to thrive within the community. Out of the 7 committees that were met, only 3 had verifiable evidence to show for activities carried out.

Conclusion and Recommendations

Based on the review of programme documents and data presented to the evaluation team, it is extremely important that the database of beneficiaries is updated so much so that it includes the precise sub-intervention(s) each girl enrolled on the programme is exposed to. There is the great need for the programme team to play more active role in validating that the ENGINE program is being implemented according to the protocols stated. This recommendation is most relevant at the state level and on the state team leaders to ensure that implementation teams are accountable and responsive to the programme objectives. This is based on anecdotal evidence which suggests a disconnect between the expectations of the MC team, and what the state implementation partners are achieving.

Based on the results, it is important that an unusual but pragmatic approach be adopted to improve learning outcomes. The programme needs to strategize with purpose to ensure literacy and numeracy skills of the programme beneficiaries supersedes that of the control by endline.

Decision-making skills among girls also needs to be improved upon just as girls have been able to apply essential life skills into their daily lives. Given the cultural context in programme states, approaching this problem requires a concerted effort at the girl and household levels.

Transition rate for in-school girls is too loose and needs to be redefined to achieve a more realistic assessment of academic achievements through grades. This is vital and non-negotiable. Furthermore, with more than half of the OSG currently not involved in any gainful economic opportunities, it is pertinent for the programme to review its steps from ENGINE I close out activities and mitigate a possibility of leaving behind this magnitude of economically inactive out-of-school girls by the time ENGINE II is over. This can be better managed by ensuring girls explore sustainable business opportunities that is marketable and non-seasonal within their neighbourhood.

SBMC/PTA members are primarily focused on facilities and infrastructure development but from the findings of the baseline survey, there is ensure they address gender and security issues in their respective communities. It may not be sufficient to train them on these focus issues; the program must also ensure that they identify and prioritize gender and child protection issues with a view to addressing them.

1 Background to programme

1.1 Programme context

The Educating Nigerian Girls in New Enterprises (ENGINE) II programme seeks to transform the futures of marginalised Nigerian girls by fulfilling their potential in education and work. The programme aims to follow girls on their journeys from adolescence to adulthood, providing opportunities for continued education and safe work that will improved the quality of life for marginalised girls. Through innovative partnerships with girls, communities, civil society, the public and private sectors, the programme will offer and facilitate continued support for girls' education. The ENGINE II programme has three major outcomes which include: improving learning outcomes (literacy, numeracy and life skills), supporting girls to transition through key stages of education, training and employment, and ensuring sustainability of changes that are in line in transition.

Under the Universal Basic Education Act of 2004, the Nigeria education system operates the 9-3-4 formal schooling system, where the first nine years form basic education i.e. primary education up to the junior secondary school level. Another three years is acquired in senior secondary level before four years in the tertiary institution. However, the reality is different, as it has been reported that Nigeria has the highest number of out-of-school youth in the world¹, majority of which are young girls and women². To mitigate the effects of having fewer literates compared to the nation's population size, more resources have been deployed into informal education programmes, where technical and vocational skills can be acquired to promote employment and improve living standards. This however, is often drawn back by several other factors such as political, religious and civil instability³.

Across the geopolitical zones, the North East and North West lag behind others in educational attainment, with more than 60 percent of females and about half of males having no education. In the North East only 5.9% of girls complete primary school. The North Eastern states have the lowest levels of secondary school completion by girls in Nigeria. By geopolitical zone, the North East has the lowest Net Attendance Ratio (NAR)⁴ at the primary and secondary levels (44 percent and 29 percent, respectively), while the South East has the highest (81 percent and 70 percent, respectively). Attendance is higher among wealthy households than poorer households at both the primary and secondary levels. At age 16, attendance rates begin to decline with increasing age, and the decline is faster for females than males after age. The Federal Capital Territory, Kano, Kaduna states (three out of the four intervention states), fall within the northern part of Nigeria which has consecutively reported⁵ very low educational uptake and high number of out-of-school population which eventually culminates into high illiteracy compared to other parts of the country.

Over the years, marginalised Nigerian girls have been faced with economic, social and educational barriers that hinder their education. Nigeria is a signatory to most international conventions on human rights, women's rights, and children's rights, as well as to agreements on international goals regarding education, health, and poverty eradication. However, religious and cultural bias still work against girls and women, especially in northern Nigeria. In Nigeria, religious and cultural bias work against female participation in politics; women who constitute about half of the population have been continuously side-lined in public life

¹ Abdullahi, Danjuma; Abdullah, John (June 2014). "The Political Will and Quality Basic Education in Nigeria" (PDF). *Journal of Power, Politics, and Governance*. American Research Institute for Policy Development. 2 (2): 75–100.

² Grace Nmadu , Solomon Avidime , Olugbenga Oguntunde , Vehcit Dashe, Binta Abdulkarim , Mairo Mandara (2010). *Girl Child Education: Rising to the Challenge*. African Journal of Reproductive Health Sept. 2010 (Special Issue); 14(3): 107

³ Omolewa, Michael (2008). "Adult Literacy in Africa: The Push And Pull Factors". *International Review of Education / Internationale Zeitschrift für Erziehungswissenschaft / Revue Internationale de l'Education*. 54 (5/6): 697–711. [doi:10.2307/40608042](https://doi.org/10.2307/40608042)

⁴ The net attendance ratio (NAR) is an indicator of participation in schooling among children of official school age (age 6-12 for primary school and age 13- 18 for secondary school), and the gross attendance ratio (GAR) indicates participation at each level of schooling among those of any age between 5 and 24 years. The GAR is nearly always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age range for that level.

⁵ NEDS, 2010 and 2015; NDHS, 2003, 2008, and 2015

to the extent that they never held more than 15% of elective offices. ENGINE II design reflects this, engaging with male and female political leaders in pushing forward change.

The Nigerian National Education Policy⁶ states that basic education should be compulsory, free, universal and high quality. Basic education is a consolidation of pre-primary (1 year), primary (6 years) and junior secondary education (3 years) into 10 years of formal schooling. The expansion of free schooling and subsequent rapid increase in enrolment has created significant challenges in ensuring good quality schooling and learning outcomes. Basic education is not entirely free; mandatory books and uniforms costing an average of \$200.00⁷ present a major barrier to girls' enrolment and completion in Northern States. Trained female teachers can empower girls to stay in school but female teachers may be lacking in the most marginalised communities where the need for them is greatest. A case study of Kano state educational policy shows that there is currently no return policy that allows / encourages pregnant girls and young mothers to return to the formal/structured school system. English is the official language of Nigeria. However, in rural areas the local language tends to be used as a language of instruction. An act of the Universal Basic Education Commission (UBEC) encourages use of mother tongue at the early primary school stage with transition to English.

The importance of girl education cannot be overemphasized. For every year of school completed, a girl's income has the potential to increase by 10%.⁸ Further, girls who finish secondary school are up to six times less likely than those with little or no education to marry prematurely. And by delaying marriage, a girl may reduce her risk of social isolation, HIV and domestic abuse, and premature child bearing.

Nigeria has further witnessed a deteriorating economic situation and inflation is affecting sales and business outcomes. This in turn has affected the program beneficiaries' young businesses, with some reporting lower than anticipated sales. However, mentors and peer influencers (girl ambassadors) are still supporting girls' businesses across communities to facilitate continuity and growth. Data from the 2013 NDHS shows that women in Nigeria are predominantly engaged in agriculture and are much less likely than men to be engaged in professional, technical, and managerial fields. Furthermore, women lag behind men in educational attainment, literacy, and exposure to mass media, all of which are critical contributors to women's empowerment and exert considerable influence on strengthening women's position in the household and in society in general.

Additionally, ENGINE is hinged on the fact that there has been a fundamental shift over the past two decades, in the sources of funding for economic development around the world. An arena once dominated by official governmental assistance is now a stage for many actors. Today, private resources account for 85% of the resource flow to the developing world, compared to just 30% in the 1970s. ENGINE intends to leverage on the collective structures, systems, knowledge, skills/expertise, and resources of the public (government) and private sectors including civil society to increase income-generating opportunities for and enhance asset-building skills of programme girls.

Nigeria ranks 120 out of 135 in the 2011 Global Gender Gap Index. In the home, men usually make the decisions. There is strong demand for financial products and services, but many young women lack access to and knowledge of formal financial institutions.⁹ There is a relationship between education, literacy and marriage; just 15% of girls never in a union are illiterate compared with 89% of girls married by age 15.¹⁰ The relationship between marriage and illiteracy is stronger than that between motherhood and illiteracy.

⁶ The Constitution of the Federal Republic of Nigeria. Sec18(3)(a)-Universal Basic Education Act 2004

⁷ US Embassy (2016) Nigeria Education Profile accessed at: https://nigeria.usembassy.gov/nigeria_education_profile.html

⁸ *Despite Wide-Ranging Benefits, Girls' Education and Empowerment Overlooked in Developing Countries* Kata Fustos, Population Reference Bureau (2010) accessed 30th August 2016 at <http://www.prb.org/Publications/Articles/2010/girlseducation.aspx>

⁹ Mercy Corps (2013) Adolescent Girls in Northern Nigeria: Financial Inclusion and Entrepreneurship Opportunities Profile

¹⁰ Girl Effect (2016) State of the Girl Report, Nigeria, August 2016

The majority of girls (64%) marry before age 18 and two thirds of married girls have no say in decisions made in their household. Nigeria has one of the highest adolescent birth rates in the world; only 1% of married or cohabiting girls use modern contraception.¹¹ As seen above, the type and degree of challenge a girl faces depends in part on which area of Nigeria she comes from.

Without adoption of the Child Rights Act (CRA 2003), child protection legal systems remain weak. Marginalised girls are not aware of the importance of legal identity; to this end ENGINE II will partner with NIMC to support girls in obtaining and using government ID.

The first phase of the ENGINE programme, ENGINE I, was implemented by MercyCorps through Civil Society Organisations (CSOs) in Kano, Kaduna and Lagos States and the Federal Capital Territory (FCT). This programme was targeted at 18,000 in and out of school girls aged between 16 and 19 years. Results indicated that there were improved learning outcomes, increased girls' economic assets and creation of enabling environments for beneficiaries to thrive, by influencing gatekeepers. However, the recent deteriorating economic situation, and increased inflation rates in Nigeria affected sales and business outcomes for beneficiaries of ENGINE I who were supported during programme implementation to set up businesses. Therefore, some of the girls reported sales figures that are lower than anticipated.

Like ENGINE I, ENGINE II is being implemented by MercyCorps through CSOs. The major difference between ENGINE I and II is the clear definition of transition pathways for beneficiaries. Moreover, while ENGINE I did not focus on improving learning outcomes for OSGs, ENGINE II aims to achieve this by improving basic literacy and numeracy skills for OSGs. The intervention for ISGs is being implemented in FCT, Kano and Kaduna states, while the intervention for OSGs is being implemented in FCT, Kano and Kaduna and Lagos states.

ENGINE II will follow-up with the marginalised girls (in school and out of school) that were retained on ENGINE I, meeting them on their journeys from adolescence to adulthood. Beneficiaries are resident in the Federal Capital Territory (FCT), Kano, Kaduna and Lagos States and are now aged between 17 and 23 years old. They will be supported for three years starting in April 2017 through March 2020.

1.2 Programme Theory of Change and assumptions

The programme design is based on the assumption that when marginalised ENGINE girls are provided with an ecosystem of support, they are able to successfully navigate key transitions. The programme's theory of change is two-fold. First, the programme assumes that in-school girls (ISGs) will successfully transition to the next phase of education or complete their current education cycle and enter the workforce through enhanced learning experiences and an improved enabling environment. Second, the programme assumes that with the right support mechanisms in place, girls whose schooling has been interrupted will have the opportunity to build their functional literacy and numeracy, while building assets and diversifying income sources. In doing so, girls will place themselves on a path to greater success and transition to employment and demand-driven entrepreneurship opportunities.

ISG are expected to transition from junior classes to senior classes with improved literacy and numeracy skills, or girls in senior classes completing secondary education and proceeding to tertiary institution or work (paid job/vocational skills/ entrepreneurship). OSG are expected to be linked to new businesses, expand their existing businesses, diversify their vocational training, or return to formal or adult education.

ENGINE II seeks to address the entrenched marginalisation of Nigerian girls that is reinforced by social, religious, economic, and educational barriers. These barriers affect access and continuation of secondary

¹¹ Ibid

education, transition to higher-level education or the workforce, and personal and economic empowerment. To address these barriers, ENGINE II will:

1. Enhance learning experiences and improve educational outcomes through enriched educational environments, including higher quality teaching, access to childcare, and targeted literacy and numeracy support. OSG will have the opportunity to further their education through flexible learning with tailored modules and the progress of all girls will be digitally tracked at an individual level.
2. Increase income-generation and asset building skills: Girls will be connected with a broad range of income generating opportunities through value chain integration or connections to key private sector partners. Asset building and business expansion will be encouraged through access to capital, cooperatives, bank accounts and government ID registration.
3. Enhance life skills training: Girls will benefit from holistic support including life skills training, health education, literacy, financial literacy, mentoring, and peer networks, with deeper content reflecting the girls' progression and increasingly complex lives.
4. Cultivate an enabling environment: The programme will improve gatekeepers' perceptions towards girls' education and empowerment and build on the key partnerships cultivated during ENGINE. These include engaging SBMCs, ENGINE State Advisory Group (SAG), and other bodies/agencies to formulate and implement actions to promote girl's education; and advocating for government, religious and education systems to incorporate the programme's activities and methodologies to sustain gains.

1.3 Programme Activities

To be able to achieve the programmes' objectives as described above, the ENGINE programme team has outlined some activities they will be implementing. In summary, this includes interventions targeted at learning, transition and sustainability. In more details, these are as follows:

1.3.1 Learning

Learning on the ENGINE II programme signifies knowledge and skills acquisition by beneficiaries through teaching experiences and programme activities in the ENGINE I learning centres. These trainings will be tailored to suit different categories of beneficiaries' capacity, learning and interests to prepare them for successful key transitions in education, work and business. ENGINE II will enhance learning for both In-School and Out of School Girls. Learning for ENGINE II is **Literacy, Numeracy, Life Skills (including menstrual health and hygiene) as well as Financial Literacy**. Learning will be facilitated by **CONTENT**-curriculum well designed to suit the respective target groups and **DELIVERY** - how the information is passed to the beneficiaries. The teaching and learning approach of ENGINE II is a Learner Centred Teaching Methodology, where teachers are responsible for providing specific intervention to the girls based on their learning needs. The programme will carry out a learning needs assessment to identify the challenges and gaps within a girl/girls learning abilities.

1.3.1.1 Learning – In School Girls

In Nigeria, the Ministry of Education (MoE) and the Universal Basic Education Commission manages all schools and determines (approves) curriculum content for all courses offered in our schools. The MoE relies on the technical expertise of one its agencies; Nigerian Educational Research and Development Council (NERDC) to develop curriculum. The process of curriculum development is cumbersome and requires inputs from the 36 states of Nigeria and approval of the Joint Consultative Committee on Education (JCCE) and National Council on Education (NCE). The JCCE and NCE are the highest making policy bodies in the Nigeria Education system.

For ENGINE II, the programme will leverage on the existing Literacy and Numeracy curricula and partner with the Federal and State MoEs and relevant agencies to review the existing teaching learning resources.

The first step will be to review the existing curriculum; identify gaps and jointly address it with the government stakeholders. This may be in the form of reviewing the curriculum by setting up learning benchmarks for each grade for English and Maths. One other major component of the Teaching and Learning (T&L) approach for ENGINE II is to use the government approved Master Trainers (MTs) to train ENGINE II learning centre facilitators. The MTs will be responsible for providing training to the teachers across the four implementing states. During the course of the training, the teachers will identify critical areas or gaps in the teaching learning process and these will be jointly addressed by Master trainers and the ENGINE II team. These critical areas will be compiled and developed into a teachers' handbook specific to each state.

1.3.1.2 Learning – Out of School Girls

In Nigeria, interventions that cover out of school adolescent girls are routed and managed by the Ministry of Women affairs both at the State and Federal level. The Ministry of Education share this responsibility in the context of providing mass literacy for ALL Nigerians- and this includes marginalised girls. The Curriculum content for Literacy, Numeracy and Vocational studies (note that often times vocational studies is confused as life skills) exist but are generic for both men, women, boys, girls. However, the gap we have identified is mainly on life skills.

ENGINE II will collaborate with the Ministry of Women Affairs (MoWA) to achieve its functional literacy targets for OSGs. This will be by influencing content (use of ENGINE II supported manuals) and delivery methodology in government centres using success stories from ENGINE I as evidence for policy dialogues and community led advocacies and sensitisation. ENGINE II will use the existing curriculum taught across all the Agency for Mass Education (AME) centres. Similar to the ISG learning approach, the programme along with the government officials will review the existing curriculum; identify gaps and jointly address it with relevant stakeholders. Similarly, MTs will be trained on ENGINE Teaching and Learning approach. They will be responsible for downstreaming the training to other OSG learning centre facilitators.

ENGINE II partnership with the MoWA and AML in the development manuals will be targeted at showcasing that adolescent girls are a specific demographic that government will need to target interventions towards. Adopting manuals specifically for adolescent girls is the starting point and target for ENGINE II.

1.3.1.3 Financial Literacy

In July 2017, the National Council on Education (NCE) approved a Financial Literacy manual to be used in all primary and Secondary schools, this means that ENGINE II will have to use this approved manual as it is the only manual authorised for schools. Mercy Corps contributed to the development of this financial literacy manual, which was led by the Central Bank of Nigeria. ENGINE II will use the government approved Financial Literacy Curriculum and will partner with the Federal and State MoE to translate and /or expound them in the context of ENGINE II's focus. This manual will override the ENGINE I financial education manual that was approved for use across schools by the Kano State Government. Since ENGINE I girls have already received training on financial literacy; the focus of ENGINE II will be to review and adapt the financial literacy curriculum to suit the needs of the adolescent girls and young women.

1.3.1.4 Life Skills

Nigeria has not adopted a Life Skills curriculum, what is approved and exists in schools is Family Life and HIV Education (FLHE) which has been mainstreamed into core science and social science subjects in schools. ENGINE II participated at the life skills curriculum review and development programme organised by the United Nations Children's Fund (UNICEF). This Life Skills curriculum developed by UNICEF is the reference document used by the ENGINE II team to develop the life skill curriculum and manual adopted by the programme for in-school and out-of-school girls. Reviews and additional contributions were made by relevant stakeholders across the four states making the manual state specific and relevant to the prevalent issues and cultural/religious norms of each state.

1.3.2 Transition

One of the key focus areas of the programme objective is to support beneficiaries prepare for and successfully transition to the next phase of education, work and personal empowerment. Here in, all programme activities will work with various stakeholders and programme units to implement linkages for beneficiaries to economic/financial opportunities for business expansion, linkages to scholarship and second chance education opportunities for academic progress and internship/work opportunities and mentorship for sustainable success.

ENGINE II will ensure girls transit successfully into higher levels of education or business/work through active engagement with the public and private sector stakeholders to increase appropriate economic opportunities for beneficiaries. The programme will mobilise public and private actors to advocate for specific and well-defined change to mitigate social and cultural barriers for marginalised girls at community and household levels.

The difficulties ENGINE I girls faced in transitioning back to schools will be reference points for ENGINE II's collaboration with the Federal and State Ministry of Education. ENGINE II will support the State Ministries in creating awareness on academic transition pathways available including scholarship, admission slots back to school or institutions of higher learning, business opportunities etc. States where these opportunities do not exist will take up advocacy events that will pressure government to consider developing transition pathways.

ENGINE II programme will provide scholarships to facilitate girls transition into higher learning, support the expansion of business ventures and provide linkages to loans to support beneficiaries' business growth and diversification.

1.3.3 Sustainability

For ENGINE II, sustainability means the ability to maintain a defined process or behaviour indefinitely or at least over a period of time. This means that the interventions will enable programme to meet its targets and that states and communities will be able to carry on these interventions well after ENGINE II close out. This concept is anchored on meaningful involvement, participation and ownership of all key stakeholders. It strives when programmes are implemented through established state structures rather than creating parallel systems even when they are more convenient. ENGINE II will demonstrate sustainability through its **PROCESS across the community, school and system levels**.

Sustainability will be achieved through institutional capacity building, harmonising costs so that government/community can continue to pay for services/ manage the process, existing systems are strengthened by implementing through Government established platforms, common data source and securing financial commitment from Government. ENGINE II will target to achieve sustainability at three levels; Government, Community/School and through state-level institutions and influencers such as the State Advisory Groups and civil society organisations.

The success of ENGINE II programme will be measured by the extent to which girl-related policies and practices in Nigeria have been influenced for positive results. Also, the depth of the acceptance, ownership and replication of the programmes' values and models will be an essential indicator for programme success. All programme activities will showcase all programme achievements to stakeholders; consolidate their contributions and handover to appropriate quarters for replication and informed decisions.

Table 1 presents the program's sustainability matrix, which outlines the approach used by the project to ensure sustainability across the community, school and system levels.

1.3.4 Intermediate Outcomes

In addition to its main aims, ENGINE II hopes to achieve additional intermediate outcomes. The programme's plans to achieve these outcomes are detailed below:

1.3.4.1 Improved attendance

The programme aims for marginalised girls to actively seek to attend secondary school and to maintain their attendance at school through to completion. The strategy for increasing attendance and retention of the beneficiaries include; motivating beneficiaries through participatory learning including the use of technology, role modelling, provision of scholarships, periodic vocational skills, and low-cost gifts linked to the completion of learning. Programme will support state government in using and maintaining Management Information Systems (MIS). Methodologies for measurement are both quantitative and qualitative: Focus group discussions (FGD), Key Informant Interviews (KII), House-Hold Surveys (HHS), MoE MIS data and school records. ENGINE II will print out bar coded ID card for all its beneficiaries. The learning centre facilitators will be given a tablet. The attendance will be collected weekly and automatically uploaded to the cloud. ENGINE II will review the attendance every week, so that whenever there is low attendance the programme knows about the reasons for high absenteeism and take immediate action.

Spot checks by the external evaluator and the programme monitoring team will be used to confirm data reported by facilitators.

1.3.4.2 Improved teaching quality

To achieve this result, ENGINE II will build upon engagement at multiple levels of the formal education system on teacher training, educational material development, school governance improvement, conditional school infrastructure investment and the enhancement of learning spaces through effective SBMC/PTA, Principals, Teachers and Role Model engagement.

The approach to teaching and learning on ENGINE II has evolved from engaging the services of an independent consultancy firm/organisation to build the capacity of teachers to deliver its learner centred teaching methodology to beneficiaries. Working with an in-house education expert, the implementation team in coordination with the existing government experts responsible for delivering education interventions across the four target states, as well as with the teachers at state level, the programme shall recruit Master Trainers from Ministry of Education and its line agencies.

Table 1: Programme Sustainability Matrix

	Changes that will be sustained	Changes that will <u>not</u> be sustained	Barriers to sustainability	Activities to address sustainability barriers
School	<ul style="list-style-type: none"> • Learning sessions facilitated by teachers • Peer learning via girls' fora • SBMC action plans for inclusion of marginalised girls • Digital platform to track girls • Girls supported by trained teachers to continue schooling and transition 	<ul style="list-style-type: none"> • Payment of stipend to teachers • Funding of M&E on NYSC volunteer activities • Payment of school fees • Payment of transition exam fees 	<ul style="list-style-type: none"> • Change in school management leadership of the school, transfer of trained teachers to non-project schools • Lack of political will or change in leadership of NYSC or Gender focal person at the Ministry of Women's Affairs • Girls peer structures may wither over time as girls age out 	<ul style="list-style-type: none"> • Work with National Union Teachers (NUT) to integrate teacher trainings • Institutionalizing safe learning spaces in the NYSC scheme. Engage Ministry of Education and NYSC in MOU for continuous deployment of corps members to schools beyond ENGINE II. • Provision of digital content to promote self-learning
Community	<ul style="list-style-type: none"> • Girls supported to expand their businesses through 'girl-friendly' service providers • Trained girl fora leaders and teachers continue to track attendance • Girls expand & diversify businesses • Girls' fora transformed to cooperatives to build their economic assets • Life skills and business training facilitated by girl leaders 	<ul style="list-style-type: none"> • Refresher training • Training of new teachers due to staff transfers and turnover of trained teachers • Provision of training materials • Engagement with private sector partners 	<ul style="list-style-type: none"> • Economic recession • Market saturation • Re-posting or transfers of teachers • Girls get married and relocate from community • Girls may be unwilling or unable to form cooperatives • Manuals may be misplaced by girls • School and community leaders may be unwilling to support the girls clubs 	<ul style="list-style-type: none"> • Linkages with value chain retailers as mentors for continuous supply of business • Support girls to diversify income sources • Bringing in other mirco franchise into ENGINE • Use of NYSC members to support girls • Source a mentor for each girl forum who can ensure continuity and help regular election of new girl fora leadership • Girls clubs will be managed by one than one girl leader and 2 manuals deployed per club to ensure t continuous sessions • Soft copies of manuals transferred to schools for reprinting if needed • Financial education mainstreaming with CBN
System	<ul style="list-style-type: none"> • SAG national council campaigns and advocacies leading to policy change • ENGINE model embedded into education systems and schools 	<ul style="list-style-type: none"> • SAG council executive active • More schools adopting the ENGINE model and supported by program to kick start the process 	<ul style="list-style-type: none"> • Transfer of SAG Government members to other state functions. • Weak coordination resulting in inactive or passive SAG members • Government unwilling to implement CRA and other policies 	<ul style="list-style-type: none"> • Ensure there are at least two Government members per state in SAG membership • Continuous advocacy to Government through concentrated effort of bringing all CSOs together to speak with concerted voice to the Government

They will be selected on the basis of set of criteria set forth by the programme. Once selected they will be trained by the programme on its T&L approach. These MTs will then be responsible for down streaming the training to ISG and OSG teachers across all the four implementing states. ENGINE II will adopt the governments curriculum for both ISGs and OSGs in Maths and English and work to develop a “Teachers Handbook” to help make teaching the material simpler, more intuitive and to take a learner-centred approach.

1.3.4.3 Increased access to economic opportunities

The programme will partner with the private sector for a double win – social impact aligned with their long-term growth strategies. This will enable marginalised girls to create better financial futures, building assets and gaining autonomy to control their own financial resources. ENGINE II is in partnership with the National Identity Management Commission (NIMC) and Access Bank Plc, a multinational bank with headquarters in Nigeria who are registering girls on national ID cards and opening accounts for beneficiaries respectively. On ENGINE I, girls were integrated into value chain and business of choice. ENGINE II will continue to support girls in their businesses while seeking additional value chains with communities where marginalised girls can generate income safely. This is happening both locally (in-communities) through apprenticeships and at higher levels through large private sector organisations. Furthermore, the programme will help girls to build their own understanding of financial management and entrepreneurship.

1.3.4.4 Increased life skills

Findings from ENGINE I endline revealed a gap in the knowledge of Reproductive Health (RH) education and skills amongst beneficiaries. ENGINE II will work to close this gap by expanding its life skills curriculum to include components of RH including Menstrual Health Hygiene and Management (MHM) that will help build the skills of beneficiaries to make informed decision to facilitate life choices. Life choices here signifies the ability to take significant decisions in life, have set goals in life and work towards it.

ENGINE II will work with an array of diverse actors at all levels to remove barriers for effective implementation of programme through an innovative advocacy and behaviour change communication campaign tagged “SHEro campaigns” where media serves as an effective public forum for policy dialogue and community and state influencers promote girl friendly policies/practices. This will lead to local community/Civil Society participating in public policy dialogues and can articulate openly and effectively their views of programme requirements.

ENGINE II aims that the effect of the programme will ripple forward, positively impacting the lives of marginalised girls in Nigeria. The programme will mobilise critical mass to advocate for specific and well-defined change, to mitigate social and cultural barriers for marginalised girls at community and household level using behaviour change communication, and to provide additional support to girls as they navigate life’s complexities by connecting them with mentors. The programme will work with the National Youth Service Corps (NYSC) to achieve this.

1.3.4.5 Improved school governance

Improved school governance refers to achieving popular and political support for programmes at school level. In-school community includes the school principal, School Based Management Committee (SBMC), the Parent Teachers Association (PTA executives), Head girl, Head boy and teachers. These stakeholders will be engaged to support gender equity by developing school charters against all forms of abuse. Engagement with the school system will be through the MoE, State PTA unions and the All Nigeria Confederation of Principals (ANCOPs).

Table 2: Programme design and intervention

Intervention types	What is the intervention?	What Intermediate Outcome will the intervention will contribute to and how?	How will the intervention contribute to achieving the learning, transition and sustainability outcomes?
Capacity building for Teachers/Learning Space Facilitators	Under GCE-T, Teachers will be selected through a rigorous process using an established criteria and a needs assessment conducted to identify gaps. ENGINE II will adopt a learner-centred approach and will build the capacity of teachers to be able to deploy this approach. Teachers will be trained to provide tailored intervention to beneficiaries and support learners to improve their learning.	Intermediate Outcome 2.2 Number of teachers who record using student centred teaching learning methodology both at safe space learning centres and at classrooms Note: Student centred teaching learning methodology here signifies but not limited to, paying attention to specific needs/pace of the students during and at different stages of the learning process, adjusting the teaching style as per the need of the students, providing feedback to the students and receiving feedbacks, encourages critical thinking, equal participation of all students, academic subject course are designed/taught in a simpler and easy to understand version	This intervention will facilitate learning for beneficiaries. Trained Teachers/Facilitators will support girls' education both for in-school and out-of-school. It will also support transition as girls will be able to move to higher grades, complete secondary education and proceed to tertiary institutions. Trained teachers will step down their trainings to other teachers within the school, thus creating a multiplier effect and supporting the sustainability drive.
Income generating opportunities.	Business education will form a part of the learning that girls receive at the safe spaces. ENGINE II will map business opportunities across locations of interventions and facilitate partnerships with private sector. Beneficiaries will undergo a Matching Interest to Work assessment and will be linked to preferred business option for income generation. Second level vocational skills training will be provided for both OSGs and IS girls across states.	Intermediate Outcome 3.1 Percentage of OSGs reporting increase in income Intermediate Outcome 3.2 Percentage of IS girls who report access to alternative livelihood opportunities and skills.	This activity will contribute to transition from one level of business to diversification and expansion. Furthermore, these businesses are expected to outlive the life of the project and provide work opportunities for non-program girls/young women within the intervention communities.

Intervention types	What is the intervention?	What Intermediate Outcome will the intervention will contribute to and how?	How will the intervention contribute to achieving the learning, transition and sustainability outcomes?
SHEro campaigns	<p>SHEro campaign is a strategic Behaviour Change Communication approach targeted at a network of people and or systems that contribute to the push and pull factors that are critical to a girl’s ability to successfully learn or transit. These will include but will not limited to the households, communities, school systems, business environment and the larger policy and governance systems. These network of influencers will be targeted through various community level interventions to support girls’ decision-making process. The SHEro activities will include advocacies, policy dialogues, community based film festivals, gender trainings, audio/video and print BCC messages.</p>	<p>Intermediate Outcome 4.1 Percentage of girls reporting improved decision-making power around their life choices Note: Life choices here signifies the ability to take significant decisions in life, have set goals in life and are working towards it</p>	<p>These activities contribute to the Learning and Transition. Girls are able to make informed decisions that impacts on their learning and transition. For example, a girl is able to make a decision to delay marriage and transit to higher grade of learning.</p>
Engagement with SBMC/PTAs and community groups	<p>Programme will work with School Based Management Committees/Parent Teachers Association across intervention schools. These stakeholders will be involved in following up with learners absent from school, facilitating a conducive learning environment and effective school systems. ENGINE II will build the capacity of SMBC/PTAs on gender and protection and track their activities for improved school safety.</p>	<p>Intermediate Outcome 5.1 Percentage of School Based Management Committees- SBMCs/PTAs that take actions to make school an enabling environment (e.g. provide child care so girls can attend school/trainings, follow up with HHs where girls are not attending school, improved school sanitation and safety systems for girls, code of conduct in practice, action taken against harassing and bullying)</p>	<p>This activity will contribute to learning, transition and sustainability. A conducive learning environment will motivate girls to stay and remain in school, thus contributing to their learning outcomes. These learners are able to transit to higher grades due to improved attendance and the activities of SMBC/PTA will continue even after the end of the project.</p>

Intervention types	What is the intervention?	What Intermediate Outcome will the intervention will contribute to and how?	How will the intervention contribute to achieving the learning, transition and sustainability outcomes?
		Intermediate 5.2 Number of SBMCs/gatekeepers reporting improved awareness on key barriers faced by marginalised girls and boys	

1.4 Target beneficiary groups and beneficiary numbers

Box 1: ENGINE II Programme Beneficiaries

Beneficiaries of ENGINE II are the marginalised girls aged between 17 and 23 years old, who were previously enrolled on the ENGINE intervention during the first phase of the GEC. The marginalisation criteria that were considered before recruiting girls into the programme include;

- Girls who were either married by or before 18,
- Girls who had a child or children by or before turning 18 years old or who were pregnant,
- Girls who are divorced or widowed,
- Girls who have a disability,
- Girls who are orphans or come from a single headed household,
- Girls who come from households with a sick parent or husband
- Out of school girls who did not complete secondary school,
- and girls identified by school heads as marginalised given their specific circumstance.

The overall population of girls enrolled into the programme during the first phase was 21,196 split across the in-school (7,128) and out-of-school (14,034) population. Among the in-school girls, there were 1,063 girls in the FCT, another 3,349 girls in Kano state and 2,716 girls in Kaduna state. In addition to this, the programme enrolled 1,583 girls in the FCT, 3,222 girls in Kano state, 1,972 girls in Kaduna state and 7,257 girls in Lagos state as the out of school population.

During the design of ENGINE II, although only the 18,000 initially targeted by ENGINE I were proposed as actual beneficiaries, and an attrition rate of 25% was estimated conservatively, it was hoped that all beneficiaries enrolled during the first phase of programming would be retained and re-enrolled in the programme. This was because on the first cycle of ENGINE I, the programme recorded a retention rate of 90% for ISG and 71% for OSG. This estimate of retained beneficiaries was used in logframe projections, an assumption that no longer holds true.

Programme enrolment records (currently tentative as the programme is authenticating the data of enrolled beneficiaries against the database from ENGINE I to be certain that all girls enrolled are actual beneficiaries) reveal some loss to follow up of beneficiaries as the enrolment rate showed that only 76% of beneficiaries were retained by the programme. The most noticeable loss was recorded in Lagos State where 50% of beneficiaries could not be traced.

To mitigate this drastic loss in Lagos, the programme requested for and received approval to enrol girls from Lagos who even though they did not benefit directly from the programme, attended girl fora activities led by ENGINE girl ambassadors; enrolment is ongoing at the time of writing this report.

Currently, among the ISG population, which totals 5,928 beneficiaries - 1,303 girls in Kano state, 423 girls in Kaduna state, and 251 girls in FCT, were identified as being marginalised due to their special circumstances at home. In addition, some others (1,665 girls in Kano state, 1,309 girls in Kaduna state and 484 girls in the FCT) were identified as being marginalised due to their families being unable to pay their school fees. In another instance, 271 girls in Kano, 1030 girls in Kaduna and 106 girls in the FCT were considered to be marginalised because they were married before turning 18 years old, had a child, had become pregnant before turning 18 years old, orphaned, or came from a single headed home. About 75% (4,514) of these girls who attended secondary school at the start of the programme are still in secondary school (in various grades between Junior Secondary School 2 and Senior Secondary School 3). An additional 27% had completed secondary school and amongst this group of girls, 263 reported that they had passed their final exams and had gained admission into tertiary institutions and 247 girls reported that they did not pass their qualifying examinations. Some girls (904) were still waiting for news on their final exams.

For the OSG population (10,007 beneficiaries) 714 girls in Kano state, 294 girls in Kaduna state, 270 girls in the FCT and 558 girls in Lagos state were identified as being marginalised because they did not complete junior secondary education. Furthermore, 724 girls in Kano state, 1,255 girls in Kaduna state 631 girls in the FCT and 1,507 girls in Lagos state were identified as being marginalised because they were married before turning 18 years old, had a child or had become pregnant before turning 18, orphaned, or come from a single headed household.

Across all states, about 2% of beneficiaries have a form of disability that limits their functionality. This varies from hearing, visual and speech impairments to mental and physical disability. The programme also recognises beneficiaries who do not fall within these categories but who consider themselves to be disabled due to their health conditions. Overall, 97 ISGs reported a form of disability and 220 OSGs are considered disabled by the ENGINE II programme.

ENGINE II is being implemented in 110 schools in total, with a distribution of 27, 38 and 46 and schools, in the FCT, Kano and Kaduna States across 13 LGAs. Likewise, the programme is being implemented in a total of 209 communities, with a distribution of 27, 72, 61 and 49 communities in the FCT, Lagos, Kano, and Kaduna states across 18 LGAs in Nigeria.

Over the course of implementing the ENGINE II programme, girls who attend secondary school at enrolment, will receive intensive coaching class to move to support them in passing their examinations and move to the next grade. Girls will also receive tutoring in Literacy, Numeracy and Life-skills. Girls who have graduated from secondary school will be supported to transition into tertiary institution or entry into the workforce or internship opportunities, based on their ambition and interests.

Girls who did not attend school during the first phase of the programme will (on ENGINE II) be supported to gain second level vocational training and to expand on or diversify their businesses. Girls will also be supported to gain functional literacy and numeracy skills and to return to school if interested.

Evaluators Note

The summary above provides details from the enrolment records that the programme team recently captured on the current status of the target beneficiaries. Data was collected by targeting beneficiary girls both at the household and school levels and can be taken to be accurate as possible, under the given circumstances. The projection of the programme before the commencement of ENGINE II has reduced by almost 25% as at the time the enrolment data was collected. Although, a buffer has been approved for the most affected area (Lagos state), regardless intense follow-up measures have to be put in place across all programme areas to ensure these estimates are maintained closely throughout the programme lifespan.

It is important to note that the programme data is not updated as at the time of this report. The analysis above is therefore based on previous programme data. OPM strongly requires that the programme team provides an accurate and updated enrolment data of all its ENGINE II beneficiaries.

2 Baseline Evaluation Approach and Methodology

In this section, we have outlined the baseline evaluation approach and the methodology. The MEL framework as well as the inception report informs in detail the information provided in the following sub-sections.

2.1 Key evaluation questions & role of the baseline

The evaluation seeks to test the overall theory of change for the programme, and assess whether inputs, outputs, and outcomes determined to operationalise the theory of change were relevant, effective, and would promote sustainability upon completion of the programme. Sub-questions have been designed to ensure that the assessment addresses main questions raised at the programme (GEC-T) level as well as measure the progress made by the programme over time. The evaluation findings will complement and feed into the evidence required for responding to higher-level programme and policy questions, which examine the effectiveness, impact and value for money of ENGINE II as a GEC-T programme.

2.1.1 Impact: What has been the impact of the ENGINE programme?

The aim of the ENGINE II programme is to achieve improved learning outcomes for the target beneficiaries i.e. marginalised girls aged 17 – 23 years old. It is expected that the two groups i.e. ISGs and OSGs will be exposed to academic interventions that would help them transition successfully through key stages of education or economic opportunities. Below are lists of questions to be addressed while evaluating impact.

Table 3: Impact

No.	Question
A.1	What impact did the ENGINE II programme have on the learning and transition of marginalised girls, including girls with disabilities?
A.2	How and why was this impact achieved across programme implementation locations?
A.3	What contextual factors impacted the implementation of the programme?

2.1.2 Relevance: How relevant is the ENGINE II programme?

The relevance of ENGINE II programme depends on the extent to which it has been based on a valid Theory of Change which is appropriate to the context of implementation, and the extent to which it meets the needs of stakeholders. The assessment of the validity of a Theory of Change has two main elements. The first is an 'ex ante' assessment of the coherence of the Theory of Change and the intervention logic it contains, as well as the consistency of its key assumptions with the available evidence base. The second is an 'ex post' assessment of how far the assumptions and intervention logic have held in practice. On the table below, we have highlighted sets of questions to be addressed while assessing relevance on the ENGINE II programme.

Table 4: Relevance

No.	Question
B.1	How relevant are the intervention (economic, education and financial) activities to the needs and priorities of stakeholders?

B.2	How significantly did the educational technology utilised on ENGINE II influence beneficiary attendance, use of learning and school grades?
-----	---

2.1.3 Effectiveness: Has ENGINE II programme achieved its objectives?

The effectiveness of the ENGINE II programme will be assessed based on achieving the core objectives of the intervention which is centred around 3 main outcomes (i) improved learning outcomes (ii) transition through key stages of education or economic opportunities and (iii) sustainability of changes in line with learning and transition. These have been used as the basis for developing the questions to be addressed while evaluating programme effectiveness as set out in Table 5.

Table 5: Effectiveness

No.	Question
C.1	Was the ENGINE II programme successfully designed and implemented?
C.2	What worked (and did not work) to increase the learning and transition of marginalised girls that benefitted from the ENGINE II programme?
C.3	How did the educational technology used on ENGINE II influence participatory teaching, teaching competence and learning solutions in programme states?
C.4	What effect did ENGINE II have on the operations of school governance and management and how did this influence learning and attendance?
C.5	How did programme outputs contribute to the impact (if any) achieved by the programme?

2.1.4 Efficiency: How efficient has ENGINE II been in achieving its objectives?

Efficiency encompasses the cost-effectiveness of the interventions and the effectiveness of management and governance. Based on the evaluation questions, the programme is highly interested on if it demonstrated value for money in terms of cost efficiency and effectiveness. We have developed the following questions that will guide into a well-reasoned evaluative judgement on the performance and contextual evidence at the endpoint. Table 6 shows the questions to be addressed while evaluating efficiency.

Table 6: Efficiency

No.	Question
D.1	How did the ENGINE partnership perform (in terms of programme efficiency)? Did the programme benefits outweigh the cost of intervention activities?
D.2	Did the programme demonstrate efficiency in terms of cost utilisation? Did it cost more or less than planned and why?
D.3	To what extent did the cost affect the results and sustainability of the programme?
D.4	To what extent did the programme costs meet the needs and priorities of the stakeholders?

2.1.5 Sustainability: Does the ENGINE II programme have sustainable approaches?

Assuming their effectiveness is demonstrated, the sustainability of the ENGINE II programme depends on the willingness and capacity of key local stakeholders in each programme area to continue implementation beyond the period of external support and financing. Assessing sustainability requires analysis of the following factors:

- The attitude of influential stakeholders, particularly government, community leaders and influencers and the education sector, to the initiative and their willingness to adopt these best practices, promoting it and new innovations associated with it;
- The affordability of the initiative within the resource envelope available, particularly the state and local government education budget;
- The existence of sufficient institutional, organizational and individual system or capacity to continue effective implementation.

To assess this, we have the following sets of evaluation questions.

Table 7 : Sustainability

No.	Question
E.1	How sustainable were the activities funded by ENGINE II and was the programme successful in leveraging additional interest and investment?
E.2	How has the institutional capacity of girls' club across programme states demonstrated competence to maintain the perceived benefits within the available resources?
E.3	What influence did ENGINE II have on communities and parents to facilitate support of girls' education and transition to the next stage of their education/business? How did this happen?
E.4	How has ENGINE II influenced the ecosystem in programme states to improve the life of marginalised girls?
E.5	What lessons can be learned for shared value partnerships?

These evaluation questions will help to validate the answers to the causal assumptions outlined in the programme's theory of change, accumulating and assessing evidence on the degree and nature of changes to beneficiaries, their communities and schools. Using a mixed-method, gender-sensitive evaluation approach that accommodates person with disabilities or special needs, information elicited will be used to answer the research questions.

During this evaluation, data will be collected at three-time points which are - baseline, midline, and end-line, focusing on impact at the outcome and intermediate outcome levels. Additionally, it will take into consideration the processes through which outputs and communication/uptake may have led to observed outcomes. It will also account for other factors that might have enabled or constrained achievement of outcomes. This would be explored with reports on findings and lessons learnt presented to key audiences of the evaluation.

2.2 Outcomes and Intermediate Outcomes

The programme has three overarching outcomes, which include:

- **Learning:** The number of marginalised girls supported by GEC who display demonstrated improved knowledge of Math, English, and improved confidence, critical thinking skills to navigate life, measured as percentage-point increases in scores for literacy, numeracy and life skills assessments.
- **Transition:** The number of marginalised girls supported by GEC who transition through key stages of education, employment or training
- **Sustainability:** Demonstrated sustainability at the community, school, and system levels of activities implemented by the programme beyond its completion.

Additionally, the programme has five intermediate outcomes, which have been identified by the programme team as essential enablers to attaining the outcomes for the programme. They also link to programme outputs as they measure the extent to which outputs have resulted in behavioural change or practice. The intermediate outcomes include:

- **Attendance:** More regular attendance of beneficiaries to schools or safe space centres, measured as an increase in attendance based on multiple sources including attendance records and bi-annual spot checks. Insight into the barriers and enablers for girls attendance in school or learning/business centres will be elicited using qualitative research techniques.
- **Teaching Quality:** More Maths and English teachers adopting the use of learners' centred teaching learning methodology; leading to improved teaching efficacy, measured through the teacher questionnaire and classroom observation. Findings will be explored further using the qualitative survey.
- **Economic Opportunities:** Beneficiaries observing an improvement in their financial status and increased access to economic opportunities, measured through multiple sources such as the girl mapping tool, and the girl questionnaire. Qualitative research will be explored to better understand available economic opportunities within their environment.
- **Life skills:** Beneficiaries acquiring important life skills such as confidence, self-esteem, interpersonal relations, critical thinking, decision-making, problem solving, and coping mechanisms necessary to navigate life and business. Additionally, beneficiaries displaying increased knowledge about menstrual health. Life skills and menstrual health knowledge would be measured using the girl questionnaire. All findings will be contextualised using the qualitative survey.
- **School Governance:** SBMC and PTAs reportedly taking demonstrated actions to make school an enabling and supportive environment for both girls and boys. School Governance would be measured using multiple tools including the SBMC questionnaire and the school survey. Findings will be explored further using the qualitative survey.

Below are the desirable programme outcomes as described on the MEL framework:

2.2.1 Learning Outcomes

Outcome 1 - Number of marginalised girls supported by GEC with improved learning outcomes

- Indicator 1.1 - Number of marginalised girls supported by GEC with improved literacy outcomes
- Indicator 1.2 - Number of marginalised girls supported by GEC with improved numeracy outcomes
- Indicator 1.3 - Number of marginalised girls supported by GEC with improved life skills

2.2.2 Transition Outcomes

Outcome 2 - Number of marginalised girls who have transitioned through key stages of education, training or employment

- Indicator 2.1 - Number of marginalised girls who have transitioned through key stages of education

- Indicator 2.2 - Number of marginalised girls who have transitioned through key stages of economic opportunities

2.2.3 Intermediate Outcomes

- Intermediate Outcome 1 – Number of marginalised girls who record improved attendance at safe space learning centres and at classrooms
 - IO Indicator 1.1 - Number of marginalised girls who achieve at least 75% attendance at the learning centres.
 - IO Indicator 1.2 - Percentage of ENGINE II ISGs reporting improved attendance at school.
- Intermediate Outcome 2 – Number of teachers who demonstrate the application of learners' centred teaching learning methodology
 - IO Indicator 2.1 – Number of teachers using learners centred teaching methodology both at learning centres and at classrooms
 - IO Indicator 2.2 – Percentage of ISGs who report improved perception on teachers' teaching quality
- Intermediate Outcome 3 – Percentage of marginalised girls who evidence increase in their financial situation and report access to economic opportunities
 - IO Indicator 3.1 – Percentage of OSGs reporting increase in income
 - IO Indicator 3.2 – Percentage of OOS girls who report access to alternative livelihood opportunities and skills
- Intermediate Outcome 4 – Percentage of girls who demonstrate increased knowledge on ENGINE II life skills curriculum
 - IO Indicator 4.1 – Percentage of girls reporting improved decision making capabilities for life choices
 - IO Indicator 4.2 – Percentage of girls reporting improved knowledge around menstrual health hygiene and management (MHM)
 - IO Indicator 4.3 – Percentage of girls reporting improved attitude towards menstrual health hygiene and management
- Intermediate Outcome 5 – SBMCs and PTAs take actions to make school an enabling and supportive environment for both girls and boys
 - IO Indicator 5.1 – Percentage of School Based Management Committees- SBMCs/PTAs that take actions to make school an enabling environment
 - IO Indicator 5.2 – Number of SBMCs/gatekeepers reporting improved awareness on key barriers faced by marginalised girls and boys
 - IO Indicator 5.3 – Percentage of girls and young women demonstrating increased awareness on protection and gender issues

2.2.4 Sustainability Outcomes

- Outcome 3 - Programme can demonstrate that the changes it has brought about which increase learning and transition through education cycles are sustainable. This will be measured at the community, school and system level.

Community level

- Indicator 1: 80 faith and traditional leaders advocate for girls' education, integrating key gender findings from the programme
- Indicator 2: 70% of parents and primary gatekeepers support girls' rights to education
- Indicator 3: 50% of gatekeepers and community members support OSGs to go back to school
- Indicator 4: 40% of community members and gatekeepers understand child protection and gender issues and are taking initiatives to address these issues at the community level

School level

- Indicator 1: 50 ENGINE II schools update/establish Code of Conduct incorporating gender and protection issues

- Indicator 2 - 50% of programme schools adapt ENGINE learner centred teaching methodology
- Indicator 3- 50% of Learning Space Facilitators transfer ENGINE's learners' centred teaching methodology to non-ENGINE teachers within their schools/communities
- Indicator 4 - 5 non-programme schools replicate ENGINE model.

System level

- Indicator 1 – 1 NYSC community development service adopts ENGINE methodology for NYSC corps members across all states in Nigeria
- Indicator 2 - 50% of SAG members take action to address gender and protection issues at the State level
- Indicator 3 - 1 Federal and 2 State Governments recognises ENGINE's contribution towards the education and economic empowerment of marginalised girls in Nigeria
- Indicator 4- 3 State Governments are aware on the key barriers to girls' education and economic empowerment and are taking supportive actions

Table 8: Outcomes for measurement

Outcome	Level at which measurement will take place	Tool and mode of data collection		Rationale – Reason why this is the most appropriate approach for this outcome	Frequency of data collection.
		Tool	Mode of data collection		
Outcome 1 - Learning	School, community/household	Quantitative Survey: <ul style="list-style-type: none"> ○ In-school girls: SeGRA/SeGMA ○ Out-of-school girls: EGRA/EGMA Qualitative Survey: <ul style="list-style-type: none"> ○ FGDs with girls to understand girls' status on life skills ○ KIIs with parents, husbands, gatekeepers and girls' employers to triangulate data. 	Administration of both quantitative and qualitative survey instruments to programme beneficiaries.	This will be measured by the external evaluator. Quantitative findings will be corroborated by qualitative interviews to understand insights and trends. These measurements will be for all beneficiaries, including OSG that receive instructions on basic literacy and numeracy.	Thrice (baseline, midline and endline)
Outcome 2 – Transition	School, community/household	Quantitative Survey: Girl Questionnaire Household Questionnaire - Qualitative Survey – FGDs with girls KIIs with parents, husbands, gatekeepers and girls' employers	Quantitative assessments using questionnaires on evaluation surveys and Qualitative interviews/case studies would be conducted with beneficiaries and teachers. Household questionnaires would be administered to head of beneficiary households.	This will be measured by the external evaluator. Quantitative findings will be corroborated by qualitative interviews to understand insights and trends	Thrice (baseline, midline and endline)
Outcome 3 - Sustainability	School, Community, Household and System.	Quantitative Survey and - In-depth Interview and FGD guides FGDs with SBMC	Quantitative assessments using questionnaires on evaluation surveys and Qualitative interviews	This will be measured by the external evaluator. Quantitative findings will be corroborated by qual interviews to understand insights and trends	Thrice (baseline, midline and endline)
Intermediate Outcome 1 – Attendance	School, learning space, Ministry of Education,	- Quantitative Survey – Girl Questionnaire Household Questionnaire - Qualitative Survey – FGDs with girls KIIs with parents, husbands and teachers	Quantitative assessments using checklists and questionnaires through spot checks in the safe space and at schools and through evaluation surveys - Qualitative interviews with gatekeepers and beneficiaries	This will be measured by the external evaluator and the programme's monitoring. Findings from quantitative data will be corroborated by qualitative interviews with beneficiaries and gatekeepers to understand insights and trends. ENGINE has trained and equipped desk officers with computing systems to support the collection and reporting of education specific	Thrice (baseline, midline and endline) with random spot checks.

Outcome	Level at which measurement will take place	Tool and mode of data collection		Rationale – Reason why this is the most appropriate approach for this outcome	Frequency of data collection.
		Tool	Mode of data collection		
		<ul style="list-style-type: none"> - Learning Space attendance and School Records - Retention and drop out data from the Education Management Information System (EMIS) of the State Ministries of Education 		data relating to attendance, retention and dropout rates.	
Intermediate Outcome 2 - Teaching Quality	Learning Space, Community/Household	<ul style="list-style-type: none"> - Quantitative Survey – Girl Questionnaire Household Questionnaire Teacher Questionnaire Classroom Observation - Qualitative Survey – FGDs with girls KIs with parents, husbands and teachers - Learning Space Records on girls who access improved learning provided by ENGINE II 	<ul style="list-style-type: none"> - Qualitative (classroom observational) assessments using checklists on teaching delivery and spot checks - Qualitative interviews with gatekeepers and teachers as well as focus group discussions with beneficiaries 	The external evaluator at baseline will establish the situation of the learning environment available to beneficiaries (i.e. in programme schools and communities), subsequent assessments will reveal changes due to teaching delivery and understanding is safe space content	Thrice (baseline, midline and endline) with random spot checks.
Intermediate Outcome 3 - Economic Opportunities	Learning Space, Community/Household	<ul style="list-style-type: none"> - Quantitative Survey – Girl Questionnaire Household Questionnaire - Programme Records - Qualitative Survey – FGDs with girls KIs with parents, husbands, girls' employers and gatekeepers 	<ul style="list-style-type: none"> - Quantitative assessments using spot checks and evaluation surveys - Qualitative interviews with gatekeepers, value chain/micro franchise-owners and beneficiaries 	A value chain mapping will be conducted to locate various businesses willing to offer economic opportunities to beneficiaries. Mixed evaluation methods will be used to quantify changes in the beneficiaries and the impact of availability of/inclusion in the economic opportunity provided by ENGINE II	Thrice (baseline, midline and endline) with random spot checks.
Intermediate Outcome 4 - Life Skills	School, Learning Space, Community/Household	<ul style="list-style-type: none"> - Quantitative Survey Girl Questionnaire Household Questionnaire - Qualitative Survey – FGDs with girls KIs with parents, husbands, girls' employers and gatekeepers 	<ul style="list-style-type: none"> - Quantitative assessments using observational assessments for content delivery and evaluation surveys for application of knowledge - Qualitative interviews with teachers as well as focus 	The external evaluator will use mixed research methods to determine if there are any changes in knowledge due to the content provided by ENGINE II in safe spaces and understand how the knowledge provided on life skills has influenced seeking further information and decision making on	Thrice (baseline, midline and endline)

Outcome	Level at which measurement will take place	Tool and mode of data collection		Rationale – Reason why this is the most appropriate approach for this outcome	Frequency of data collection.
		Tool	Mode of data collection		
			group discussions with beneficiaries	learning space content and especially menstrual hygiene	
Intermediate Outcome 5 - School Governance	School, Community/Household	Quantitative Survey SBMC Questionnaire School Questionnaire - Programme Records - - Qualitative Survey – FGDs with SBMCs	- Quantitative assessments using spot checks and evaluation surveys - Qualitative interviews with gatekeepers, staff of schools and government stakeholders	At baseline, the environment of programme beneficiaries will be assessed using a mixed approach to determine policies, school environment and gatekeeper perceptions and community involvement in female education. Subsequent evaluation points will be used to determine and understand changes influenced by programme implementation.	Thrice (baseline, midline and endline)

This table has been updated with the specific survey instruments designed to address each indicator. Quantitative tools for assessing learning outcomes were designed following the guidance provided by the FM and prior to the baseline evaluation, reading and numeracy tests were piloted and calibrated to assess ceiling and floor effects across different grades and populations (i.e. ISG and OSG). All other survey instruments were designed by the evaluation team and reviewed by the programme and FM before the commencement of fieldwork.

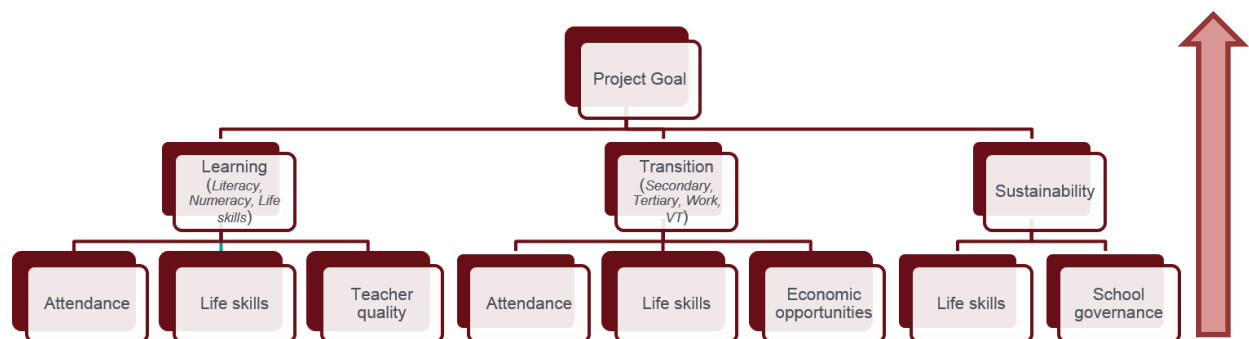
Table 9: Sustainability outcome for measurement

Sustainability level	Where will measurement take place	What source of measurement/verification will you use	Rationale – clarify how you will use your qualitative analysis to support your chosen indicator	Frequency of data collection
Schools	School and household	Household survey, FGDs, KII	The qualitative analysis will be used to understand how the sustainability approach adopted for the programme has worked and will also be used to determine a scorecard of progress	Thrice (baseline, midline and endline)
Community	Household	Household survey, FGDs, KII	The qualitative analysis will be used to understand how the sustainability approach adopted for the programme has worked and will also be used to determine a scorecard of progress	
Systems	Programme activities	KII/IDIs, programme report	The qualitative analysis will be used to understand how the sustainability approach adopted for the programme has worked and will also be used to determine a scorecard of progress	

2.3 Assumptions between Intermediate Outcomes and Outcomes

The figure below shows the assumptions between the intermediate outcomes and outcomes.

Figure 1: Project Assumptions



Intermediate Outcome 1: This intermediate outcome seeks to measure the number of marginalised girls who record improved attendance at safe space learning centres and at classrooms. The programme links this intermediate outcome to Outcome 1, learning, and Outcome 2, transition. The programmes assume that learning outcomes can be improved in girls who attend school and the learning spaces regularly. Similarly, girls who attend school and learning spaces regularly are expected to learn the necessary skills to transition through life successfully.

Intermediate Outcome 2: This intermediate outcome seeks to measure the number of teachers using learners centred teaching methodology both at learning centres and at classrooms. The programme links this intermediate outcome to Outcome 1, learning, as an improvement in teaching quality is absolutely essential to improve learning outcomes in girls.

Intermediate Outcome 3: This intermediate outcome seeks to measure the percentage of marginalised girls who evidence increase in their financial situation and report access to economic opportunities. This IO is specific to OSGs only. The programme links this intermediate outcome to Outcome 2, transition. An increase in financial situation and increased access to economic situations is pertinent for OSGs to transition through key stages of life.

Intermediate Outcome 4: This intermediate outcome seeks to measure the percentage of girls who demonstrate increased knowledge on ENGINE II life skills curriculum. This includes the ability to make better decisions, and improved knowledge and attitude around menstrual health hygiene and management. The programme links this intermediate outcome to Outcome 1, learning, Outcome 2, transition, and Outcome 3, sustainability. The programme assumes that improved decision-making skills would allow girls make better decisions that would improve learning and transition outcomes. Additionally, improved life skills would ensure that the changes implemented in girls would be sustained beyond the project's lifespan.

Intermediate Outcome 5: This intermediate outcome seeks to measure SBMCs and PTAs that take actions to make school an enabling and supportive environment for both girls and boys. This includes taking actions to make the school an enabling environment and demonstrating improved awareness of key barriers faced by marginalized girls and boys. The programme links this intermediate outcome to Outcome 3, sustainability. The programme assumes that by creating a supportive environment, sustainability of the program's activities can be ensured.

During the baseline evaluation, quantitative data was collected to establish baseline values on intermediate outcomes and outcome level indicators in order to set targets and benchmark levels. This would allow for difference-in-differences comparisons between treatment and control populations at subsequent evaluation

points. It is important to note that there are inter-dependent relationships between the different intermediate outcomes and in turn on the main project outcomes; therefore, the programme should monitor these relationships. Doing this will help the programme achieve a more robust impact. For example, an improved teaching quality can boost attendance thereby improving learning outcomes. (Bietenbeck, et.al. 2017)

2.4 Evaluation methodology

The Impact Evaluation adopted a mixed method approach, employing a quantitative household panel survey and qualitative research to assess impact and evaluate the programme across the four states of intervention. For the quantitative component that was survey-based, a longitudinal evaluation using quasi-experimental identification strategies was done so we can establish attributable changes in intermediate and final outcomes. This identification strategy was also used to determine the calculation of the required sample size that is required for a desired level of attributable change in key indicators to be statistically significant (a Minimum Detectable Effect, MDE).

The quantitative panel survey will be made up of three rounds of survey over twenty months including a baseline, midline and endline. The Impact Evaluation focuses on the core impact areas of improved learning outcomes, transition and sustainability. It included impact on literacy and numeracy skills, life and financial skills, teaching quality, school governance, to mention a few. For the qualitative component of this evaluation the approach to sampling schools is based on stratified purposive sampling. The sample for the qualitative strand is nested within the contexts used for sampling by the quantitative strand.

Beneficiaries of ENGINE II are the marginalised girls aged between 17 and 23 years old, who were previously enrolled of the ENGINE intervention during the first phase of GEC. For the indirect beneficiaries, there the teachers and boys in the same school with target girls, parents/caregivers, etc. The two different cohorts being evaluated are the in-school and out-of-school girls based on the specific intervention received from the programme. Based on the theory of change, the same cohort of girls are being evaluated for learning and transition. This is to better align with the programme design and maximise efficiency. ENGINE II beneficiaries (ISGs and OSGs) have been grouped into independent populations (in-school girls and out of school girls), based on the intervention they receive. Therefore, the sample has been divided into 4 groups: a control and treatment group for ISGs, and a control and treatment group for OSGs.

About 46 schools were randomly selected from the list of treatment schools received from the implementing partners in each state, with each school representing a cluster. Upon arrival at each school, 10 beneficiaries were randomly sampled from the identified ENGINE girls and enrolled into the study. The quantitative survey was done in a representative manner for both the treatment and comparison groups to elicit information on key indicators. It is worthy to note that the qualitative component was not designed to produce results that are generalizable in the same sense as quantitative data.

Incorporation of GESI Minimum Standards

MercyCorps Nigeria performed an extensive gender analysis of the context surrounding ENGINE II and developed a list of key project interventions intended to address girls' practical and strategic needs. This list is extensive and consistent with GESI minimum standards. The list is excerpted from ENGINE II Gender Analysis and provided for reference in the table below¹²:

¹² Excerpted from: ENGINE II GEC-T Projects Gender Analysis

Gender Analysis to address practical and strategic needs of target beneficiaries

<p>Practical Needs- <i>Short-term, immediate, practical assistance for girls according to perceived need to assist their learning progress</i></p>
<p>Safe space learning centres: Through the safe space learning centres, the girls will be provided lessons on literacy and numeracy (Maths and English) combined with soft skill subjects such as Life Skills and Financial Literacy. These will be designed with the specific needs of the beneficiaries in mind. For example, for the ISGs the focus will be more on increasing their literacy and numeracy skills and reinforcing their academic skills. Whereas for the OSGs, the project has identified three types of OSGs; girls who have never been to school, girls who have been to school and dropped out, and girls who have dropped out but are not willing to re-enter school. For the first cohort, the project will focus on providing basic literacy and numeracy skills combined with soft skills, for the second the project will focus on providing intensive coaching classes to the girls to help them re-enter schools and for the third it will be more on increasing their knowledge on Life Skills and Financial Literacy.</p>
<p>Life Skills: Teenage pregnancy/unwanted pregnancies and early marriage have been cited as one main reason for drop-outs. Early marriage arranged by parents is deep seated in some cultures, particularly in the northern part of the country. Lack of knowledge and awareness of menstruation and SRH (sexual and reproductive healthy) also contributes to educational attrition. Through the LS classes at the learning space centres, the project aims to increase participants’ knowledge of SRH. The difference in approach between ENGINE I LS classes and ENGINE II is that the later will be more focused on SRH. This will enable the girls to make better life choices.</p>
<p>Enabling environment at schools: Inadequate WASH facilities, corporal punishment, bullying and harassment and hunger are some of the reasons why students and mainly girls dropout. The project has not designed any specific intervention around WASH but it intends to carry out a gender needs assessment at all schools and work with the SBMCs and PTAs (School Based Management Committees and Parents Teachers Association) to address the key gender and protection issues affecting the learning process. Similarly, the project will work with the school stakeholders to effectively implement/ establish Code of Conduct at all project schools and ensure proper implementation. It will further work with the Guidance Counsellor at schools to mitigate any issues around bullying and harassments. Corporal punishment is entrenched across all schools, which will be addressed through child protection training as a part of the teachers training curriculum.</p>
<p>SHero Campaigns: Due to the complexities of the project areas and the deeply rooted culture, traditions and beliefs, advocacy around early marriage, teenage pregnancy or even providing equal rights and access can bring severe repercussions to the project and onto the beneficiaries. Whilst, the issues need to be addressed but in order to avoid any backlashes, the nature of the intervention has to be subtle. And it is through the SHero campaigns at the community, household and state level the project aims to increase awareness on the key issues. This will be later elevated to the state level.</p>
<p>Teachers’ Training: Quality teaching has been identified as another major problem in the learning process. In the first phase of the project, it used Learning Space Coordinators from the community to facilitate the learning spaces whereas in the ENGINE II, the project will work directly with the school teachers to build their capacities. The learning spaces will be facilitated by the in-school teachers for the ISGs. By doing so, the project aims at system strengthening. The project will revise its existing curriculum and teacher training manual which will be based on the lessons learned from ENGINE I and the best practices for both ISGs and OSGs. This will focus on student friendly teaching learning methodology. The</p>

project beneficiaries are girls 17 to 23 years old, therefore the curriculum will have to be designed in such a way that it is simple to understand and yet not too basic for them to lose interest.

Strategic needs – Interventions that will challenge existing gender roles with the goal of achieving gender equality. They seek to transform girls’ status and role in the home, community and school

Gender Transformative: The project is in the first phase was Gender Accommodating and in ENGINE II it aims at achieving Gender Transformative. It will be achieved through the SHEro campaigns in raising awareness on the barriers faced by the girls at the household and community level. The parents do not equally prioritise girls’ education to that of the boys. Day to day survival makes it hard for the parents to accept the longer-term benefit of educating a girl child. Gender will be addressed through a gender training which will be given to men, women, boys and girls at the communities integrating the different roles and responsibilities, time poverty and power dynamics existing within a household and community.

Through the SHEro campaigns, the project will target the religious and traditional leaders to support girls’

Economic intervention: Based on the findings, a girl mainly drops out due to poverty, hunger, early marriage or pregnancy. Once she stops her education it is very difficult for the girl to continue her education. This is especially true if she has children. She may not be willing to re-join schools but would like to seek alternative means of income generation. The project will target these girls by providing them higher level of vocational trainings which will be determined after a market assessment has been carried out by supporting them in expanding or diversifying their businesses and in providing access to financial services. All the economic interventions will be based on markets assessment findings. The assessment will look at what is available at the communities, scope for business expansion and profitability.

Policy advocacy and dissemination: The project’s beneficiaries do not have knowledge of the policies around education and gender equality. The project will identify key policies for strategic intervention, which has a direct link to the learning outcomes and successful transition points. The project will be looking at state specific and National level policies. The policies will also be widely disseminated to the relevant stakeholders.

Child Protection and Do No Harm (DNH): Although the project beneficiaries may not qualify as child by definition, the project will work towards ensuring that protection and DNH principles are imbedded into its design, implementation and M&E activities. It will work with existing child protection mechanisms within the state to address any protection issues that may arise during implementation.

The evaluation was designed to collect data that would be important for measuring the impact of the program’s activities over three evaluation points. The data collected was disaggregated by marginalization characteristics and potential barriers to learning, enabling the identification of subpopulations of girls who are at the greatest risk or disadvantage. Additionally, the evaluation was designed to be inclusive of girls with disabilities, and potential barriers facing this subpopulation were explored in detail. Due to the project’s focused target beneficiaries, it was not possible to conduct a direct comparison of barriers affecting girls and boys, as boys were not a direct part of the evaluation. However, boys were included in some components of the qualitative study in order to understand some barriers to learning, from their perspective.

Evaluation Benchmark

According to the FM guidance the sample size for the transition benchmarking survey ranged between 100-200 households¹³. This suggests that with a sample size of 100 households there will be a precision of +/- 9% around the estimate for the transition benchmark. This level of precision does, not significantly improve as we increase the sample within reasonable bounds – for example at 200 households there will be a sample precision of +/- 6% points around the estimate of transition.

We understand that the purpose of the benchmarking is to set targets and not to evaluate the actual performance of ENGINE on transition. The actual achievement of ENGINE on transition will be measured using the bespoke quasi-experimental evaluation design. As such we believe that a sample of 100 households should be sufficient for target setting. Although having a higher sample size increases precision, the sample size is still within the provisions of what has been outlined by the FM

Based on the guidelines in the MEL guidance¹⁴ for OSGs, a separate learning benchmark was not conducted for this subgroup. The target for subsequent evaluation points for out of school girls as provided in the project logframe would be the baseline value + 50% at midline, and baseline value + 75% at endline. However, a transition benchmark was conducted which accounts for the OSGs. It is unrealistic to set in-school targets for out of school girls, as girls in this population come from a wide range of education background, ranging from girls who never attended school, to girls who completed secondary school. Therefore, setting in-school targets for girls who never attended school is an unrealistic target. Benchmarking for out-of-school girls would be explored at the subsequent evaluation point in order to set accurate targets for this population.

For this aspect of the survey, school treatment catchment areas were identified based on the final sample of treatment schools and within each catchment area 5 households were surveyed. An abridged version of the household survey tool was implemented at this level.

Table 10: Learning and transition benchmarks.

Baseline	Midline (1 year later)	Endline (2 years later)
Programme grades		
JSS3	SS1	SS2
SS1	SS2	SS3
SS2	SS3	Workforce/Tertiary Education
Learning Benchmark grades		
SS1	n/a	n/a
SS2	n/a	n/a
SS3	n/a	n/a
Transition Benchmark		
Tertiary Education	n/a	n/a
Workforce	n/a	n/a

¹³ Page 6: Guidance on the GEC-T Baseline Household and Girls School Survey.pdf

¹⁴ Page 36: GECT MEL Guidance Part 2

See **Box 1** and **Box 2** for more details.

Box 1: Benchmarking for learning.

School and Community Sampling

The learning benchmark would be conducted in 25 treatment schools, which consists of about 50% of the survey schools, and the transition benchmark will be conducted in the same communities, with the schools serving as the cluster.

Sampled LGAs across all states were selected based on their urban-rural classification. In Lagos, Kano and Kaduna, schools were randomly selected from each LGA, which would be the reference point for the learning and transition benchmark sampling. Communities selected for the transition benchmarking would be located within 2 – 5 km from the sampled schools. A similar approach was employed in Lagos state, where LGAs were selected based on their urban-rural classification, and five communities were randomly selected from the LGAs. The table below presents a summary of the number of selected schools and communities across all states.

S/N	State	Number of LGAs	Number of schools	Number of communities
1	Abuja	2	5	5
2	Lagos	2	0	5
3	Kaduna	5	11	11
4	Kano	4	9	9

Sampling for Learning Benchmark

- The field team would contact the school principal ahead of the team's scheduled visit to inform the school of the pending visit.
- The selected schools will be visited and consent will be taken from the principal before the tests commence.
- Using the Random UX software, six girls were selected in SS1, SS2 and SS3 respectively.
- If any of the randomly selected girls is an ENGINE beneficiary, she will be excluded and replaced.
- The learning assessments were then administered as it was done during the baseline survey.
- 18 girls were sampled per school, across 25 schools to achieve a total sample size of 450.

Box 2: Benchmarking for transition.**Sampling**

The 25 schools visited for the learning benchmark would serve as the catchment area for the transition benchmark in FCT, Kano and Kaduna. The selected communities must be at least 2km from the reference school. For Lagos, five additional OSG communities would be selected as the transition benchmark communities, for a total of 30 communities across all states.

In each of the communities, 5 households will be selected and surveyed – for a total of 150 households overall. The selection criterion for the benchmark transition sample is that the households have female children between 17-25 years. The five households in each community must be spread across the community i.e. at least one for the north, east, west or south of the communities.

The snowball sampling approach will be used to identify and sample households using the following steps:

- **Step 1:** In each of the selected communities, the enumerator will ask any beneficiary household about non-beneficiary households with female children ranging from the ages of 17-25 years and ask if they can be directed to that household(s).
- **Step 2:** Once the enumerator has identified the household, s/he will ask to speak to the primary caregiver or head of the household and establish if there are any female children in that household between the ages of 17-25 years.
 - **Criteria met and household consents:** If the household meets the selection criteria, the enumerator will explain the purpose of our visit and seek their consent. Once consent is obtained, the enumerator will proceed with the abridged version of the household survey.
 - **Criteria met but household does not consent:** If the household meets the criteria but does not consent, the enumerator will seek to find another household that meets the criteria to replace the previous household, and repeat the process above.
 - **Criteria not met:** If the household does not meet the criteria, he enumerator will seek to find another household that meets the criteria to replace the previous household, and repeat the process above.

2.5 Baseline data collection process

This section outlines the data collection process, beginning with sample design and selection of schools as sampling points, and other aspects of preparing for data collection. The process of data collection is described, including quality assurance measures used. Finally, the post-fieldwork data cleaning and verification processes are described.

Sampling Framework

Forty-six schools were randomly selected from the list of treatment schools received from the implementing partners in each state, with each school representing a cluster. There were 13, 15 and 18 clusters in FCT, Kano and Kaduna states respectively. Additionally, a replacement list was created using the additional ENGINE II schools. Using Education Management Information Systems (EMIS) data from each state, propensity score matching was used to select 2 potential control schools for each treatment school.

Subsequently, a school validation survey was conducted in order to obtain characteristics, including population, of each treatment and potential control school. Using data from the school validation survey, the list of final control schools was populated by matching the schools that were most closely related, and furthest apart from each other. The schools served as the cluster for in-school and out of school populations.

In Lagos state, the list of treatment communities was obtained from the mapping exercise conducted by the programme team. 12 communities across 5 LGAs were randomly selected from this list to be visited during the survey. Control communities in each LGA were selected based on their distance from the treatment communities. The selection criterion was dependent on the control communities being furthest away from the treatment communities.

For the qualitative survey, LGAs were purposively selected from the list of LGAs visited during quantitative fieldwork. Based on the number of clusters in each LGA, the two LGAs with the highest number of clusters were selected in Kano, Kaduna and FCT. This was especially important, as each Girl and SBMC FGD consisted of participants from several clusters within the LGA. In Lagos, two LGAs were selected purposively based on their distance from one another.

Tracking of cohorts at subsequent evaluation points

To obtain a sufficient sample size for cohort tracking, the evaluation sample size was increased to account for 30% attrition rate. Prior to field work, an assignment sheet was developed in order to collect information about the girl, her phone number if available, the name of her household head or primary care giver, the phone number of the household head or primary care giver, and her house address, and any landmarks near her house. Additionally, the survey questionnaires were designed to collect information about any other person that might know about girl's whereabouts in the future, as well as collect GPS locations of girl's school and/or house.

Instrument design

Research instruments were designed specifically to address the indicators listed above. In total, 7 quantitative instruments were designed: Learning Assessments (SEGRA, SEGMA, EGRA, EGMA), Girl Questionnaire, Household Questionnaire, School Survey, Teacher Interview, Classroom Observation and SBMC questionnaire. The qualitative research tools were developed to provide in-depth insight and better understanding of the key perceptions of programme beneficiaries. 3 types of instruments were designed: FGDs, KIIs and IDIs. FGDs were administered to ISGs and OSGs; KIIs were administered to teachers, gatekeepers, parents and husbands; and the IDI was administered to boys. All instruments were designed closely with the programme manager and according to the specifications set out by the Fund Manager.

Piloting

The pilot phase of the baseline study commenced on the 18th of January 2018. Prior to fieldwork, research consultants were trained on the administration of the instruments. Over the course of the pilot, the learning assessments, girl questionnaire and the household questionnaire were assessed. In order for girls to be enrolled into the pilot study, they were required to meet the ENGINE II marginalisation criteria.

Four versions of the EGRA/EGMA assessments were piloted and administered to about 280 OSGs across all implementation states with each girl being administered two version of each test. One version of the SEGRA and SEGMA assessments were administered to 80 in-school girls in public schools across 3 states (FCT, Kano and Kaduna). Based on the results of the pilot, there were no changes made to the EGMA instrument. However, Subtasks 3 of the EGRA was slightly modified. Results from the SEGRA/SEGMA showed variability between subtask scores across states, suggesting that the piloted versions may have been too difficult in certain states. Therefore, two easier questions were added to subtask 1 in the SEGMA instrument, and two easier inferential questions were added to subtask 2 in the SEGRA instrument.

The Girl and Household Questionnaires were administered to 30 girls in FCT. Feedback from the pilot indicated that the questionnaires were a bit long to administer, leading some respondents to complain or get distracted during administration. Removing questions that did not directly report to an indicator reduced the questionnaire length in order to avoid compromising data quality due to fatigue. Additionally, the pilot study informed the development of a field-work protocol that allowed research consultants to conduct household interviews more efficiently, while maximising time.

Enumerator Recruitment

All recruited research consultants for the quantitative fieldwork were selected based on their extensive experience with conducting education surveys in Lagos and Northern Nigeria. Additionally, all research consultants had previous experience working with Computer Assisted Personal Interviewing. All research consultants were required to be fluent in English and Yoruba/Hausa depending on their states of assignment. Due to the survey target population, all the recruited research consultants and team supervisors were female, while state coordinators were male. A 15% buffer was added to the list of recruited research consultants to ensure that only the best-trained research consultants advanced to fieldwork. Research consultants recruited for the qualitative fieldwork had previous experience working on the ENGINE quantitative fieldwork, making them more familiar with the details of the programme. In addition, the selected research consultants had previous experience with conducting qualitative research in at least one previous project. All moderators were female, with fluency in English, and the native language of their states of assignment.

Training

For the quantitative fieldwork, research consultants were trained about a week. In order to maximise training efficiency and minimise distractions to data collectors, the training was fully residential. This ensured that the research consultants had more time to familiarise themselves with survey instruments on the CAPI and be better equipped with skills for accurate data collection. The training sessions provided the research consultants with the programme, the instruments to be administered, and provided them with the opportunity to discuss potential difficult scenarios they might encounter on the field, and possible solutions to these scenarios.

The training lasted for 6 days, combining a variety of methods including PowerPoint presentations, group sessions, mock interviews, role-play and in-class scenarios to ensure that the training was intensive and interactive. Additionally, the participants were quizzed at the beginning of each day to assess their level of understanding of the information they received the previous day, and to inform facilitators on areas where participants had knowledge gaps. Furthermore, participants were given daily evaluation forms in order to get their opinions on the day's training, with the aim of learning how facilitators could improve their training experience.

Over the course of the training, pilot survey was conducted to give the research consultants an opportunity to witness real life scenarios, and practice accurate coding of responses. Facilitators assessed their ability to interact with the respondents; code responses appropriately, use the show cards and the CAPI confidently. The pilot survey was conducted in the public schools (exclusive of programme schools) situated within one of the local government areas of the FCT. This gave the research consultants a chance to practice the school entry protocol and focused on their ability to conduct in-school assessments including the learning assessments, the school survey, girl questionnaire, teacher interview, and classroom observation.

For the qualitative fieldwork, research consultants were trained for about 4 days. The training was conducted with the aim of providing the research consultants with the skills required to conduct qualitative research. Role-plays, in-class scenarios and PowerPoint presentations were used to convey the information to the research consultants.

A pilot session was held in a nearby programme beneficiary community, to practice and further reflect on the research process and methodology, including FGD facilitation with OSGs and KII with a community gatekeeper. The pilot gave the team a first-hand experience on best practices and some of the logistical challenges to be expected in the field. At the end of the exercise, the team had a review session to deliberate on the in-field experience and discussed on ways to manage difficult situations.

Data Collection

Quantitative fieldwork in Kano, Kaduna and Lagos commenced on the 27th of February 2018, while fieldwork in FCT commenced on the 5th of March. Fieldwork in FCT was delayed by a week due to late receipt of approval from the State Universal Basic Education Board (SUBEB). Therefore, the FCT team was deployed to Kaduna for the first week of fieldwork. Due to the small sample size, team Lagos team concluded work on 7th of March. The Kano team concluded fieldwork on 9th of March, while the Kaduna team concluded fieldwork on 12th of March. Upon the completion of fieldwork in Kano state, the Kano team was deployed to FCT in order to expedite fieldwork completion. This was especially important because exams were pending. FCT fieldwork was concluded on the 15th of March. Qualitative fieldwork commenced on the 2nd of April, after the conclusion of quantitative fieldwork, and data collection lasted for one week. Commencing qualitative field work a week later, allowed for preliminary review of the quantitative data to provide insight into trends that needed to be further explored during the qualitative research.

Ethical standards

Training on Child Safeguarding Policy

MercyCorps facilitated a training on child safeguarding policy to ensure all field team members that would encounter a research subject below the age of 18 years were properly trained on ethical standards i.e. the rule of do no harm. At the end of the training, participants signed to have understood and be able to apply acquired knowledge when dealing with their respondents.

Furthermore, OPM has a safeguarding policy that was shared alongside a detailed research ethics guideline with the team while the survey lasted. These documents outline the procedures and considerations that protect the physical and emotional well-being of child participants (as well as all other participants) at all points.

Enumerators' Safety

To ensure enumerator safety, logistical arrangements were conducted in close coordination with local community members and guides as well technical oversight from Spearfish, the security firm for OPM. We ensured that teams are not sent to places where adequate security support could not be provided or was reported as not safe to work for the field team. In addition, when teams have to work in areas with limited power supply, they were provided with rechargeable power banks to sustain the electronic tablets.

Informed Consent

Consent was obtained from all respondents over 18 years old, and assent was obtained for all respondents less than 18 years old. Moreover, during the interview process, respondents were reminded of the confidentiality of the process, and that they were free to stop interviews at any time or skip any questions they did not want to answer. They also had the right to ask questions at any point before, during or after the interviews were completed. Respondents signed a photo indemnity form that granted permission to take their photographs for easier identification at subsequent timelines. All interviews were conducted in plain sight, and considered local language and cultural practices during administration.

Quantitative respondent sampling and selection

Girl Questionnaire

Prior to the commencement of fieldwork, the state coordinator conducted advocacy visits to the sampled schools in order to inform them of upcoming visits. Upon arrival at a treatment school, the team supervisor discussed with the ENGINE teacher or LSC assigned to the school to recruit 15 ENGINE ISGs in classes JSS3 – SS2. From this selection, 10 girls were randomly chosen from the selection to be enrolled into the study. The minimum criteria for enrolment into the study, was that girls had to be at least 17 years old. The ISGs were administered the Girl Questionnaire and the SEGRA/SEGMA learning assessments. A similar approach was used to recruit OSGs into the study.

Household Questionnaire

The household questionnaire was administered to a member of a sampled girl's household that could speak to her wellbeing at home. Upon conclusion of administering the girl questionnaire and learning assessments to the sampled girl, the research consultants followed the girl home to administer the household questionnaire. In cases where no adult was available to speak about the girl's wellbeing, research consultants called the adult to schedule an appropriate day/time to visit.

School Survey

The primary respondent of the school survey was the school principal. Whenever the school principal was unavailable, the survey was administered to the vice principal.

SBMC/CBMC Interview

The SBMC/PTA was mobilised with the help of the school principal, who contacted the chairman/vice-chair of the SBMC, who subsequently contacted other members of the committee. On the community level, the CBMC members were contacted with the help of the LSCs.

Teacher Interview

In school, the selected teacher was a teacher who teaches Math or English to students between JSS3 and SS2. Preference was given to a teacher who meets the previously stated criteria, and was trained on ENGINE I.

Qualitative respondent sampling

For the qualitative component of this evaluation the approach to sampling schools was based on stratified purposive sampling. The survey was carried out in four states across Nigeria- FCT, Kano, Kaduna and Lagos and sampling done on two levels following the quantitative sampling. The first level was the purposive sampling of LGAs; LGAs were purposively selected from the list of LGAs visited during quantitative fieldwork. Based on the number of clusters in each LGA, the two LGAs with the highest number of clusters were selected in Kano, Kaduna and FCT. The next level of sampling was of treatment schools. The schools served as a cluster from which the FGD participants were selected. This was especially important, as each Girl and SBMC FGD consisted of participants from several clusters within the LGA. In Lagos, two LGAs were selected purposively based on their distance from one another. Schools were then randomly selected within the LGA for the study. Also, all respondents for the qualitative study were randomly selected. While some basic information about the respondents was collected, this data is not enough to accurately split the respondents into sub-groups to make any comparisons.

Focus Group Discussions

FGD participants were randomly selected from a pool of respondents interviewed during the quantitative survey. Data collectors were provided with the contact details of the girls and SBMC members. Data collectors organised a venue and called respondents to schedule an appointment for the discussions. For the ISG and OSG FGDs, girls from several schools and communities were randomly selected based on the LGA they lived in. For the SBMC FGDs, SBMC members from several schools were selected to form one FGD session. All interviews were recorded and fully transcribed and translated.

Key Informant Interviews

KII respondents were individuals who are stakeholders and are involved directly or indirectly with the ENGINE programme. This includes;

- Parents/Guardians: Parents or Guardians of an ENGINE II beneficiary
- Husbands: Husbands of ENGINE II beneficiaries
- Gatekeepers: Traditional or religious leaders of ENGINE communities
- Teachers: In school and out of school learning space coordinators
- Girls' Employers: Current or former employer of an ENGINE beneficiary
- Boys: Boys learning in ENGINE schools

Data Quality Assurance

A combination of techniques and resources was deployed across all phases of the exercise to assure data quality during the baseline evaluation. State coordinators, and members of the central survey management team observed live interviews. Any errors detected during observations were noted and discussed with the teams the daily de-brief.

Additionally, each supervisor was given a school assignment sheet to be filled each day after field work. Details to be filled into the form included the name of girl, questionnaires administered, name of teacher interviewed. There was a household-tracking sheet, where teams were to fill in the household information of each girl interviewed to allow for easy tracking. This allowed supervisors to track the work completed by their team members daily and follow up on any pending questionnaires. At the end of each work day, supervisors sent their daily achievements to the WhatsApp group created for the survey. These reports were checked for consistency, completeness and correctness by the field management team. This report was cross-checked with the data management team, and any missing or inaccurate data are identified and communicated to the data collection team. Feedback was provided to enable teams to correct any mistakes and improve data collection. Additionally, teams were re-trained on data collection protocols as necessary.

An excel tracking sheet was also created by the survey management team to track the uploaded data. This information was cross-checked with the data provided on the WhatsApp group. This dashboard was also used to check any inconsistent or missing data. In the event of missing data, the field team was informed, and re-visits were conducted to ensure data completeness. Any other inconsistencies or errors were communicated to the state coordinators, and data collectors were re-trained when needed.

Final sample size for the baseline evaluation

The following tables summarise the total achievements for quantitative tools.

Final Sample Size of ISG Instruments				
	FCT	Kano	Kaduna	Total
Girl Questionnaire	259	300	359	918
SEGRA/SEGMA	259	300	359	918
Household Questionnaire	255	299	351	905
School Survey	26	28	36	90
SBMC Questionnaire	26	28	35	89
Teacher Interview	26	29	36	91
Classroom Observation	26	30	36	92

Final Sample Size of OSG Instruments					
	FCT	Kano	Kaduna	Lagos	Total
Girl Questionnaire	208	240	288	192	928
EGMA	208	238	287	191	924
EGRA	208	238	287	191	924
Household Questionnaire	207	240	287	192	926
CBMC Questionnaire	1	8	5	1	15
Teacher Interview	9	14	17	6	46

In addition to the above quantitative tools, the following qualitative assessments were conducted:

Final Sample Size of Qualitative Assessments					
FGDs					
	FCT	Kano	Kaduna	Lagos	Total
ISG	1	1	2	-	4
OSG	2	2	2	4	8
SBMC	1	1	2	-	4
KIIs/IDIs					
School teachers/LSCs	2	2	2	1	7
Gatekeepers	2	2	2	2	8
Girls' Employers	2	-	1	2	5
Parents/Guardians	2	2	2	2	8
Husbands	2	2	2	2	8
Boys	2	2	2	2	8

Data Cleaning

At the end of each workday, the field team synced their data and uploaded it to the server. The data management team reviewed the data in real time. An error log was designed using STATA to check for inconsistencies, completeness and accuracy. Upon receipt of the data collected each day, the error-log was generated and sent to the state coordinators for review. This exercise was performed daily to avoid any backlog. Additionally, an Excel dashboard was created in order to track incomplete data across the survey states. Any cases of incomplete data were reported to the state coordinators. Providing real time support ensured that any errors were addressed efficiently. Following the completion of fieldwork, a .do-file was created to reorder the flow of the dataset and label missing variables. Datasets were checked for blanks, skips, range, outliers and consistency. Additionally, the multiple select questions were re-labelled,

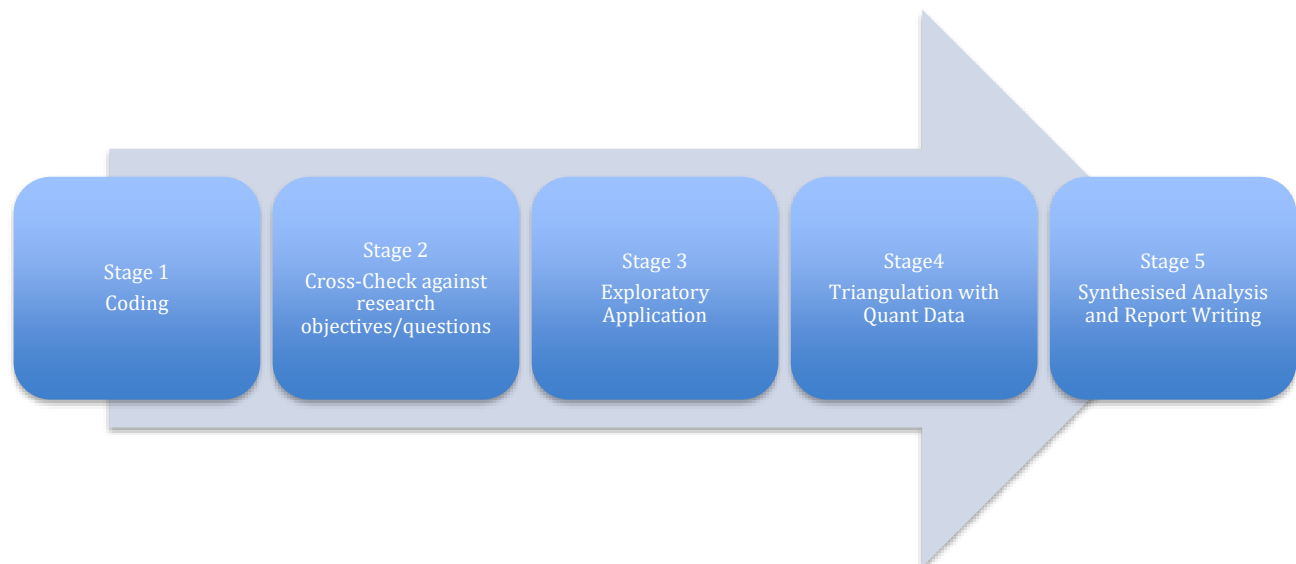
making each option a variable, with yes if ticked and no if unticked. The datasets were merged across various tools to link various questionnaires

Data Storage and Analysis

All quantitative data was analysed using STATA, and a full record of all analysis has been kept using STATA syntax stored in .do files. All tables and graphs written in this report are reproducible and can be provided upon request.

All qualitative data was transcribed, translated into English. The transcripts were coded according to the first set of codes agreed based on the discussion guide. Additional codes capturing new areas were generated as the iteration process continued. Consolidating the final codes, followed by identification of initial themes, patterns and relationships. The team of four independent consultants later met to view results of each of the coding process and to agree the parameters of the summary outline. Finally, a workshop was held with the quantitative research team to triangulate the findings from both components.

Figure 2: Qualitative analysis process



2.6 Challenges in baseline data collection and limitations of the evaluation design

This section presents the primary methodological challenges posed by the study. For each of the challenges presented, the steps taken to mitigate the challenge are also presented. It is noteworthy that while steps were taken to mitigate these challenges, some uncontrollable factors may affect the robustness and reliability of the data.

2.6.1 Methodological Challenges

Using Quasi-Experimental Design

Firstly, the evaluation inherited schools from the previous cycle of the ENGINE programme thus limiting the evaluation to the use of quasi-experimental design. This challenge was mitigated by conducting a validation survey whereby data on school characteristics were collected and matched using the propensity score matching technique to identify closely related comparison schools to each of the treatment schools.

Sample attrition

The evaluation is based on a panel sampled of girls in their schools and at the household. The possibility exists that some of these schools and households may not be available to respond during future rounds of survey for various reasons such as refusal, non-location and migration. For example, it is possible that girls who are currently in JSS3 in Junior Secondary Schools transfer to non-ENGINE Senior Secondary Schools. On the refusal, this is likely to occur more in the control areas that will not be offered the intervention and therefore lose interest in participating in the study at subsequent evaluation points.

This was mitigated by estimating additional 30% to the calculated sample size to buffer up for any possible attrition. Furthermore, important information to ease tracking of the girls and their households was collected including contact phone numbers of all adults in the household and GPS coordinates of the household as well as a picture to minimise attrition.

OPM has a protocol in place to be used for tracking households that might have relocated which will seek to balance the need to reduce sample attrition. However, this is largely dependent on the distance of target girl/household from their original location at subsequent evaluation points. In the event whereby tracking is not successful, a replacement protocol will be initiated.

Spillover Effect

There is the potential that ENGINE II activities in treatment schools might have some impact on non-treated schools. For example, if a teacher moves from an intervention school to a non-intervention school, this could compromise the programme impact as the girls in the comparison group might become exposed to some of the programme benefits. To mitigate this, during sampling, we ensured matched schools were positioned at a '**zone of exclusion**' around one another thus minimising the possibility of the evaluation sample being exposed to spill over effects. However, government maintains the right to transfer teachers across the state, increasing the possibility that some teachers may be transferred to non-ENGINE schools at subsequent evaluation points.

Interviewer Bias

There is a possibility that interviewers introduced bias while administering some instruments, especially in the variations of reading questions to respondents. To circumvent this, extensive training, role play exercises, daily debrief sessions were done. Also, questionnaires were translated where appropriate and direct observation by the survey management team was carried out to ensure enumerators were strictly adhering to the research protocol.

Proportion of Girls in High Grade

A high proportion of girls recruited into the study were in SS2, which means that by the endline evaluation, they would have transitioned out of their current schools to tertiary education. This was expected, given that girls were enrolled into the program on ENGINE I and should have transitioned to higher grades. To circumvent this issue, the sample size was adjusted to an additional 30% to account for any sample loss, which minimizes this risk. Where possible, careful consideration was taken to select girls from lower grades. Additionally, the cohort tracking, and replacement strategies put in place would ease tracking of girls when they transition to tertiary education at endline.

Data management

Evaluation process like this are data-driven hence could be laborious and prone to human error. To avoid this, the programmed instrument was desk-tested severally and in-field to ensure that it is rightly contextualised to the evaluation objectives. Furthermore, incomplete or loss of datasets can occur as a

result of poor programming and inefficient data collection/entry. To avoid this, high quality data checks were implemented by making sure there was a daily and continuous data review, error logs and feedback, syntax files checks, etc.

2.6.2 Field observations and challenges

Age and Marginalisation Criteria

A substantial number of ENGINE beneficiaries (ISGs and OSGs) did not meet any of the marginalisation criteria as stated in the questionnaire. (married before 18, widowed, divorced, sick/disabled household member, etc.). However, it is possible that at the point of enrolment into the program, the principal identified some of the girls as marginalized

Nonetheless, the survey respondents were sampled from the pool of beneficiaries presented by the school principal, LSC, or girl ambassadors in communities as ENGINE girls. Girls were recruited into the survey based on second hand information provided by principals or LSCs or girl ambassadors. To address this issue, the list of beneficiaries following the completion of enrolment into ENGINE II would be compared to the list of survey respondents to confirm their enrolment into the program.

Furthermore, field teams reported that a significant number of ENGINE ISGs presented by the LSCs were below the age of 17. In order to ensure that the sampled girls were at least 17 years, the field team asked each girl about her name and year of birth before commencing the interview. This step was taken in a bid to ensure that only girls that meet at least one criterion is recruited into the study.

In Lagos state, there were striking cases of ENGINE OSGs who were significantly over the age of 23. Additionally, some of the girls reported that they had completed tertiary education and undergone the one-year national youth service. Interestingly, some OSGs reported that they dropped out of school voluntarily as they had no interest in continuing formal education.

As the external evaluator, we strongly recommend that MercyCorps Nigeria conduct a thorough validation of its beneficiaries. While it is understood that MC-Nigeria is not implementing the program, it is responsible for ensuring that the implementation is being performed accurately, by managing and overseeing the activities of implementation partners across all states more closely. MC-Nigeria should work with the implementation partners to ensure that the program eligibility criteria are strictly enforced when recruiting girls and conduct a thorough review of the validation and enrolment data of the beneficiaries. Moreover, the MC-Nigeria team should visit ENGINE beneficiary schools to carry out random spot checks. The field visits should be made without prior knowledge of the implementation partners to ensure the effectiveness of this process. State Team Leads should be given more authority to audit the state implementation partners' activities. During the field data collection exercise, some irregularities like name swaps were observed and this needs to be managed properly.

Absence of functional SBMCs and CBMCs

There were reported cases of non-functional SBMCs in some sampled schools. PTAs seemed to be the more functional committee in schools, because most of the constituted SBMCs had been inactive for years while others had relocated to other communities. Similarly, conducting the CBMC interviews was challenging because most committees were either inactive, or the members were unavailable. The teams also discovered that in some communities, the CBMC was referred to as the Community Action Committee (CAC), with 2 members per committee. It was still difficult to schedule interviews as most of them work outside the community.

A lot of schools did not have functional SBMCs and CBMCs (CAC) were also absent in a lot of the communities visited. Most of the schools visited admitted to having a constituted SMBC that were usually not functional. PTA groups seems to be the most functional in schools because most of the constituted SBMCs had been inactive for years while others have relocated to other state due to security concern as well as some personal issues.

This high migration and mobility rate observed during field work might pose a challenge to the sustainability of programme activities, given the high rate of migration of SBMC and CAC members observed during fieldwork. If committee members change during the implementation timeline, there is no guarantee that their replacements would ensure continuity of the program's plans, unless the programme can absorb new members over the life of the project.

High transfer rate of principals

A number of teams reported that some school principals were recently transferred and as such could not provide much information regarding the school and some were not aware of the ENGINE programme. This is a strong indication that the programme needs to engage more with stakeholders to ensure that ENGINE school principals are not transferred too frequently to retain programme efforts throughout the implementation period. This is a best practice that has been learnt from other education-based programmes in Nigeria.

Training

In Lagos state, some ENGINE I OSGs reported they had never been enrolled in a skill acquisition programme, or any business. Moreover, they had not been able to transition to school.

Timing for the benchmark sample

It is noteworthy that the benchmark data collection was done about 4 weeks sequel to the completion of the main baseline data collection due to an oversight on the part of the evaluation team.

Large number of students not attempting the tests

In the in-school population, it was observed that almost half of the girls in the treatment and control groups did not attempt the test. While this is disappointing, it proves the need for intervention programs like ENGINE, and provides an opportunity for ENGINE to impact learning outcomes, by reducing the number of girls who did not attempt the tests, and increasing the mean score of the girls that attempted the tests. In subsequent trainings, interviewers would also be trained to verbally encourage girls to attempt all questions, without suggesting answers to girls, as a means of mitigating this challenge.

Other Challenges

School Operating Hours

The most significant challenge reported in Kaduna and Kano states was the operating hours of schools. In Kaduna state, some school run a shift schedule, where junior secondary school operate in the morning, and senior secondary schools operate in the afternoon, and vice versa. Similarly, in Kano state, operating hours vary depending on the day of the week. While schools are open from 8am to 12:30pm from Monday – Thursday, they are only open from 8am to 10am on Fridays, making fieldwork challenging on Fridays. In order to resolve this challenge, the team supervisors re-strategized the team's schedule based on the school's schedule, which allowed for efficient time management.

Household Interviews

In order to deliver the household component of this programme, the field teams faced several challenges. These include difficulty in locating houses using address provide by respondents, resistance from the schools due to their concern for the students' welfare, and the distance of the school from respondents' homes. In some instances, schools assigned teachers to accompany the respondents and interviewers home.

Locating OSGs

Field teams reported difficulties with locating out of school girls in treatment communities. Some ISG LSCs and girl ambassadors had no information about the OSG population. To resolve these issues, the teams got creative and utilised whatever resources were available to them. These included locating one OSG and asking her to call any friends she has, asking the ISG LSCs to help locate the OSG LSCs, following an OSG home if she knows any ENGINE girls living in her neighbourhood.

Resistance

Some resistance was faced in some out-of-school communities as the beneficiaries complained of receiving the initial materials for the business (Coca-Cola coolers etc) but there has been no follow-up since 2016. In instances like this, such beneficiaries were replaced.

Learning Space Coordinators

Some of the Girl mentor (Teachers) revealed that they have been inactive for a while now as they assumed that following a certain exam they wrote issued by the local partner for which results are yet to be released that they were not sure if the programme was continuing. Also, that coupled with the teachers strike in Kaduna state, so many of their activity has been placed on hold.

Control schools and communities

Some teams expressed difficulty in getting girls, especially OSG in the control communities. To solve this problem, teams liaised with school teachers and principals to recruit girls that live in the community but dropped out of school before JSS3. These girls were then asked to call other girls.

3 Key Characteristics of Baseline samples

3.1 Programme beneficiaries

ENGINE II defines marginalised girls as girls who face economic, social and education barriers to improving learning and transition outcomes. The programme beneficiaries are girls aged between 17 and 23, who were married by or before age 18, are pregnant or had a child or children before age 18, are widowed or divorced, are orphaned or come from a single headed household, have a disability, come from a household with a sick parent or husband, never attended school, did not complete junior secondary school, or were identified by school heads as marginalised given their special circumstances. The analysis in the following sub-sections provides sample breakdowns by regions, grade, age, and disability, and subsequently provides a breakdown of girls' characteristics and barriers associated with educational marginalisation.

3.2 Representativeness of the learning and transition samples

The tables below present key demographic information of the baseline evaluation sample across the intervention and control population.

Table 11 describes the breakdown per intervention type across programme regions. Overall, 1846 girls were sampled in both intervention and control groups across all states. Kaduna had the highest population across both intervention types based on probability proportional to size (PPS) sampling calculations. Lagos had the lowest population, as only OSG interventions are being implemented in the state. In the ISG intervention group, a total of 460 girls were sampled in the treatment population, while 458 girls were sampled in the control population, across 3 states. In the OSG intervention group, a total of 463 girls were sampled in the treatment population, while 465 girls were sampled in the control population.

Table 11: Evaluation sample breakdown (by region)

	Intervention (Baseline)	Control (Baseline)
Sample breakdown (In-School Girls)		
FCT	130 (28.3%)	129 (28.3%)
Kaduna	180 (39.1%)	179 (39.0%)
Kano	150 (32.6%)	150 (32.7%)
Total sample size (Girls)	460 (100.0%)	458 (100.0%)
Sample breakdown (Out-of-School Girls)		
FCT	103 (22.3%)	105 (22.4%)
Kaduna	144 (31.1%)	144 (31.0%)
Kano	120 (25.9%)	120 (25.9%)
Lagos	96 (20.7%)	96 (20.7%)
Total sample size (Girls)	463 (100.0%)	465 (100.0%)

Table 12 shows the evaluation sample breakdown by grade. All the sampled girls were in grades JSS3 to SS2. There are differences in the grade breakdown between the intervention and control population. There were more girls sampled in the control population (14%) compared to the intervention population (9%) in JSS3. Conversely, there were more girls sampled in the intervention population (29%) when compared to the control population (22%) in SS2. This could be explained by the fact that a lot of beneficiaries enrolled on ENGINE I in treatment schools had transitioned to higher grades during the baseline visit.

Table 12: Evaluation sample breakdown (by grade)

	Intervention (Baseline)	Control (Baseline)
Sample breakdown (All Girls)		
JSS3	80 (8.7%)	129 (13.9%)
SS1	112 (12.1%)	131 (14.2%)
SS2	268 (29.0%)	198 (21.5%)
OOS girls (%)	463 (50.2%)	465 (50.4%)
Girls (sample size)	923 (100.0%)	923 (100.0%)

Table 13 presents the breakdown of the evaluation sample by age.

Among the in-school population, the standard deviations for the intervention and comparison groups are closely related (0.8 and 1.0). This result indicates that there is no statistically significant difference between the mean age for treatment (17.5) and control (17.6) in-school girls ($t = -1.102$, $p = 0.271$).

Among the out-of-school population, the standard deviations for the two groups are similar (1.8 and 1.9). The results indicate also that there is no statistically significant difference between the mean age for treatment (19.6) and control (19.5) out-school girls ($t = 1.130$, $p = 0.259$).

Table 13: Evaluation sample breakdown (by age)

	Intervention (Baseline)	Control (Baseline)
Sample breakdown (In-School Girls)		
Aged 17	271 (58.9%)	281 (61.2%)
Aged 18	150 (32.6%)	125 (27.5%)
Aged 19	27 (5.9%)	29 (6.3%)
Aged 20	8 (1.7%)	11 (2.4%)
Aged 21	2 (0.4%)	2 (0.4%)
Aged 22	1 (0.2%)	8 (1.7%)
Aged 23	1 (0.2%)	2 (0.4%)
Girls (sample size)	460 (100.0%)	458 (100.0%)
Sample breakdown (Out-School Girls)		
Aged 17	54 (11.7%)	91 (19.6%)
Aged 18	89 (19.2%)	97 (20.7%)
Aged 19	91 (19.7%)	64 (13.8%)
Aged 20	97 (21.0%)	79 (17.0%)
Aged 21	49 (10.6%)	34 (7.3%)
Aged 22	46 (9.9%)	49 (10.6%)
Aged 23	37 (8.0%)	51 (11.0%)
Girls (sample size)	463 (100.0%)	465 (100.0%)

Table 14 presents the breakdown of the evaluation sample by disability. As per the GEC guidance and in line with the Washington Group of questions on disability, disability is assigned to anyone with a ranking of ‘has a lot of difficulty’ or ‘cannot do at all’ in at least one of the six domains of functioning which includes – vision, hearing, mobility, cognitive, self-care and communication impairments.

This table has presented our findings on the proportion of girls that reported severe disability in at least one of the domains listed. In the ISG intervention group, about 5% of the treatment population reported having a disability, while approximately 9% of the control population reported having a disability. Interestingly, out of the girls that reported having any disability, the highest proportion was among those who reported having difficulty or no ability to comprehend or remember things (2% in the intervention group and 4% in the comparison group). The proportion of girls that reported having any disability in the OSG intervention group was lower than the ISG intervention group, at 3% in the treatment population, and 4% in the control population.

Currently the final dataset from the programme is not available as it is being worked on. However, there are differences in the methodology used to measure the proportion of girls living with disabilities. While the Washington Group of questions was used for the evaluation sample, the program did not use these sets of questions. Below (Box 3) is the questions administered by the programme to assess child functioning in girls.

Box 3: Child functioning questions as was asked by the programme

Question	Options
You mentioned that you are disabled. With which of the following do you have difficulty?	Hearing properly (hearing impairment) Seeing clearly (visual impairment) Using your legs to move from one place to another (physical disability) Using your hands to lift things (physical disability) Standing straight (physical disability) Sitting upright (physical disability) Speaking clearly for others to hear and understand (speech impairment) Thinking clearly to understand what people say or do (mental impairment) Multiple impairments/Others (Please specify)

Given the differences in methodology, and the unavailability of a final dataset, it is not possible to make direct comparisons on the differences between the proportion of girls with disability in the evaluation sample and overall programme beneficiaries at the time of this report. In the future, we recommend that the programme use a standardised instrument to assess child function.

Table 14: Evaluation sample breakdown (by disability)

Sample breakdown	Intervention (Baseline)	Control (Baseline)	Girls survey – Washington Group and child functioning questions
Girls with disability (% overall)	22 (4.8%)	39 (8.5%)	Module F
(In-School Girls)			
Vision impairment	3 (0.7%)	9 (2.0%)	F01
Hearing impairment	2 (0.4%)	3 (0.7%)	F02
Mobility impairment	2 (0.4%)	5 (1.1%)	F03
Cognitive impairment	9 (2.0%)	20 (4.4%)	F05
Self-care impairment	1 (0.2%)	1 (0.2%)	F06
Communication impairment	7 (1.5%)	5 (1.1%)	F04
Girls (sample size)	460	458	
(Out-School Girls)			
Girls with disability (% overall)	13 (2.8%)	16 (3.5%)	Module F
Provide data per impairment			
Vision impairment	6 (1.3%)	3 (0.7%)	F01
Hearing impairment	1 (0.2%)	1 (0.2%)	F02
Mobility impairment	3 (0.7%)	4 (0.9%)	F03
Cognitive impairment	2 (0.4%)	6 (1.3%)	F05
Self-care impairment	0 (0.0%)	2 (0.4%)	F06
Communication impairment	1 (0.2%)	2 (0.4%)	F04
Girls (sample size)	463	465	

3.3 Educational Marginalisation

Table 15 below presents the proportion of sampled cohort girls whose characteristics may relate to barriers and education marginalisation. ENGINE II outlines marginalisation criteria to include being pregnant or having a child or children before 18, being an orphan, living with a sick parent or husband, or having a disability, or being a school dropout.

Poverty was estimated using the Grahmeen's Foundation's Progress out of Poverty Index (PPI) now known as Poverty Probability Index tool for Nigeria. The PPI is a set of ten low-cost indicators adapted for Nigeria to estimate the likelihood that a household is living below a given poverty line. The sum of scorecard points for a household is called the score. For Nigeria, scores range from 0 (most likely below a poverty line) to 100 (least likely below a poverty line). While higher scores indicate less likelihood of being poor, the scores themselves have only relative units.

From this study, the mean Poverty Probability Index (PPI) score for the intervention group and control group were similar at 31 (standard deviation of ~3.6) and 30.85 (standard deviation of ~3.8) respectively. This implies that the likelihood (%) of the households living below the poverty line is 53.4%. Almost half of the population had PPI scores in the 2 lowest quintiles in the treatment population (44%) and the control population (46%).

Among the out-of-school, the mean Poverty Probability Index (PPI) score for the intervention group is 30.8 (standard deviation of 3.2), while the comparison group has a mean PPI score of 30.6 (standard deviation of 3.4). The likelihood for households being below the poverty line is the same as that of the in-school group (53.4%). Almost half of the population had PPI scores in the 2 lowest quintiles in the treatment population (44%) and the control population (46%).

Slightly over one-third (34%), and above average (53%) of the girls reported that they are single or double orphans, in the intervention and control populations respectively. Furthermore, only a small percentage (1% treatment, 3% control) of the in-school population were found to have had children before they aged 18 years.

Lack of funds at the household level was attributed to be the main reason for girls to be out of school by over 80% of parents/caregivers in the treatment and control populations. This was also confirmed by the OSG respondents (see the table on barriers below). Over one-third of parents of OSGs were not educated at all and therefore might not appreciate the value of good and quality education for their wards.

Table 15: Girls' characteristics

Characteristics	Intervention (Baseline)	Control (Baseline)	Source (Household and Girls School survey)
(In-School Girls)			
Orphans (%)	158 (34.4%)	244 (53.2%)	GQA06_5
Living with a sick parent/guardian (%)	90 (19.6%)	94 (20.5%)	GQA06_6
-Married (%)	5 (1.1%)	11 (2.4%)	GQ_A07_2
-Girls married by or before age 18 (%)	2 (0.5%)	1 (0.3%)	GQ_A07_2 & A4<18
-Girls that are divorced	2 (0.4%)	0 (0.0%)	GQ_A6_C
-Girls that are widowed	3 (0.7%)	2 (0.4%)	GQ_A6_D
-Girls with disabilities	22 (4.8%)	39 (8.5%)	GQ_Module F
Mothers (%)			
- Under 19	0 (0.0%)	1 (10.0%)	GQ_A4<19 & A8>0<<99
- Under 18	0 (0.0%)	0 (0.0%)	GQ_A4<18 & A8>0<<99
- Had a child(ren) before 18 years	4 (0.9%)	12 (2.6%)	GQ_A06_2
Poor households (%)			
- PPI Score (mean (s.d.))	31.0 (3.57)	30.85 (3.79)	GQ_A13-22
- PPI Score (2 lowest quintiles)	201 (43.7%)	212 (46.3%)	GQ_A13-22
- Household doesn't own land for themselves	217 (47.2%)	225 (49.0%)	GQ_A22_3
- Material of the roof is crude (Thatch, Mud/Clay, Grass/papyrus/banana leaf, Wood/Planks)	16 (3.5%)	30 (6.6%)	GQ_A15_1,2,3,4
Primary Caregiver education			
- Parent has no education (%)	88 (35.6%)	68 (39.3%)	HQ_A03a_1 & A04_0
- Sibling has no education (%)	3 (3.8%)	1 (1.3%)	HQ_A03a_2 & A04_0
- Husband/In-law has no education (%)	0 (0.0%)	0 (0.0%)	HQ_A03a_3 & A04_0
- Other Relative Primary caregiver has no education (%)	16 (13.1%)	46 (23.5%)	HQ_A03a_4 & A04_0

Characteristics	Intervention (Baseline)	Control (Baseline)	Source (Household and Girls School survey)
(Out-School Girls)			
Orphans (%)	152 (32.8%)	170 (36.6%)	GQA06_E
Living with a sick parent/guardian (%)	112 (24.2%)	147 (31.7%)	GQA06_F
-Married (%)	163 (35.2%)	122 (26.3%)	GQ_A7_2
-Girls married by or before age 18 (%)	12 (8.4%)	14 (7.5%)	GQ_A07_2 & A4<18
-Girls that are divorced	14 (3.0%)	32 (6.9%)	GQ_A6_C
-Girls that are widowed	7 (1.5%)	7 (1.5%)	GQ_A6_D
-Girls with disabilities	13 (2.8%)	16 (3.5%)	GQ_Module F
Mothers (%)			
- Under 19	11 (6.3%)	14 (9.3%)	GQ_A4<19 & A8>0<&99
- Under 18	5 (2.9%)	3 (2.0%)	GQ_A4<18 & A8>0<&99
- Had a child(ren) before 18 years	142 (30.7%)	132 (28.5%)	GQ_A06_2
Poor households (%)			
- PPI Score (mean (s.d.))	30.8 (3.20)	30.6 (3.40)	GQ_A13-22
- PPI Score (2 lowest quintiles)	202 (44.3%)	210 (45.6%)	GQ_A13-22
- Difficult to afford for girl to go to school because there isn't enough money to pay the costs of girl's schooling)	385 (83.3%)	401 (86.4%)	HQ_D08_1
- Girl needs to work, earn money or help at home	54 (11.7%)	30 (6.5%)	HQ_D08_2
- Household doesn't own land for themselves	237 (51.2%)	235 (50.7%)	GQ_A22_3
- Material of the roof is crude (Thatch, Mud/Clay, Grass/papyrus/banana leaf, Wood/Planks)	12 (2.6%)	19 (4.1%)	GQ_A15_1,2,3,4
Primary Caregiver education			
- Parent has no education (%)	75 (38.9%)	71 (43.8%)	HQ_A03a_1 & A04_0
- Sibling has no education (%)	3 (3.6%)	7 (7.1%)	HQ_A03a_2 & A04_0
- Husband/In-law has no education (%)	13 (18.1%)	3 (4.4%)	HQ_A03a_3 & A04_0
- Other Relative Primary caregiver has no education (%)	20 (17.5%)	21 (15.6%)	HQ_A03a_4 & A04_0

Barriers

Table 16 below lists potential barriers to learning and transition for both ISG and OSG respectively.

We explored safety in two dimensions i.e. her travel to and from school as well as when she is in the school premises. In this context, safety is defined as non-exposure to any type of threats, bullying or abuse within the school environment. A slightly higher proportion of the ISG in control areas (12%) felt unsafe on their way to school compared to those in the treatment (8%). Similarly, more than two times the proportion of girls in control schools (7%) compared to those in the intervention (3%) reported to not feel safe while in school.

These results emphasize the need for the programme to work closely with the school and community stakeholders to improve girl safety en-route to, and while in school. Findings from the qualitative study support this data, as some respondents reported issues such as cultism, school fights and stabbings, especially among boys, as reasons why girls might feel unsafe in school.

(Referring to boys in her school) "They are either cult boys and bad boys they can easily stab someone, they like fighting"
- Participant ISG FGD, Nyanya FCT

“So I think its more of a peer group thing. That’s why we have a lot of cult issues. And all these cultists are the boys that we keep capturing. We can’t see girls there except the boys. I do not have issues regarding the girls”

- Participant Teacher KII, FCT

Anecdotal evidence supported by findings from the qualitative research indicates that boys are a primary source of reported issues on cultism, fights and stabbing in schools. This poses a complex challenge for the program, as boys are not direct beneficiaries of the program. The program needs to work closely with the school governance structures such as the SBMC to ensure school safety. Findings from the qualitative studies also suggest that school and community governance structures are already taking steps to ensure safety. The programme can leverage on these existing interventions, or seek to improve/financially support these interventions to ensure their implementation.

Adequate seating arrangement is an essential school facility that could promote an enabling environment for learning. About one third of the girls surveyed in school said this was lacking within their schools. Data from the school survey supports these findings as 33% of principals or vice principals in the intervention schools to 35% in the control schools reported that there are not enough seats for every student in their school. Near average of all the ISGs surveyed also reported not to use toilets in school. About one-fifth of the ISGs reported that teachers were often absent in classrooms in the treatment and control schools.

Table 16: Potential barriers to learning and transition

	Intervention (Baseline)	Control (Baseline)	Source
Home – community (In-School Girls)			
Safety:			
Fairly or very unsafe for girls to travel to schools in the area (%)	9 (2.0%)	9 (2.0%)	HQ_E01_3,4
Doesn't feel safe travelling to/from school (%)	37 (8.0%)	56 (12.3%)	GQ_B04_2
Household support:			
Sufficient time to study: High chore burden takes up to one hour or more	5 (1.1%)	6 (1.3%)	HQ_F01 & F03_1,2,3
Doesn't get support to stay in school and do well (%)	0 (0.0%)	0 (0.0%)	HQ_F02_2,3 & F03_1,2,3 & F06_4,5
Listen to girl before decisions about her education are made	371 (82.8%)	377 (84.3%)	HQ_F05_2
Does not agrees that investing in girl-child education is worth it even when funds are limited	3 (0.7%)	3 (0.7%)	HQ_F06_4,5
Attendance:			
Attends school half the time (%)	457 (99.8%)	450 (98.7%)	GQ_B08
Attends school less than half time (%)	1 (0.2%)	6 (1.3%)	GQ_B08 (< half the time)
Doesn't feel safe at school (%)	15 (3.3%)	30 (6.6%)	GQ_B05
School facilities:			
No seats for all students (%)	152 (33.1%)	160 (35.0%)	GQ_B23
Difficult to move around school (%)	52 (11.3%)	60 (13.1%)	GQ_B24
Doesn't use drinking water facilities	128 (27.9%)	143 (31.2%)	GQ_B25

	Intervention (Baseline)	Control (Baseline)	Source
Doesn't use toilet at school	213 (46.3%)	207 (45.2%)	GQ_B26
Teachers:			
Disagrees teachers make them feel welcome	17 (3.7%)	15 (3.3%)	GQ_B11
Agrees teachers often absent from class	84 (18.3%)	93 (20.3%)	GQ_B12
School Management:			
SBMC addresses gender issues such as bullying, sexual harassment, etc.	170 (39.7%)	115 (28.1%)	GQ_B18_4
Performance of head teacher/principal is considered as poor or fair	11 (2.4%)	10 (2.2%)	GQ_B16_3,4
Home – community (Out-of-School Girls)			
Safety:			
Fairly or very unsafe for girls to travel to learning/business centre in the area (%)	5 (1.1%)	5 (1.1%)	HQ_E01_3,4
Household support:			
Reasons for stopping school			GQ_C01a_x
Lack of money for school fees	289 (69.6%)	317 (74.4%)	
Parents did not support	33 (8.0%)	53 (12.4%)	
Did not pass classes	26 (6.3%)	24 (5.6%)	
Married/had children	51 (12.3%)	70 (16.4%)	
Parent/Husband fell ill	12 (2.9%)	32 (7.5%)	
Graduated from SS	39 (9.4%)	15 (3.5%)	
Prolonged illness	8 (1.9%)	13 (3.1%)	
Relocation	4 (1.0%)	13 (3.1%)	
Others	62 (14.9%)	44 (10.3%)	
Sufficient time to study: High chore burden takes up to one hour or more	24 (5.2%)	7 (1.5%)	HQ_F01 & F03_1,2,3
Doesn't get support to stay in learning/business centre and do well (%)	2 (0.6%)	0 (0.0%)	HQ_F02_2,3 & F03_1,2,3 & F06_4,5
Listen to girl before decisions about her education are made	393 (87.0%)	370 (80.3%)	HQ_F05_2
Does not agree that investing in girl-child education is worth it even when funds are limited	16 (3.5%)	8 (1.7%)	HQ_F06_4,5

Barriers Specific to girls with disabilities

Table 17 presents the barriers specific to girls living with disabilities in the ISG and OSG intervention groups.

In the in-school intervention group, 14% of girls living with disabilities in the treatment group, and 18% in the control group reported that they don't feel safe traveling to/from school. These results are consistent with the overall group, and further emphasize the need for the programme to work closely with the school and community stakeholders to improve girl safety en-route to, and while in school, especially for girls with disabilities.

Overall, girls living with disabilities reported a lack of adequate school facilities. 23% of girls in the treatment group, and 46% of girls in the control group reported inadequate seats for all students in their schools. About 36% of girls in the treatment group also reported that they don't use the drinking water facilities in

the school and they don't use the toilets in school. 32% of girls in the treatment group also reported that it was difficult for them to move around. These results indicate that there is a lot to be done by the programme in order to improve access of girls living with disabilities to school facilities.

In the out-of-school intervention group, the prevalent barrier is the lack of money for school fees, where 62% of girls in the treatment population, and 75% of girls in the control population reported that they were not in school for this reason.

Table 17: Potential barriers to learning and transition for girls with disabilities

	Intervention (Baseline)	Control (Baseline)	Source
Home – community (In-School Girls)			
Safety:			
N	22	39	
Fairly or very unsafe for girls to travel to schools in the area (%)	1 (4.6%)	3 (7.7%)	HQ_E01_3,4
Doesn't feel safe travelling to/from school (%)	3 (13.6%)	7 (18%)	GQ_B04_2
Household support:			
Sufficient time to study: High chore burden takes up to one hour or more	0 (0.0%)	2 (5.1%)	HQ_F01 & F03_1,2,3
Doesn't get support to stay in school and do well (%)	0 (0.0%)	0 (0.0%)	HQ_F02_2,3 & F03_1,2,3 & F06_4,5
Listen to girl before decisions about her education are made	18 (81.8%)	33 (84.6%)	HQ_F05_2
Does not agree that investing in girl-child education is worth it even when funds are limited	0 (0.0%)	0 (0.0%)	HQ_F06_4,5
Attendance:			
Attends school half the time (%)	22 (100%)	37 (94.9%)	GQ_B08
Attends school less than half time (%)	0 (0.0%)	2 (5.1%)	GQ_B08 (< half the time)
Doesn't feel safe at school (%)	0 (0.0%)	6 (15.4%)	GQ_B05
School facilities:			
No seats for all students (%)	5 (22.7%)	18 (46.2%)	GQ_B23
Difficult to move around school (%)	7 (31.8%)	5 (12.8%)	GQ_B24
Doesn't use drinking water facilities	8 (36.4%)	10 (25.6%)	GQ_B25
Doesn't use toilet at school	8 (36.4%)	16 (41.0%)	GQ_B26
Teachers:			
Disagrees teachers make them feel welcome	1 (4.6%)	0 (0.0%)	GQ_B11
Agrees teachers often absent from class	8 (36.4%)	10 (25.6%)	GQ_B12
School Management:			
SBMC addresses gender issues such as bullying, sexual harassment, etc.	14 (63.6%)	15 (38.5%)	GQ_B18_4
Performance of head teacher/principal is considered as poor or fair	4 (18.2%)	1 (2.6%)	GQ_B16_3,4

	Intervention (Baseline)	Control (Baseline)	Source
Home – community (Out-of-School Girls)			
Safety:			
N	13	16	
Fairly or very unsafe for girls to travel to learning/business centre in the area (%)	1 (7.7%)	1 (6.3%)	HQ_E01_3,4
Household support:			
Reasons for stopping school			GQ_C01a_x
Lack of money for school fees	8 (61.5%)	12 (75%)	
Parents did not support	2 (15.4%)	2 (12.5%)	
Did not pass classes	0 (0.0%)	1 (6.3%)	
Married/had children	2 (15.4%)	2 (12.5%)	
Parent/Husband fell ill	1 (7.7%)	1 (6.3%)	
Graduated from SS	1 (7.7%)	1 (6.3%)	
Prolonged illness	2 (15.4%)	1 (6.3%)	
Relocation	1 (7.7%)	0 (0.0%)	
<i>Sufficient time to study:</i> High chore burden takes up to one hour or more	0 (0.0%)	0 (0.0%)	HQ_F01 & F03_1,2,3
Doesn't get support to stay in learning/business centre and do well (%)	0 (0.0%)	0 (0.0%)	HQ_F02_2,3 & F03_1,2,3 & F06_4,5
Listen to girl before decisions about her education are made	12 (92.3%)	13 (81.3%)	HQ_F05_2
Does not agree that investing in girl-child education is worth it even when funds are limited	1 (7.7%)	0 (0.0%)	HQ_F06_4,5

3.4 Intersection between key characteristics and barriers

The most prevalent characteristics across both groups were related to poverty, and the level of education that girl's primary caregiver had achieved.

Table 18 presents the cross-tabulation analysis of the intersection between key characteristics and barriers faced by the girls in the treatment population.

In households where the primary care giver has no education, about 30% of this households reported that they had not visited the girls' school in 12 months. Almost 40% reported that decisions on girl's education were made by adults only within the household. In addition to this, 25% reported that the girl was not enrolled in any school or vocational centre as at the time of this study.

Considering the effect of household poverty as a barrier on girls' educational status, it was observed that about 48% of primary care givers reported not to have visited the girls' school in the last 12 months for any reason whatsoever. Furthermore, 56% reported that decisions on girl's education were made solely by adults in the household, and 46% reported that the girl was not enrolled in any school or vocational centre. For girls who had to travel a long distance to school, 34% of their primary care givers reported that they had made no visits to the girls' school in the last 12 months, and 32% of their primary care givers reported that decisions on girl's education were made by adults only.

On the school level, 41% of girls whose primary care givers had no education, and 38% of girls from poor households reported that they disagreed that their teachers made them feel welcome in school.

Approximately 67% of girls with a long travel time to school reported that they attend school less than half the time, and about 50% of them don't feel safe traveling to school. Additionally, 54% of girls from poor households reported they don't feel safe traveling to school while 55% reported that they don't have someone to talk to if they feel unsafe at school.

Discussions in the qualitative study unearthed barriers to the girls' quest for quality education; this was not limited to ISGs as OSGs also expressed the barriers they faced in their desire to gain autonomous control over their financial resources. Barriers reported by ISG ranged from their inability to pay school fees on some occasions, to lack of parental support such as being sent on errands when they should be in school. OSGs mentioned barriers like a lack of access to loans, high interest rates and the fear of inability to pay back. In addition, their inability to efficiently manage their existing businesses was also mentioned.

These views were echoed by key stakeholders who buttressed the challenges girls mentioned, albeit from different perspectives. Discussions with husbands revealed that the need to take care of the home and children as a paramount duty of their wives, has hindered their ability to return to learning (school) or business. Some husbands also appeared to be adamant about their disallowing their wives to return to school. On the other hand, a good number of parents expressed willingness to send girls to school but were challenged by economic limitations.

Table 18: Examples of barriers to education by characteristic

Barriers	Characteristics			
	Primary caregiver has no education HQ_A3a & A04_0	Household is poor GQ_A13-23	Married GQ_A7_2	Long travel time (one-way) to school (over 30 min) GQ_B03_4,5,6,7
Parental/caregiver support:				
Household members made no visit to girls' school in the last 12 months (HQ_C07_z)	128 (29.2%) <i>About 29% of girls whose primary caregiver had no education were not visited in school in the last 12 months</i>	211 (48.1%) <i>Near half (48%) of poor households made any visit to girls' school in the past one year</i>	13 (3.0%)	148 (34.4%) <i>About one-third of girls that travel over 30 mins to school daily.</i>
Decision on girls' education made by adults only HQ_F05_1	111 (37.4%)	165 (55.7%) <i>Decisions over girls' education were commonly made by adults only in poor households (56%)</i>	30 (10.1%)	46 (31.9%)
Girl is not enrolled in a school or vocational centre HQ_B04_2 and D01_2	117 (25.1%)	215 (46.6%)	149 (31.9%) <i>Almost one-third (32%) of girls who were married reported not to be enrolled in any form of learning.</i>	0 (0.0%)
School Level:				
Disagrees teachers make them feel welcome GQ_B11_4,5	13 (40.6%)	12 (37.5%) <i>Over one-third of girls from poor background felt less welcomed by their teachers.</i>	1 (3.1%)	8 (25.0%) <i>A quarter of girls travelling long distances (over 30 mins) to school reported to feel welcomed by their teachers</i>
Attends school less than half time (%) GQ_B08 (< half the time)	1 (16.7%)	2 (28.6%)	0 (0.0%)	4 (66.7%) <i>Interestingly, girls (67%) who travel long distances (over 30 mins one-way) often record lower attendance in school</i>
Doesn't feel safe travelling to/from school GQ_B04_2	21 (23.3%)	50 (53.8%)	1 (1.1%)	45 (49.5%)
Doesn't have someone to talk to at school if unsafe (GQ_B06_2)	57 (26.3%)	122 (55.2%)	4 (1.8%)	81 (37.2%)

3.5 Appropriateness of programme activities to the characteristics and barriers identified

Box 2: Programme Appropriateness

All data collected during the implementation of ENGINE I were made available to the external evaluator. Although these were subsequently used for determining the sample size and sample breakdown for the baseline evaluation, the characteristics of the sample used for the baseline evaluation is slightly different to the population of ISGs and OSGs re-enrolled on the programme. The major reason for this difference is the reduced number of beneficiaries re-enrolled on the programme.

For instance, although the sample retained in the FCT in-school population was 1,063 girls, only 575 of these girls were re-enrolled into the programme. This was due to the academic system run by the Federal Capital Development Authority, which is responsible for the administration of the school boards – because Junior Secondary Schools are run separately from Senior Secondary Schools, upon finishing basic education at the end of the JSS 3 class; graduands are posted to Secondary Schools by the boards. At re-enrolment, it was realised that some ISG beneficiaries had been posted to secondary schools that were not receiving the ENGINE II intervention. Another major difference is in the OSG population, 28% of these beneficiaries could not be traced at enrolment and this affected the characteristics of the group.

In spite of these differences, the programme team, believes that the theory of change for ENGINE II still holds true and is especially relevant in the face of the barriers identified by the external evaluators. Most of the barriers identified revolve around the support system available to the beneficiary, limited support from parents, the school system/infrastructure and limited economic opportunities have been targeted by the programme. Using intensive community advocacy, the programme will work with parents, husbands and community leaders to garner support for beneficiaries to stay in school and improve at their education. The programme also intends to work with schools receiving the intervention to support them with resources that will motivate reading and retention. Through its learner centred teaching approach that supports teachers who facilitate learning on the programme, ENGINE II will improve the teaching methodologies of these teachers and encourage teachers that attend trainings to conduct step down trainings to other teachers in their schools who do not benefit from the ENGINE II teacher training process.

Rather than review the programme's theory of change, ENGINE II will use the findings from the baseline evaluation to re-enforce the communication/messaging intended for the sensitisation through the SHEro Approach.

The feedback on conducting advocacy visits to parents/guardians to ensure that they show active interest in the progress and welfare of their wards has been relevant to the revision of the teaching and learning approach for ENGINE II. The programme had initially planned to conduct community engagement meetings with mothers' groups, men and boys across the 209 communities receiving the intervention, this approach was to increase the awareness of key influencers around the need to support girls. Our revised approach to ensuring quality assurance on teaching and learning includes the incorporation of parents and community leaders as monitors that would support Master Trainers and the programme implementation team. This is to ensure parents and community members are actively engaged in the education of their wards, teachers conduct their classes as scheduled, learners are present/actively participating at learning sessions and there is the mainstreaming of child protection principles guiding the programme into the learning space and at community activities.

The programme appreciates the recommendation of the EE recommendation to revise the eligibility criteria based on the Poverty Probability Index (PPI) tool for Nigeria due to the lack of a direct reference to poverty as a requirement to be a part of the ENGINE programme. However, to avoid biased enrolment or false claims based on poverty, the programme in its first phase described the eligibility criteria as explicit conditions that are a result of poverty rather than specific terms that refer to different forms marginalisation. During enrolment on ENGINE I, in-depth explanation was provided to enrolment officers about how Principals were to identify beneficiaries whose home conditions categorised them as marginalised, while these home conditions included poverty, they were not limited to poverty and could include girls suffering

from different forms of abuse or deprivation at home. Considering that on ENGINE II, there would be no new recruitment of ISG beneficiaries, the programme would retain the initial marginalisation criteria designed for the programme.

The ENGINE II programme activities are focused on providing the essential support that will aid marginalised ENGINE girls to successfully navigate key transitions through life. To achieve this, the programme is working at mitigating the effect of social, economic and educational barriers that maybe challenging these girls. This will be done by 1) enhancing their learning experiences and improving their educational outcomes; 2) Increase income-generation and asset building skills; 3) enhance their life skills to be able to make informed choices; and lastly 4) cultivate an enabling environment that young, marginalised girls can successfully thrive in.

From the outlined activities above, girls in-and-out-of-school will be aided by putting in place (where there is none) and encouraging the already established ones with sustainable structures that could bridge the foundational gaps and foster a better future for the target girls. Teachers (and learning space coordinators) will be trained to provide assistance to girls based on learning needs. The programme team is partnering with the different stakeholders to review the existing teaching resources and curriculum. ENGINE II team is also collaborating with the Ministry of Women Affairs (MoWA) and the Agency for Mass Education to achieve its functional literacy targets for OSGs.

The baseline data reveals that the major barrier to education across the in-school and out of school population is poverty, evidenced by 44% of households in both populations having PPI scores in the two lowest quintiles. Currently, the marginalization criteria do not explicitly state “poor household” as an eligibility criterion. However, there is the criterion that states target girls include “girls identified by the principal to be marginalised”. It is possible that for the in-school girls, they were recruited into the program because they were identified as marginalized by the principal because they come from a poor household, but this is purely speculative. We recommend that the eligibility criteria be reworded to include “coming from a poor household based on the Poverty Probability Index (PPI) tool for Nigeria”. Across both intervention populations, additional prevalent characteristics identified include living with sick parents/guardians (ISG: 20%, OSG: 24%), being orphans (ISG: 34%, OSG: 33%) and coming from families where the parents have no education (ISG: 36%, OSG: 39%) (Table 15).

These characteristics, especially lack of education of primary caregiver, and coming from a poor household present several barriers to education for the girl, on the school and household levels (Table 18). This highlights the importance of the program to work on the household level to ensure that learning outcomes are achieved. The programme’s plan currently includes the formation of a Community Action Committee (CAC) that includes parents. We strongly advise that the activities of the CAC include conducting advocacy visits to parents/guardians to ensure that they show active interest in the progress and welfare of their wards.

As duly stated by the program team, the characteristics of the sample used for the baseline evaluation is slightly different to the population of ISGs and OSGs re-enrolled on the programme, primarily due to the reduced number of beneficiaries re-enrolled on the programme. These differences make it challenging to directly compare our baseline evaluation sample to the preliminary beneficiary mapping data provided.

While there are some differences, the prevalent barriers observed in the baseline population are being addressed by the programme activities. This includes facilitating academic transition pathways including scholarship, admission slots back to school or institutions of higher learning for the in-school girls and support the expansion of business ventures and provide linkages to loans to support beneficiaries’ business growth and diversification for those out-of-school.

Also, the programme will be mobilising several public and private actors to advocate for specific and well-defined change that could mitigate social and cultural barriers affecting marginalised girls at community and household levels such as high-chore burden, safe environment for girls to thrive, lack of funds to support girls' education or business, etc.

4 Key Outcome Findings

4.1 Learning Outcome

ENGINE II programme targets three learning outcomes namely; literacy, numeracy and life skills. The literacy, numeracy and life skills assessments were administered to both the in-school and out-of-school girls during the baseline evaluation. This is to provide an understanding of their learning, and transition within school or technical and vocation learning/business outside of school. In this section, we have presented key findings of the subgroups with emphasis on their current literacy and numeracy levels. Specifically, we have presented the identified gaps based on the respective subtasks of the different assessments. The aggregate scores from both the intervention and comparison groups are presented in the following sub-sections.

Learning Assessment Design

The literacy and numeracy learning assessments, SeGMA and SeGRA were designed based on the national curriculum for secondary school students in school. For the out-of-school girls, the standardised EGMA/EGRA learning assessments were used based on the foundational learning requirements for basic education. For the life skills section, all girls were administered the same set of questions under guidance from the GEC FM which are focused on relevant skills that could aid their learning and transition.

The learning assessments were developed by an education specialist who was contracted for this sole purpose who has contextual understanding of the Nigerian education system. As prescribed by the MEL Guidance, up to four versions of the tests were designed and piloted for the out-of-school group and one version of SeGRA/EGRA and SeGMA/EGMA. At the end, one version of the learning assessments for each of the sub-groups was approved for use during the baseline study. Throughout the design phase, guidance was provided by the GEC FM as well as the MercyCorps team to ensure learning assessments were in line with the MEL framework and the GEC MEL guidance for SeGRA/EGRA and SeGMA/EGMA accordingly. The different subtasks under the numeracy and literacy learning assessments for the out-of-school and in-school girls respectively are outlined as follows;

Table 19: Outline of subtasks by key sub-groups

Literacy	Numeracy
Out-of-school	
<i>Subtask 1: Letter Sound Identification</i>	<i>Subtask 1: Number Identification</i>
<i>Subtask 2: Familiar Word</i>	<i>Subtask 2: Number Discrimination</i>
<i>Subtask 3: Non-word</i>	<i>Subtask 3: Missing Numbers</i>
<i>Subtask 4: Oral Reading</i>	<i>Subtask 4: Addition</i>
<i>Subtask 5: Comprehension</i>	<i>Subtask 5: Subtraction</i>
	<i>Subtask 6: Word problems</i>
In-school	
<i>Subtask 1: Comprehension + analytical questions</i>	<i>Subtask 1: Advanced multiplication and division, fractions and proportion, geometry and measurement</i>
<i>Subtask 2: Comprehension + inferential questions</i>	<i>Subtask 2: Algebra</i>
<i>Subtask 3: Short essay</i>	<i>Subtask 3: Sophisticated Word Problems</i>

In the following sub-section, we have presented the group mean score out of 100 points achievable on the respective learning assessments between the intervention and comparison cohorts and according to their grades. Subsequently, their percentage performance score bands across the different subtasks are also presented. It is important to note that two types of approach were taken to analyse the scores. The first approach included scores of in-school girls who attempted the respective exercises and scored at least 1 on each subtask, while the second approach included all scores of the total sample size that took the assessments.

The mean scores are calculated as the mean among the subtasks of each learning assessments. The first step, is to calculate first the raw score of each subtask, which is defined as the sum among all the items of the subtask “i”. Each subtask contains multiple questions for which the answers could be correct (score equal to 1 or higher), incorrect (score equal to 0) or no attempt (score equal to 99). The raw score is calculated even for those cases where no attempts exist in some questions but not in all of the subtask. In this case, then the raw score is equal to the total score of questions that were attempted (correct and incorrect) by the girl. In the same way, if all the subtasks are equal to no attempt, then the learning scale is recoded as incorrect (zero) to allow for the calculation of the mean score.

The subtasks tables show the proportion of cases for which no attempts exist as a raw score. It is pertinent to note that for the EGMA/EGRA, the early stop rule might have contributed to the number of questions not attempted within a subtask as the allotted time to the question ran out before the girl could respond. All such questions were also regarded to be missing and scored likewise.

Figure 3: SEGMA/SEGRA Mean Score Calculation



Literacy

Table 20 below shows the literacy group mean score of the in-school and out-of-school groups and by intervention and control during baseline. Among the ISG, the mean literacy score between the two higher grades are closely related. In the JSS 3 grade however, a higher mean literacy score was observed among the intervention group compared to the control group. For the out-of-school, the literacy mean score between the intervention and control were closely matching. The low mean literacy scores among in-school girls raise the possibility of floor effects, particularly in Kano and Kaduna states (see

Table 36). This possibility was considered when designing the assessments, and two easier inferential questions were added to SEGRA Subtask 2 after the pilot, to mitigate the challenge of floor effects.

The deviation from the mean score among the out-of-school population is ± 22 within the intervention evaluation sample. For the in-school population, the deviation from the mean score ranged from about ± 13 to ± 16 from the lowest to the highest grade of the evaluation sample.

Table 20: Literacy (EGRA/SeGRA) scores including only girls who scored at least 1 on the respective subtasks

Grade	Intervention Mean	Group	Control Group Mean	Standard Deviation in the intervention group
In-School Girls (SeGRA)				
JSS 3	18.4		20.8	16.2
SSS 1	17.5		20.3	13.9
SSS 2	19.8		21.1	16.4
Total sample size (ISG)	371		348	719
Out-of-School Girls (EGRA)				
OOS Girls	32.1		30.0	22.2
Total sample size (OSG)	461		460	921

When the mean scores were calculated with the total sample size, the scores were even lower, given the frequency of girls who did not attempt the test, or scored zero on all the questions. Although the mean scores calculated with the total sample size are lower, overall, mean scores increase with an increase in grades among in-school girls.

Table 21: Literacy (EGRA/SeGRA) scores including total sample size

Grade	Intervention Mean	Group	Control Group Mean	Standard Deviation in the intervention group
In-School Girls (SeGRA)				
JSS 3	14.2		11.2	15.6
SSS 1	14.3		14.6	15.5
SSS 2	16.9		17.8	16.2
Total sample size (ISG)	460		458	918
Out-of-School Girls (EGRA)				
OSG Girls	31.5		29.1	22.6
Total sample size (OSG)	463		465	928

Numeracy

The numeracy levels of the ENGINE II programme beneficiaries as well as their comparison groups are presented on Table 22 according to their grades. Among the out-of-school population, the mean scores of the intervention group is slightly higher than that of the control group. The mean OSG baseline scores are relatively high and may suggest the likelihood of ceiling effects. However, further analysis of the subtasks indicates that the programme would need to strategically intensify its efforts to alleviate skills gaps; by tailoring lesson plans to address the specific skills that the girls are missing. The deviation from the mean score among the out-of-school population is ± 19 within the intervention evaluation sample.

For the in-school population, there was an increase as the grade progressed to higher levels. Within the intervention group, the deviation from the mean score ranged from about ± 8 to ± 15 from the lowest to the highest grade of the evaluation sample. Similar to the literacy scores, the low mean literacy scores among in-school girls raise the possibility of floor effects particularly in Kano and Kaduna states (see

Table 36). To mitigate this foreseen challenge, two additional easier questions were added to the SEGMA Subtask 1 after the pilot.

Table 22: Numeracy (EGMA/SeGMA) scores including only girls who scored at least 1 on the respective subtasks

Grade	Intervention Mean	Group	Control Group Mean	Standard Deviation in the intervention group
In-School Girls				
JSS 3	7.7		12.8	7.6
SSS 1	15.0		12.0	13.7
SSS 2	16.6		12.8	14.7
Total sample size (ISG)	250		214	464
Out-of-School Girls				
OOS Girls	61.2		58.2	18.5
Total sample size (OSG)	461		460	921

Similar to the literacy scores, calculating mean scores with the total sample size slightly reduces the mean scores.

Table 23: Numeracy (EGMA/SeGMA) scores including total sample size

Grade	Intervention Mean	Group	Control Group Mean	Standard Deviation in the intervention group
In-School Girls (SeGMA)				
JSS 3	3.5		2.2	6.2
SSS 1	5.3		4.8	8.1
SSS 2	7.5		5.7	10.4
Total sample size (ISG)	460		458	918
Out-of-School Girls (EGMA)				
OOS Girls	61.1		57.8	18.6
Total sample size (OSG)	463		465	928

Among the in-school population, the overall low numeracy and literacy baseline scores in the in-school population present a huge challenge to MercyCorps Nigeria, in terms of improving learning outcomes. It is also noteworthy that both the SEGMA and SEGMA assessments were designed according to what is expected for students in these grades based on the curriculum. Low scores on these assessments are indicative of systemic problems that require an intense multifaceted and long-term approach to address.

Findings from the qualitative study suggest that the girls felt they had improved in their understanding of Math and English, evidenced by their progression between grades and test scores. However, the quantitative data shows otherwise. While the qualitative research did not directly explore reasons for the low scores on the learning assessments, an indicative reason may be limited English skills. Obviously, students with limited reading skills in English cannot read and understand the SEGMA assessments, and therefore cannot be expected to score highly on any comprehension questions. Similarly, if Mathematics is being taught in English in the classrooms, students with limited understanding may have difficulty understanding the subject, and therefore cannot understand and perform well on the SEGMA assessments.

Therefore, exhaustive methods are required to improve learning outcomes in this group. After school programs are essential, and girls need to be taught basic reading and writing skills.

The qualitative findings revealed that teacher quality plays a huge role in girls' performance. Girls who reported that they enjoyed studying attributed this to their teachers, while some girls complained about their teachers teaching skills or attitude. Additionally, participants stated that they understand the subject matter better when teachers explain further in their local language. While findings from the qualitative study revealed that teachers think they are teaching their classrooms in an effective manner, data from the quantitative study indicated that all sampled teachers don't use learner-centred teaching methodologies (see

Table 60 below), but use ineffective teaching methods by the PALS¹⁵ standard. Therefore, in addition to providing extra lessons for girls, these results highlight that it is important for MC to intensify its efforts in improving teacher skills, with focus on using learner-centred methodologies to improve learning outcomes.

Among the out of school population, the mean literacy scores are quite low. Like the in-school population, this is likely due to limited English skills, which reduces the possibility of understanding the questions. Conversely, this population presents high numeracy scores. An indicative reason for this result may be because the girls are actively involved in businesses that have allowed them to develop basic addition, subtraction and division skills. For the out of school population, MC-Nigeria should intensify efforts to improve English reading and understanding in order to improve their learning outcomes.

Life skills and Decision-making skills

On Table 24, the skills required for making important life decisions by ISG and OSG girls within the intervention and control groups were assessed. Responses to the statements read out were on Likert scale and findings were interpreted based on the proportion of respondents who agreed to the set of questions on life skills and decision-making skills. Subsequently, an index was created to include respondents that had agreed to at least 21 out of the 28 set of questions. The output of the index was then sub-analysed into the ISG and OSG groups with the former presenting the proportion by grade.

Among the in-school group, the highest proportion (59%) was observed among the ISG in the intervention areas. It is interesting to note that life and decision-making skills increased as girls advanced in grade. This trend is almost similar to what was observed among girls in the control schools. Among the out-of-school, it is also evident that the girls in the intervention areas were better than their counterparts in the comparison areas, which hints at a residual effect of ENGINE I.

When compared to the in-school population, the out of school population reported higher life skills. This is consistent with findings from the qualitative study. A plausible explanation for this data is that out of school girls have had more exposure to the “real world”, forcing them to develop life skills that are necessary for survival. Moreover, only 2.6% of the in-school population are aged between 20-23, while almost 50% of out of school girls are in this age group, suggesting that increased age and maturity may be partially responsible for higher life skills. The MC team should intensify its life skills training in the in-school populations, especially for girls in lower grades and younger girls.

Table 24: Life skills

Grade	Intervention Group as percentage stating strongly agree or agree	Control Group as percentage stating strongly agree or agree
In-School Girls		
JSS 3	17.2%	24.2%
SSS 1	23.5%	28.1%
SSS 2	59.3%	47.7%
Total sample size (ISG)	460	458
Out-of-School Girls		
OOS Girls	50.2%	50.4%
Total sample size (OSG)	463	465

¹⁵ PALS – Principle of Adult Learning Scale

Identifying Foundational Skills Gaps

A diagnosis of the learning scores by subtask aimed at identifying the gaps in literacy and numeracy skills, particularly the foundational ones, across the intervention and control groups was carried out. Their achievement category was classified as non-learner, emergent learner, established learner and proficient learner. To better understand the gaps, the subtask scores were graded into bands of achievement as follows;

- Non-learner: 0% score of subtask items
- Emergent learner: 1%-40% score of subtask items
- Established learner: 41%-80% score of subtask items
- Proficient learner: 81%-100% score of subtask items

For the out-of-school, the assessment of the foundational learning skills was based on the percentage score achieved out of a total possible score of 100 using the marking scheme (see Annex 7). For the in-school girls, their marking scheme (see Annex 7) allowed for partial and full credits for answers provided and were therefore graded based on the total number of points that could be achieved by the learners. The correctness of the answers provided was used to inform the different scoring criteria.

Foundational Numeracy Skills Gaps

On

Table 25 and

Table 27, the numeracy skills gaps across the subtasks for both out-of-school and in-school groups are presented. Their performance was graded from non-learners up to proficient learners and the proportion for classification can be seen in the tables. The findings showed that the majority (>90%) of the out-of-school group could easily identify and distinguish between numbers. However, as the tasks increased in difficulty, their performance declined. Less than 10% of the OSG were demonstrated proficiency in subtasks 3 and 5 respectively. Interestingly, slightly above one-quarter achieved the proficiency level on word problems.

While the overall mean numeracy scores are high, subtask analysis reveals skills gaps for the out of school population, especially in identifying missing numbers and performing subtractions and solving word problems. It would be useful to MC to focus its efforts to target these missing skills gaps specifically.

Table 25: Out-of-school numeracy skills gaps including only girls who attempted

Categories	Subtask 1 Number Identification	Subtask 2 Number Discrimination	Subtask 3 Missing Numbers	Subtask 4 Addition	Subtask 5 Subtraction	Subtask 6 Word problems
Non-learner 0%	3 (0.7%)	3 (0.7%)	29 (6.3%)	10 (2.2%)	46 (10.0%)	46 (10.0%)
Emergent learner 1%-40%	23 (5.0%)	20 (4.3%)	296 (64.2%)	125 (27.1%)	179 (38.8%)	88 (19.1%)
Established learner 41%-80%	137 (29.7%)	85 (18.4%)	106 (30.0%)	237 (51.4%)	202 (43.8%)	184 (39.9%)
Proficient learner 81%-100%	298 (64.6%)	353 (76.6%)	30 (6.5%)	89 (19.3%)	34 (7.4%)	143 (31.0%)
	461 (100%)	461 (100%)	461 (100%)	461 (100%)	461 (100%)	461 (100%)

Table 26: Out-of-school numeracy skills gaps including total sample size

Categories	Subtask 1 Number Identification	Subtask 2 Number Discrimination	Subtask 3 Missing Numbers	Subtask 4 Addition	Subtask 5 Subtraction	Subtask 6 Word problems
No Attempt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Non-learner 0%	3 (0.7%)	3 (0.7%)	29 (6.3%)	10 (2.2%)	46 (10.0%)	46 (10.0%)
Emergent learner 1%-40%	23 (5.0%)	20 (4.3%)	296 (64.2%)	125 (27.1%)	179 (38.8%)	88 (19.1%)
Established learner 41%-80%	137 (29.7%)	85 (18.4%)	106 (30.0%)	237 (51.4%)	202 (43.8%)	184 (39.9%)
Proficient learner 81%-100%	298 (64.6%)	353 (76.6%)	30 (6.5%)	89 (19.3%)	34 (7.4%)	143 (31.0%)
	461 (100%)	461 (100%)	461 (100%)	461 (100%)	461 (100%)	461 (100%)

For the in-school girls, performance across the three subtasks was generally poor with more than half categorised as non-learner with zero percent in each of the subtask. On the first subtask that had addition, subtraction, fractions and geometry, approximately 37% of the learners fell within the emergent learner bands, and about 10% were found to be established. Less than one percent attained up to proficiency (81% and above).

There were a higher percentage of girls who were classified as emergent learners in subtask 3, when compared to subtask 2. This could be due to the presence of graphs in subtask 3, which the girls might have found easier to interpret than solving algebra questions. Algebra is a commonly taught subject in the Nigeria education curriculum, but these scores reveal that there are gaps between what is included in the syllabus and student's proficiency levels. The subtask analysis results revealed areas that MC should intensify programs efforts targeted at in-school girls.

Table 27: In school numeracy skills gaps including only girls who attempted

Categories	Subtask 1 Advanced multiplication and division, fractions and proportion, geometry and measurement	Subtask 2 Algebra	Subtask 3 Sophisticated word problems
Non-learner 0%	229 (52.1%)	218 (72.4%)	109 (50.2)
Emergent learner 1%-40%	172 (39.1%)	73 (24.3%)	106 (48.8%)
Established learner 41%-80%	37 (8.4%)	9 (3.0%)	2 (0.9%)
Proficient learner 81%-100%	2 (0.5%)	1 (0.3%)	0 (0.0%)
	440 (100%)	257 (100%)	217 (100%)

Table 28: In school numeracy skills gaps including total sample size

Categories	Subtask 1 Advanced multiplication and division, fractions and proportion, geometry and measurement	Subtask 2 Algebra	Subtask 3 Sophisticated word problems
No Attempt	16 (3.5%)	155 (34.0%)	239 (52.4%)
Non-learner 0%	229 (50.2%)	218 (47.8%)	109 (23.9%)
Emergent learner 1%-40%	172 (37.7%)	73 (16.0%)	106 (23.3%)
Established learner 41%-80%	37 (8.1%)	9 (2.0%)	2 (0.4%)
Proficient learner 81%-100%	2 (0.5%)	1 (0.2%)	0 (0.0%)
	456 (100%)	456 (100%)	456 (100%)

Foundational literacy skills gaps

The interpretation of the literacy outcome across the different subtasks for the out-of-school girls is slightly different from that of the in-school as seen on subtask 4. Oral fluency was classified from non-reader to proficient readers (Table 29). It has been observed that in most languages when a student can read 45-60 words per minute (WPMs), he or she will be able to understand the simple text. Hence when a student can read above 45 WPMs, the student can 'read to learn' rather than 'learn to read' (Abadzi, 2011). For the Oral Reading Fluency score (Words Per Minute), the achievement of girls was slightly adjusted to reflect the following scoring bands:

- Non-reader: 0-5 WPMs
- Emergent reader: 6-44 WPMs
- Established reader: 45-80 WPMs
- Proficient reader: 80 WPMs plus

The performance of the out-of-school girls did not present in a specific trend across the different literacy subtask. From the table below, identification of letter sounds was difficult for most of the girls with 9 out of 10 performing within the band of an emergent or non-learner. On the other hand, almost two-thirds of the learners could recognise familiar words unlike non-words which seemed difficult for them (>70% of the girls scored forty per cent or less). This could be because these words were mostly illogical even though they

followed the rules of the language, using letters in legitimate positions and consonant-vowel combinations that are typical of English language.

It can also be observed that most of the out-of-school girls could only read up to 44 words or less per minute. On the contrary, more than half of the learners showed to understand the reading by responding accurately to the follow-up questions.

Overall, the literacy mean scores for out-of-school girls were low, when compared numeracy scores. Greater efforts need to be applied in order to improve literacy outcomes for out-of-school girls. Specifically, to improve letter sound identification scores, it is important that MC incorporates phonics lessons into its out of school syllabus. Additionally, lessons targeted at improving reading skills and accuracy are essential to improving learning outcomes.

Table 29: Out-of-school literacy skills gaps including only girls who scored at least 1 on each subtask

Categories	Subtask 1 Letter Sound Identification	Subtask 2 Familiar Word	Subtask 3 Non-Word	Subtask 4 Oral Reading	Subtask 5 Comprehension
Non-learner 0%	210 (49.6%)	64 (13.9%)	124 (26.9%)	123 (27.2%)	78 (22.9%)
Emergent learner 1%-40%	224 (43.9%)	103 (22.3%)	200 (43.4%)	110 (24.3%)	85 (25.0%)
Established learner 41%-80%	27 (6.3%)	106 (23.0%)	120 (26.0%)	80 (17.7%)	145 (42.6%)
Proficient learner 81%-100%	0 (0.0%)	188 (40.8%)	17 (3.7%)	139 (30.8%)	32 (9.4%)
	461 (100%)	461 (100%)	461 (100%)	452 (100%)	340 (100%)

Table 30: Out-of-school literacy skills gaps including total sample size

Categories	Subtask 1 Letter Sound Identification	Subtask 2 Familiar Word	Subtask 3 Non-Word	Subtask 4 Oral Reading	Subtask 5 Comprehension
No Attempt	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	121 (26.3%)
Non-learner 0%	210 (49.6%)	64 (13.9%)	124 (26.9%)	123 (27.2%)	78 (16.9%)
Emergent learner 1%-40%	224 (43.9%)	103 (22.3%)	200 (43.4%)	110 (24.3%)	85 (18.4%)
Established learner 41%-80%	27 (6.3%)	106 (23.0%)	120 (26.0%)	80 (17.7%)	145 (31.5%)
Proficient learner 81%-100%	0 (0.0%)	188 (40.8%)	17 (3.7%)	139 (30.8%)	32 (6.9%)
	461 (100%)	461 (100%)	461 (100%)	452 (100%)	461 (100%)

Generally, the achievement of in-school girls declined as the level of difficulty increases across subtask. Most (>50%) of the learners were within the performance band of emergent learners and less than 5% demonstrated proficiency on subtask 1. See Table 31. Similar to the in-school numeracy scores, the in-school literacy scores also reveal significant skills gaps. 73% of girls in the non-learner category in Subtask 2 indicate a lack of comprehension and inferential skills. An equally poor performance on Subtask 3 shows that the girls were unable to write short essays. The subtask analysis results revealed that there is a critical need for MC to improve literacy outcomes in the in-school population.

Table 31: In-school literacy skills gaps including only girls who scored at least 1 on each subtask

Categories	Subtask 1 Comprehension analytical qs (+)	Subtask 2 Comprehension (+inferential)	Subtask 3 Short essay
Non-learner 0%	80 (18.3%)	303 (73.4%)	269 (59.3%)
Emergent learner 1%-40%	239 (54.6%)	103 (24.9%)	118 (26.0%)
Established learner 41%-80%	101 (23.1%)	7 (1.7%)	61 (13.4%)
Proficient learner 81%-100%	18 (4.1%)	0 (0.0%)	6 (1.3%)
	438 (100.0%)	413 (100.0%)	454 (100.0%)

Table 32: In-school literacy skills gaps including total sample size

Categories	Subtask 1 Comprehension analytical qs (+)	Subtask 2 Comprehension (+inferential)	Subtask 3 Short essay
No attempt	18 (3.9%)	43 (9.4%)	2 (0.4%)
Non-learner 0%	80 (17.5%)	303 (66.5%)	269 (59.0)
Emergent learner 1%-40%	239 (52.4%)	103 (22.6%)	118 (25.9%)
Established learner 41%-80%	101 (22.2%)	7 (1.5%)	61 (13.4%)
Proficient learner 81%-100%	18 (4.0%)	0 (0.0%)	6 (1.3%)
	456 (100%)	456 (100%)	456 (100%)

Using the life skills template provided by the GEC FM, life skills were reported based on those who strongly agreed or agreed with the different opinion statements that were read to them. From the learning to learn category, perception of girls in their different subgroups (treatment/control; in-school/out-of-school) were closely related. More than three-quarter of the girls responded to know how to utilise life skills such as self-esteem, confidence, assertiveness in their learning. For the girls who are out-of-school, this was more relative to their daily life and interaction with other people they encounter from time to time. The same form of distribution can also be observed in the skills required in the learning for life series across the different subgroups.

In addition to life skills, respondents also provided information on how decision about their education and/or life opportunities are made. On the Table 33 (a-c) below, the percentage of girls in their key subgroups who reported “I decide” or “I jointly decide with my family” are presented.

Table 33a: Life skills gaps – Learning to learn (Reported as percentage stating strongly agree or agree)

Sample Size	Key sub-groups	Learning to learn					
		I am able to do things as well as my friends	I want to do well in school	I get nervous when I have to read in front of others	I get nervous when I have to do maths in front of others	I feel confident answering questions in class	I can stay focused on a goal despite things getting in the way
460	ISG Treatment	92.6%	99.6%	32.4%	35.2%	82.8%	91.3%
458	ISG Comparison/Control	90.4%	99.8%	34.2%	32.2%	82.8%	90.0%
463	OSG Treatment	94.4%	98.7%	33.3%	26.3%	87.3%	89.8%
465	OSG Comparison/Control	93.3%	95.5%	26.9%	27.6%	79.5%	92.7%

Table 33b: Life skills gaps – Learning for life (Transition) (Reported as percentage stating strongly agree or agree)

Sample Size	Key sub-groups	Learning for life (Transition)													
		I would like to continue studying/attending school after this year	I can put a plan in place and stick with it	I recognise when choices I make today about my studies can affect my life in the future.	I can describe my thoughts to others when I speak	If someone does not understand me I try to find a different way of saying what is on my mind	When others talk I pay attention to their body language, gestures and facial expressions	I can work well in a group with other people	When I have the opportunity, I can organize my peers or friends to do an activity.	I often feel lonely at school	I ask the teacher if I don't understand something	When I succeed at school/learning centre, it is because I worked hard	If I do well in a test it is because I am lucky	I get support I need from my family to stay in school and perform well	
460	ISG Treatment	99.6%	92.4%	82.4%	91.5%	97.0%	88.5%	95.7%	92.0%	69.1%	93.0%	97.6%	37.8%	94.8%	
458	ISG Comparison/Control	99.3%	93.0%	85.2%	89.5%	95.2%	89.1%	96.9%	90.2%	62.1%	93.2%	98.3%	32.0%	92.4%	
463	OSG Treatment	97.0%	93.3%	81.2%	92.2%	93.5%	90.3%	97.2%	92.2%	60.9%	94.4%	95.7%	32.2%	83.4%	
465	OSG Comparison/Control	94.2%	93.5%	83.2%	90.9%	95.5%	93.3%	97.8%	93.8%	52.8%	87.9%	92.9%	25.9%	75.9%	

Table 33c: Decision-making about life (Reported as percentage stating I decide or I decide jointly with my family)

Sample Size	Key sub-groups	Whether or not you will go to school	Whether or not you will continue in school past this year	When/ at what age you will get married	If you will work after you finish your studies	What type of work you will do after you finish your studies	How you spend your free time	How often you spend time with your friends	How you spend your money
460	ISG Treatment	54.8%	50.7%	53.0%	64.3%	73.9%	75.4%	73.9%	77.0%
458	ISG Comparison/Control	55.8%	48.1%	51.9%	62.7%	70.2%	74.1%	73.6%	73.2%
463	OSG Treatment	62.6%	62.4%	62.9%	70.4%	75.4%	79.9%	78.0%	84.0%
465	OSG Comparison/Control	61.0%	61.4%	55.0%	63.4%	69.0%	77.6%	80.4%	83.2%

Findings from the qualitative study also suggests that majority of the girls seemingly displayed life skills that are relevant to social interaction and survival. Most of the participants reported that the ENGINE I programme helped them to be more assertive and less aggressive. Discussion with the stakeholders also confirmed these findings as a good number of the ENGINE I girls to be more confident and purpose-driven. Interesting to know that ENGINE I apparently has residual effect in life skills among the girls. Within the in-school and out-of-school group, these findings were consistent.

Grade achievements

The EGRA/SeGRA and EGMA/SeGMA subtasks were designed to assess the foundational skills and difficulty levels experienced by girls out-of-school and those in secondary school. To achieve an appropriate grading level for the evaluation sample, the national curriculum for basic education and secondary education was adopted. This is to make sure that the learning levels that should be achieved by girls at the end of each grade through the achievements at subtasks were adequately captured. To report on the 'grade achieved' by the girls, we followed the same pattern used in identifying foundational skills gaps, however, limiting this to the proportion of learners who were categorised as established or proficient in the subtask(s). By this, all learners (starting with the out-of-school up to the in-school girls) were graded to map their proficiency levels from the tests to the grades according to the national curriculum. It is important to note that this grade achieved was limited to those who had scored forty-one per cent and above in the different subtasks across the learning assessments. See Table 34 and Table 35 below for more.

We understand that this data collection happened at about mid-academic year (second term period), hence learners might not have completely received teaching on some of these subtasks requirements, however, we anticipate that this would infer on how much learning they have received and might attain before the end of the academic year.

Grade Achieved EGRA/SeGRA

To achieve grade 1 in literacy, learners must demonstrate proficiency in letter sound identification, familiar words and non-words. From our analysis, it was observed that none fit into this achievement band in the intervention group and much less than 1 per cent in the control group. There was near-equal level of achievements for grades 2 and 3 between the intervention and control groups with the former having a slightly higher proportion of girls (18%) established in oral reading fluency compared to the latter (17%). Then, an equal proportion of the OSGs (7%) that showed proficiency in the comprehension of short passage in the treatment and control groups. Having this as the baseline result, necessitates the importance of intensifying the delivery of targeted activities during programme implementation to improve proficiency in literacy outcomes among the out-of-school group in the intervention over and above those in the control by subsequent evaluation points.

Among the in-school girls, it can be observed that girls in the control group as at the baseline evaluation presented to be somewhat ahead in literacy outcomes than their peers in the intervention except for the slightly higher proportion of girls in the intervention group who were observed to be more proficient in comprehension and analytical inferential questions (SeGRA subtask 1) on the grade 5 band.

Grade Achieved EGMA/SeGMA

In terms of grade level achievement in numeracy, the out-of-school girls in the intervention group who attained grade 1 level (proficiency in number identification and number discrimination) were approximately 9% more than those in the control group. On grade levels 2 and 3, the performance levels of OSG in the intervention group was equal to their counterparts in the control group.

For girls in-school, proficiency declined as the level of difficulty increased across the subtasks. Nevertheless, more of the girls in the intervention group were better placed in solving mathematical problems related to advanced multiplication, division, fraction, etc. compared to those in the control. On subtasks 3 i.e. sophisticated word problems, none of the intervention ISG achieved a grade 9 level numeracy outcome.

Table 34: Grade Achieved EGRA/SeGRA

		Relevant subtasks	Literacy	Intervention (Baseline)	Control (Baseline)
Grade achieved	1	Subtask 1, 2 and 3 (EGRA)	Proficient in Letter Sound Identification, Familiar Word, Non-Word	0 (0.0%)	1 (0.2%)
Grade achieved	2	Subtask 4 (EGRA)	Established in Oral Reading Fluency	80 (17.7%)	74 (16.7%)
Grade achieved	3	Subtask 5 (EGRA)	Proficient in Comprehension of short fluency paragraph	32 (6.9%)	32 (7.0%)
Grade achieved	4	Subtask 6 (SeGRA subtask 1)	Established in Comprehension (+ analytical qs)	101 (23.1%)	106 (24.5%)
Grade achieved	5	Subtask 6 (SeGRA subtask 1)	Proficient in Comprehension (+ analytical qs)	18 (4.1%)	13 (3.0%)
Grade achieved	6	Subtask 7 (SeGRA subtask 2)	Established in Comprehension (+inferential)	7 (1.7%)	8 (2.0%)
Grade achieved	7	Subtask 7 (SeGRA subtask 2)	Proficient in Comprehension (+inferential)	0 (0.0%)	4 (1.0%)
Grade achieved	8	Subtask 8 (SeGRA subtask 3)	Established in Short Essay construction	61 (13.4%)	67 (14.6%)
Grade achieved	9	Subtask 8 (SeGRA subtask 3)	Proficient in Short Essay construction	6 (1.3%)	11 (2.4%)

Table 35: Grade Achieved EGMA/SeGMA

		Relevant subtasks	Literacy	Intervention (Baseline)	Control (Baseline)
Grade achieved	1	Subtask 1 and 2 (EGMA)	Proficient in Number Identification and in Number Discrimination	271 (58.8%)	232 (50.4%)
Grade achieved	2	Subtask 3 and 4 (EGMA)	Proficient in Missing Numbers and Additions	22 (4.7%)	23 (5.0%)
Grade achieved	3	Subtask 5 and 6 (EGMA)	Proficient in Subtractions and Words Problem	19 (4.1%)	19 (4.1%)
Grade achieved	4	Subtask 7 (SeGMA 1)	Established in Advanced multi and division etc.	37 (8.1%)	28 (6.1%)
Grade achieved	5	Subtask 7 (SeGMA 1)	Proficient in Advanced multi and division etc.	2 (0.4%)	0 (0.0%)
Grade achieved	6	Subtask 8 (SeGMA 2)	Established in Algebra	9 (4.9%)	4 (0.9%)
Grade achieved	7	Subtask 8 (SeGMA 2)	Proficient in Algebra	1 (0.2%)	1 (0.2%)
Grade achieved	8	Subtask 9 (SeGMA 3)	Established in sophisticated word problems.	2 (0.4%)	1 (0.2%)
Grade achieved	9	Subtask 9 (SeGMA 3)	Proficient in sophisticated word problem.	0 (0.0%)	2 (0.4%)

4.2 Subgroup analysis of the Learning Outcome

This section focuses on drawing out trends in learning for key subgroups and to understand the characteristics and barriers associated with the lowest levels of learning. In particular, we have considered; differences in learning levels across states, differences in learning across key subgroups identified by the programme, and differences in learning across barriers experienced (see Section 3 above).

Learning scores for key groups

On

Table 36, we have described the learning scores of key subgroups and further discussed this by their respective in-school and out-of-school status. It is important to note that analysis is limited to the intervention group only.

All Girls: Average literacy and numeracy scores

The average literacy scores of in-school girls are quite low with a mean score of ~16 out of 100 possible points. The mean score is way lower on numeracy at ~10. On the other hand, the out-of-school girls appeared to perform better in their reading and mathematical competencies with an average numeracy score of approximately 60 points out of 100 and 34 points out of 100 in literacy. This high average could be attributed to the fact that some of the out-of-girls who dropped out were involved in some business activities which require them to do basic mathematics in their day-to-day life or perhaps had even finished secondary education but did not pass their final exams. More on this is described in the next section.

In-School Girls: Average literacy and numeracy scores

In terms of child functioning, impairment was reported as girls who said they could not perform that function at all or have a lot of difficulty getting it done. The least average learning outcome (literacy and numeracy) among the in-school girls with one form of impairment or more was among those who were challenged with self-care such as washing or dressing themselves. Low average literacy score was also observed among those who had hearing impairment. More of those with sight, mobility and cognitive impairments also performed poorly in their numeracy assessment among the in-school girls.

By state, in-school girls in the Federal Capital Territory had a higher average learning score (literacy and numeracy) compared to girls from Kaduna and Kano. The differences in performance across states can be attributable to the level of urbanisation in these locations. Northern Nigeria is one of the most disadvantaged regions in Nigeria, with limited access to quality education. Lower scores in Kano and Kaduna states are symptomatic of this general problem. Federal Capital Territory is the nation's capital city and therefore at the centre, privileged to be serviced by high-profile units. Between Kaduna and Kano, performance in literacy and numeracy was in inverse order.

By marital status, in-school girls who were mothers before age 18 years performed poorly in their literacy (13 points of 100) and numeracy (10 points out of 100) assessments. This can also be likened to ISGs who were married with an average literacy score of 6 points and numeracy of 12 points out of 100 possible points.

Other characteristics such as poverty, loss of one or both parents, caregiver's educational status, travel time to school might have impacted on the low average in literacy and numeracy outcomes of girls in-school as described on

Table 36 below.

Table 36: Learning scores of key subgroups (ISG)

Includes only girls who attempted and scored 1 or higher.

	Average (mean) literacy score (aggregate)	Average (mean) numeracy score (aggregate)	Source
Girls in-school	15.8	9.5	SeGRA/SeGMA
In-School Girls			
Disability			
Vision impairment	18.9	5.2	GQ_F1
Hearing impairment	7.7	18.3	GQ_F2
Mobility impairment	15.0	9.3	GQ_F3
Cognitive impairment	15.3	8.3	GQ_F5
Self-care impairment	3.0	0.0	GQ_F6
Communication impairment	39.1	17.0	GQ_F4
Learning outcome by state			
FCT	28.4	13.4	N/A
Kaduna	12.1	6.5	N/A
Kano	8.4	9.4	N/A
Learning outcome by marital status			
Married	6.3	12.4	HQ_B02_1
Mother			
- Under 19	27.0	9.0	GQ_A4<19 & A8>0&<99
- Had a child before 18 years	13.4	10.1	GQ_A06_2
Learning outcome – other characteristics			
Orphaned	15.5	8.7	GQ_A06_5
Poverty	12.1	8.0	GQ_A13-23
Girls travelling over 30 minutes to school	19.4	11.6	GQ_B03_4,5,6,7
Girls feel unsafe in school	14.0	10.4	GQ_B05_2
Primary caregiver (husband/parent in-laws)	1.0	5.0	HQ_A3a_3

Out-of-School Girls: Average literacy and numeracy scores

Girls who are unable to care for themselves or experience so much difficulty while trying to do so also performed the least in literacy and numeracy among the out-of-school group with any form of disability. Generally, they seemed to find literacy more problematic than numeracy as their average score was lower regardless of the form of impairment they experience.

By state, Lagos state performed much better than the other three states with an average score above 50 in literacy and numeracy. This improved performance can also be as a result of the high urbanisation in this state compared to other programme states in the northern part of the country. Firstly, all sampled girls in Lagos state had previously attended school at some point, compared to other states where some of the respondents had never attended school. Additionally, as presented in Table 38 below, the quantitative data shows that a higher percentage of girls in Lagos state (75%) dropped out in higher grades (SS1-SS3), compared to other states: FCT (28%), Kaduna (40%) and Kano (41%). This result indicates two things: that girls in Lagos state had more access to education than girls in other states, and girls in Lagos were achieved higher levels of education than other states, which could explain their better performance on the assessments.

Marital status, poverty, orphanhood, caregiver level of education, etc. have some impact on learning outcomes of girls out-of-school. See Table 37 below.

Table 37: Learning scores of key subgroups (OSG)

Includes only girls who attempted and scored 1 or higher.

	Average (mean) literacy score (aggregate)	Average (mean) numeracy score (aggregate)	Source
Out-of-School Girls			
Girls out-of-school	33.6	59.8	EGRA/EGMA
Disability			
Vision impairment	33.0	68.1	GQ_F1
Hearing impairment	38.5	66.0	GQ_F2
Mobility impairment	34.0	57.6	GQ_F3
Cognitive impairment	12.9	53.0	GQ_F5
Self-care impairment	6.5	40.0	GQ_F6
Communication impairment	37.3	72.0	GQ_F4
Learning outcome by state			
FCT	27.7	56.5	N/A
Kaduna	28.6	55.1	N/A
Kano	29.7	53.7	N/A
Lagos	52.5	78.4	N/A
Learning outcome by marital status			
Married	26.3	56.0	HQ_B02_1
Mother			
- Under 19	17.9	51.9	GQ_A4<19 & A8>0&<99
- Under 18	28.3	53.4	GQ_A4<18 & A8>0&<99
- Had a child before 18 years	28.0	57.0	GQ_A06_2
Learning outcome – other characteristics			
Poverty	30.6	56.8	GQ_A13-23
Orphaned	32.0	60.3	GQ_A06_5
Stopped attending school for one or more reasons	38.8	62.3	GQ_C01c
Primary caregiver (husband/parent in-laws)	26.8	54.1	HQ_A3a_3

Table 38: School Drop Out Grade

	FCT	Kaduna	Kano	Lagos	Source
N	179	276	195	192	
Primary school	64 (35.8%)	51 (18.5%)	50 (25.6%)	7 (3.7%)	GQ_C01b
JSS 1	10 (5.6%)	13 (4.7%)	11 (5.6%)	1 (0.5%)	GQ_C01b
JSS 2	14 (7.8%)	31 (11.2%)	16 (8.2%)	7 (3.7%)	GQ_C01b
JSS 3	41 (22.9%)	71 (25.7%)	38 (19.5%)	33 (17.2%)	GQ_C01b
SS 1	11 (6.1%)	17 (6.2%)	5 (2.6%)	38 (19.2%)	GQ_C01b
SS 2	19 (10.6%)	52 (18.8%)	27 (13.8%)	88 (45.8%)	GQ_C01b
SS 3	20 (11.2%)	41 (14.9%)	48 (35%)	18 (9.4%)	GQ_C01b

Key barriers affecting learning outcomes

Furthermore, we reviewed the effect of key barriers facing girls on learning outcomes on Table 39. Average learning outcomes as affected by key barriers are presented for in-school girls in relation to their household characteristics, school infrastructure, teaching quality, etc. Similarly, learning outcomes of out-of-school girls as it relates to their household, safety and support within their environment towards their learning/businesses were considered.

Generally, average literacy and numeracy scores by barriers were less than 20 points across board. It was significantly lower among girls in-school who opined that their teachers did not make them feel welcome in class. Girls who alluded to having poor school infrastructure also had poor learning outcomes, particularly, non-availability of learning materials in school. These results highlight two important points for MC on reducing school level barriers. The first point is that training teachers on learner centred methodologies is essential to improving learning outcomes in girls. We understand that the programme proposes to empower teachers with skills that could help them tailor their teaching styles to meet each girl's learning needs. The second point is that it might be useful for MC to make school an enabling environment by working closely with school governance structures to provide learning materials and other infrastructure to facilitate learning.

Barriers explored which are peculiar to the out-of-school girls include such that exist at the household and community levels.

Table 39: Learning scores of key barriers

This helps us understand which barriers might be having the most/ least impact on levels of learning. This helps programmes to sense check they are addressing the right barriers to girls learning.

Includes only girls who attempted and scored 1 or higher.

	Average (mean) literacy score (aggregate)	Average (mean) numeracy score (aggregate)	Source
Barriers: In-School	SeGRA	SeGMA	
All girls	15.8	9.5	SeGRA/SeGMA
Household			
Doesn't go to school when menstruating	16.0	4.3	GQ_E10a_1
Travel distance to school is far (over 30 minutes)	19.4	11.6	GQ_B03_4,5,6,7
Heavy chore burden (lasting one hour or more) affects attendance	14.7	5.2	HQ_F01 & F03_1,2,3
Safety			
Doesn't feel safe at school (Girls feel unsafe in school)	14.0	10.4	GQ_B05_2
If feeling unsafe, has no one to go to	13.9	6.0	GQ_B06_2
Doesn't feel safe travelling to/from school	17.0	12.7	GQ_B04_2
School infrastructure			
Difficult to move around school	13.8	8.7	GQ_B24_2
Doesn't have enough seats for all student to seat in class	13.2	8.7	GQ_B23_2
Doesn't have drinking water facilities in school	18.9	10.3	GQ_B25_2
Doesn't use toilet at school	16.4	10.1	GQ_B26_2
Doesn't have access to use school-owned books or other learning materials as needed when in school	12.2	10.4	GQ_B21_2
Teaching quality			
Disagrees teachers make them feel welcome	9.6	6.6	GQ_B11_4,5
Agrees teachers often absent from class	15.7	10.0	GQ_B12_1,2

4.3 Transition Outcome

This section presents the key findings on the transition outcomes. Firstly, we have described the potential pathways that girls can move into using the ENGINE II MEL framework as a guide. Based on this, transition groups are categorised into out-of-school and in-school girls (junior and senior secondary schools) and further analysis on transition outcomes by age.

Transition outcomes are defined as either successful or unsuccessful using a wide range of definitions applicable to the ENGINE beneficiaries. If a girl experiences an academic progress in school or enrolls into a gainful employment at a legal age, on a paid employment receiving decent (minimum) wage, such individual is considered to have transitioned positively. However, if a girl was formerly enrolled in-school but dropped out, or was/never in business and currently out-of-school, or is on an employment that is demeaning, possibly receiving at least the minimum wage or remained in the same grade as the previous year, such is considered to have a negative transition.

See Table 40 below for further description. It is important to know that some transition outcomes cannot be measured until subsequent time points, after the programme has begun implementation.

Table 40: Transition pathways

	Baseline point	Successful Transition	Unsuccessful Transition
Out of school (age 17 to 23+ years)	Dropped out Grade 1, 2, 3	Re-enrol in basic education Re-enrolled into appropriate grade in secondary school (Ex-dropout) GQ_B01a=7 & B01 Business diversification GQ_C05≠C06a & C06f=1 Business expansion GQ_C05=C06a & C06f=1	Remains out of school GQ_C06=2
Junior Secondary school	Enrolled in Grade 4, 5, 6	In-school progression: GQ_B01 > B01a & = 1,2,3 Actively involved in business GQ_C06=1	Remains in same grade GQ_B01 = B01a Drops out of school GQ_C01_1 & C01a = 2/3/4/5/6 Moves into work, but is below legal age GQ_C01_1 & C01a = 2/3/4/5/6 & A04 < 18
Senior Secondary school	Enrolled in Grade 7, 8, 9	In-school progression GQ_B01 > B01a & = 4,5,6 Moves into gainful employment	Drops out of school GQ_C01_1 & C01a = 2/3/4/5/6 Moves into employment, but is paid below minimum wage Moves into employment, but is below legal age GQ_C01_1 & C01a

Benchmarking

The benchmark sample provides an overview of girls outside of the cohort girls, whose transition outcome could be used to infer the possible outcome(s) of cohort girls by the end of the ENGINE II programme. The benchmark sample is made up of 150 girls whose age range is from 17 to 25 years. This captures the projection age into which cohort girls (currently 17 - 23 years) will grow into by endline. It is important to note that this sample is exclusive of girls in the main evaluation sample and the assessment for this group would not be repeated at subsequent evaluation points, rather it will be used for comparability purposes as the programme progresses.

The proportion of girls enrolled in formal education (secondary and tertiary) as at the time of this study was 22%. The out-of-school population included girls who had dropped out before the completion of their

primary or secondary school and not enrolled in an alternative learning programme (10%), those in business or enrolled in a vocational skills/alternative learning programme were above 50% and those who remain out-of-school (<1%).

The overall transition rate for the benchmark group is about 54% and decreases as age increases. It can be seen that the rate of transition declines as the age increases up to 23 years, then a sudden rise and slight dip in the two older years. The transition outcome of the benchmark sample is comparable to that of the evaluation sample in the successful and unsuccessful pathways. See Table 41 below.

Table 41: Benchmarking for the Transition Outcome

Benchmark group									
		Benchmark transition pathway							Transition rates
		Successful transition				Unsuccessful transition			
Age	Sample size (#)	Re-enrolled to formal education B04 = 1, C03= 7 and C02	In-school progression B04 = 1, C03 ≠ 7, 98, 99 and < C02	Out of school but enrolled in alternative learning B04 = 2, D01 = 1,2	Out of school but gainfully employed/in business/TVET B04 = 2, D02 = 1, 2, 3	Remains out of school B04 = 2, D03 = 2, D02 = 4, D05 = 4	Remains in the same grade B04 = 1, C03 ≠ 7, 98, 99 = C02	Drops out of school and not enrolled in any alternative learning programme B04 = 2, D03 = 1, D02 = 4	Successful transition rate per age (%)
17	27	1 (3.7%)	18 (66.7%)	3 (11.1%)	4 (14.8%)	0 (0.0%)	0 (0.0%)	4 (14.8%)	(81.5%)
18	32	1 (3.1%)	18 (56.3%)	2 (6.3%)	5 (15.6%)	0 (0.0%)	0 (0.0%)	3 (9.4%)	(65.6%)
19	22	1 (4.6%)	7 (31.8%)	4 (18.2%)	5 (22.7%)	0 (0.0%)	0 (0.0%)	2 (9.1%)	(54.5%)
20	16	0 (0.0%)	3 (18.8%)	8 (50.0%)	5 (31.3%)	0 (0.0%)	0 (0.0%)	2 (12.5%)	(68.8%)
21	14	1 (7.1%)	1 (7.1%)	5 (35.7%)	6 (42.9%)	1 (7.1%)	0 (0.0%)	2 (14.3%)	(50.0%)
22	7	0 (0.0%)	0 (0.0%)	5 (28.6%)	4 (57.1%)	0 (0.0%)	0 (0.0%)	1 (14.3%)	(28.6%)
23	11	0 (0.0%)	0 (0.0%)	2 (18.2%)	4 (36.4%)	0 (0.0%)	1 (9.1%)	2 (18.2%)	(18.2%)
24	10	0 (0.0%)	1 (10.0%)	5 (50.0%)	3 (30.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	(60.0%)
25	11	0 (0.0%)	1 (9.1%)	5 (45.5%)	5 (45.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	(54.5%)
Overall	150	4 (2.1%)	49 (22.2%)	36 (29.3%)	41 (32.9%)	1 (0.8%)	1 (1.0%)	16 (10.3%)	(53.5%)

Transition outcome of cohort girls

The tables below highlight the transition outcomes for girls in-school and out-of-school, aged 17 to 23 years both in the intervention and comparison groups. From Table 42 and Table 43, it can be observed that the ISG transition rate for both the intervention group (97%) and control group (98%) is almost one hundred percent.

Table 42: Transition outcome for ISG in the intervention group

ISG Intervention group – Transition pathways					
		Successful transition	Unsuccessful transition		Successful transition rate per age (%)
Age	Sample Size	In-school progression GQ_B01 > B01a & = 1-6	Remains in the same grade GQ_B01 = B01a	Drops out of school GQ_C01_1 & C01a = 2/3/4/5/	
17	271 (58.9%)	259 (95.6%)	12 (4.4%)	0 (0.0%)	95.6%
18	150 (32.6%)	149 (99.3%)	1 (0.7%)	0 (0.0%)	99.3%
19	27 (5.9%)	27 (100.0%)	0 (0.0%)	0 (0.0%)	100.0%
20	8 (1.7%)	7 (87.5%)	1 (12.5%)	0 (0.0%)	87.5%
21	2(0.4%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	100.0%
22	1 (0.2%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	100.0%
23	1 (0.2%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	100.0%
Overall	460 (100%)	446 (97.5%)	12 (2.5%)	0 (0.0%)	97.5%

Table 43: Transition outcome for ISG in the comparison group

ISG Comparison group - Transition pathway					
		Successful transition	Unsuccessful transition		Successful transition rate per age (%)
Age	Sample Size	In-school progression GQ_B01 > B01a & = 1-6	Remains in the same grade GQ_B01 = B01a	Drops out of school GQ_C01_1 & C01a = 2/3/4/5/	
17	281 (61.2%)	265 (94.3%)	16 (5.7%)	0 (0.0%)	94.3%
18	125 (27.5%)	121 (96.0%)	5 (4.0%)	1 (0.8%)	96.0%
19	29 (6.3%)	28 (96.6%)	1 (3.5%)	0 (0.0%)	96.6%
20	11(2.4%)	11(100.0%)	0 (0.0%)	0 (0.0%)	100.0%
21	2 (0.4%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	100.0%
22	8 (1.7%)	8 (100.0%)	0 (0.0%)	0 (0.0%)	100.0%
23	2 (0.4%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	100.0%
Overall	458 (100.0%)	437 (98.1%)	22 (1.9%)	1 (0.1%)	98.1%

Among the out-of-school population (see Table 44 and Table 45), the treatment group has a higher transition rate at 49% compared to the control group at 25%. It noteworthy that this could be due to the residual effect of the programme activities lasting from ENGINE I where girls were exposed to diverse business opportunities.

Table 44: Transition outcome for OSG in the intervention group

OSG Intervention Benchmark group - Transition pathway							
		Successful transition				Unsuccessful transition	Successful transition rate per age (%)
Age	Sample size (#)	Re-enrolled to formal education GQ_B01a=7 & B01	Actively involved in business GQ_C06=1	Business diversification GQ_C05#C06a & C06f=1	Business expansion GQ_C05=C06a & C06f=1	Remains out of school GQ_C06=2	
17	54 (11.66%)	0 (0.0%)	20 (37.0%)	2 (3.7%)	6 (11.1%)	34 (62.9%)	37.0%
18	89 (19.22%)	0 (0.0%)	32 (35.9%)	8 (9.0%)	4 (4.5%)	57 (64.0%)	35.9%
19	91 (19.65%)	0 (0.0%)	39 (42.9%)	11 (12.1%)	9 (9.9%)	52 (57.1%)	42.9%
20	97 (20.95%)	0 (0.0%)	59 (60.8%)	17 (17.5%)	22 (22.7%)	38 (39.2%)	60.8%
21	49 (10.58%)	0 (0.0%)	26 (53.1%)	6 (12.2%)	3 (6.1%)	23 (46.9%)	53.1%
22	46 (9.94%)	0 (0.0%)	29 (63.0%)	5 (10.9%)	5 (10.9%)	17 (37.0%)	63.0%
23	37 (7.99%)	0 (0.0%)	18 (48.7%)	4 (10.8%)	6 (16.2%)	19 (51.4%)	48.7%
Overall	463 (100%)	0 (0.0%)	223 (48.8%)	53 (10.9%)	55 (11.6%)	240 (51.8%)	48.8%

Table 45: Transition outcome for OSG in the comparison group

OSG Comparison Benchmark group - Transition pathway							
		Successful transition				Unsuccessful transition	Successful transition rate per age (%)
Age	Sample size (#)	Re-enrolled to formal education GQ_B01a=7 & B01	Actively involved in business GQ_C06=1	Business diversification GQ_C05#C06a & C06f=1	Business expansion GQ_C05=C06a & C06f=1	Remains out of school GQ_C06=2	
17	91 (19.6%)	0 (0.0%)	12 (13.2%)	2 (2.2%)	1 (1.1%)	79 (86.8%)	13.2%
18	97 (20.7%)	0 (0.0%)	21 (21.9%)	1 (1.0%)	2 (2.1%)	75 (78.1%)	21.9%
19	64 (13.8%)	0 (0.0%)	18 (28.1%)	1 (1.6%)	3 (4.7%)	46 (71.9%)	28.1%
20	79 (17.0%)	0 (0.0%)	22 (27.9%)	3 (3.8%)	5 (6.3%)	57 (72.2%)	27.9%
21	34 (7.3%)	0 (0.0%)	9 (26.5%)	0 (0.0%)	1 (2.9%)	25 (73.5%)	26.5%
22	49 (10.6%)	0 (0.0%)	13 (26.5%)	1 (2.0%)	4 (8.2%)	36 (73.5%)	26.5%
23	51 (11.0%)	0 (0.0%)	22 (43.1%)	2 (3.9%)	3 (5.9%)	29 (56.9%)	43.1%
Overall	465 (100.0%)	0 (0.0%)	117 (25.2%)	10 (2.1%)	19 (4.5%)	347 (74.8%)	25.2%

In-school girls appear to have a much higher transition rate than out-of-school girls. However, it is noteworthy that the high transition rate for the in-school girls is not reflective of academic success. Positive transition for in-school girls, as defined by the program, includes successfully moving from one grade to another. However, the Nigerian education sector currently implements the “No Child Left Behind” practice, which means that students can successfully move up in grades, regardless of how they have performed in the previous grade, without even making the pass mark. This means that successful transition according to the program is not in any way indicative of academic success, and therefore creates a bias in the program’s transition pathway.

We strongly recommend that the program change its transition pathway definition for in-school girls. Instead of moving up in grades, positive transition should be defined as achieving at least a pass mark in 5 subjects, including Math and English. This requirement is based on the minimum number of classes that a student would need to pass in order to move from one grade to another in Nigerian secondary schools, if the “No Child Left Behind” practice is not being implemented.

4.4 Sub-group analysis of the transition outcome

In this section, we have discussed how transition (successful or unsuccessful) is influenced by the girl characteristics at the individual, household or community levels. Furthermore, we also considered the key barriers that could deter the successful transition of target girls from one level to the next.

As indicated on Table 46, about one-third of the in-school girls at the intervention sites had achieved a successful transition from one grade to the next. This was lower than what was observed in the comparison group with more than half reporting that they had in-school progression. From the findings, girls who live with a sick parent/guardian were observed to have low transition rate (~20%) within the treatment and comparison groups. Near-half of the in-school girls whose household fall within the lowest two wealth quintiles reported to have progressed from one academic grade to the higher one. About 1 out of 5 girls who live with a sick parent/guardian were observed not to have had a successful transition. This requires some programmatic focus to explore how this barrier has been contributing to unsuccessful transition among such marginalised girls. For example, the program might want to explore providing counselling services to girls with sick parents, in order to understand any additional help, they might need to overcome this barrier.

Table 46: Transition outcomes by In-School Girls' characteristics

	Successful transition		Unsuccessful transition	
	Intervention (Baseline)	Control (Baseline)	Intervention (Baseline)	Control (Baseline)
(In-School Girls)				
N	446	437	14	22
Orphans (%)	158 (35.4%)	238 (54.5%)	0 (0.0%)	4 (20.0%)
Living with a sick parent/guardian (%)	87 (19.5%)	92 (21.1%)	3 (21.4%)	2 (9.1%)
-Married (%)	5 (1.1%)	10 (2.3%)	0 (0.0%)	0 (0.0%)
-Girls married by or before age 18 (%)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
-Girls that are divorced	2 (0.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
-Girls that are widowed	3 (0.7%)	2 (0.5%)	0 (0.0%)	0 (0.0%)
- Had a child(ren) before 18 years	4 (0.9%)	12 (2.7%)	0 (0.0%)	0 (0.0%)
Poor households (%)				
- PPI Score (2 lowest quintiles)	199 (44.6%)	209 (47.9%)	2 (14.3%)	3 (13.6%)

Similarly, slightly above one-third of the out-of-school population who are orphaned also reported to have transitioned positively in their various economic pathways (Table 47). Near-equal proportion (46%) of girls belonging to the lowest two wealth quintiles also made some positive progression in their respective business opportunities.

The proportion of out-of-school girls who were married within the intervention area (42%) is about double compared to those in the comparison group (22%). However, a slightly lower proportion than this was observed among those who did not report to have had a successful transition in the last 12 months.

Table 47: Transition outcomes by Out-of-School Girls' characteristics

	Successful transition		Unsuccessful transition	
	Intervention (Baseline)	Control (Baseline)	Intervention (Baseline)	Control (Baseline)
(Out-School Girls)				
N	144	233	463	464
Orphans (%)	55 (38.2%)	85 (36.5%)	152 (32.8%)	170 (36.6%)
Living with a sick parent (%)	31 (21.5%)	72 (30.9%)	112 (24.2%)	147 (31.7%)
-Married (%)	144 (41.7%)	233 (21.9%)	163 (35.2%)	122 (26.3%)
-Girls married by or before age 18 (%)	3 (2.1%)	1 (0.4%)	5 (1.1%)	3 (0.6%)
-Girls that are divorced	4 (2.8%)	11 (4.7%)	14 (3.0%)	32 (6.9%)
-Girls that are widowed	1 (0.7%)	0 (0.0%)	7 (1.5%)	7 (1.5%)
Mothers (%)				
- Under 19	4 (2.8%)	5 (2.1%)	11 (2.4)	14 (3.0%)
- Under 18	3 (2.1%)	1 (0.4%)	5 (1.1%)	3 (0.6%)
- Had a child(ren) before 18 years	50 (34.7%)	60 (25.8%)	142 (30.7%)	132 (28.4%)
Poor households (%)				
N	143	233	456	461
- PPI Score (2 lowest quintiles)	66 (46.2%)	108 (46.4%)	202 (44.3%)	210 (45.6%)

As previously highlighted, several barriers could affect girls as they progress through life, either academic or economic opportunities pathways. On

Table 48 and

Table 49 below, we have presented our findings reflecting key barriers that are most prominent in contributing to the successes achieved by target girls.

Over 90% of ISG that reported to be burdened with high chores at the household level thus limited time to study were found not to have proceeded to the next higher grade from the previous year. In the same manner, this was the same among the comparison group. Infrastructural facilities such as adequate seating arrangements in schools also affect transition having observed about only one-third of the making successful transition among the ISG in the treatment and control groups. More girls in the treatment schools (40%) having their SBMC governance structures address issues such as bullying, sexual harassment make progression when compared to those in the control schools (29%).

Among the out-of-school girls, about 75% of girls who had to stop schooling due to lack of funds reported positive advancement in their different economic adventures. Also, those who were not often listened to before decisions are made about their education are more likely not to successfully transit in the treatment group (10%) compared to their peers in the control areas (22%).

Table 48: Transition outcomes by key barriers to transition among In-School Girls

	Successful transition		Unsuccessful transition	
	Intervention (Baseline)	Control (Baseline)	Intervention (Baseline)	Control (Baseline)
Home – community (In-School Girls)				
Safety:				
<i>N</i>	446	436	14	21
Doesn't feel safe travelling to/from school (%)	37 (8.3%)	55 (12.6%)	0 (0.0%)	1 (4.8%)
<i>N</i>	446	437	14	21
Doesn't feel safe at school (%)	15 (3.4%)	29 (6.6%)	0 (0.0%)	0 (0.0%)
Household support:				
<i>N</i>	439	431	13	22
<i>Insufficient time to study:</i> High chore burden takes up to one hour or more	435 (99.1%)	425 (98.6%)	12 (92.3%)	22 (100.0%)
<i>N</i>	439	431	13	22
Does not listen to girl before decisions about her education are made	81 (18.5%)	70 (16.2%)	0 (0.0%)	6 (27.3%)
Does not agree that investing in girl-child education is worth it even when funds are limited	2 (0.5%)	3 (0.7%)	1 (7.7%)	0 (0.0%)
School level (In-School Girls)				
School facilities:				
<i>N</i>	445	436	14	21
No seats for all students (%)	148 (33.3%)	154 (35.3%)	4 (28.6%)	6 (28.6%)
<i>N</i>	446	437	14	21
Difficult to move around school (%)	50 (11.2%)	13.3%	2 (14.3%)	2 (9.5%)
Doesn't use drinking water facilities	126 (28.3%)	138 (31.6%)	2 (14.3%)	5 (23.8%)
Doesn't use toilet at school	208 (46.6%)	203 (46.5%)	5 (35.7%)	4 (19.0%)
Teachers:				
<i>N</i>	446	437	14	21
Disagrees teachers make them feel welcome	17 (3.8%)	15 (3.5%)	0 (0.0%)	0 (0.0%)
Agrees teachers often absent from class	84 (18.8%)	89 (20.4%)	0 (0.0%)	4 (19.0%)
School Management				
<i>N</i>	414	392	14	18
SBMC addresses gender issues such as bullying, sexual harassment, etc.	166 (40.1%)	112 (28.6%)	4 (28.6%)	3 (16.7%)
<i>N</i>	446	437	14	21
Performance of headteacher/principal is considered as poor or fair	11 (2.5%)	10 (2.3%)	0 (0.0%)	0 (0.0%)

Table 49: Transition outcomes by key barriers to transition among Out-of-School Girls

	Successful transition		Unsuccessful transition	
	Intervention (Baseline)	Control (Baseline)	Intervention (Baseline)	Control (Baseline)
Home – community (Out-of-School Girls)				
Safety:				
N	144	233	462	464
Fairly or very unsafe for girls to travel to learning/business centre in the area (%)	2 (1.4%)	4 (1.7%)	5 (1.1%)	5 (1.1%)
Household support:				
Reasons for stopping school				
N	132	213	415	426
Lack of money for school fees	100 (75.8%)	159 (74.6%)	289 (69.6%)	317 (74.4%)
Parents did not support girl's education	14 (10.6%)	29 (13.6%)	33 (8.0%)	53 (12.4%)
Did not pass classes	8 (6.1%)	13 (6.1%)	26 (6.3%)	24 (5.6%)
Married/Had children and had to stop	15 (11.4%)	29 (13.6%)	52 (12.3%)	70 (16.4%)
Parent/Husband fell ill	2 (1.5%)	15 (7.0%)	12 (2.9%)	32 (7.5%)
Graduated from secondary school	10 (7.6%)	10 (4.7%)	39 (9.4%)	15 (3.5%)
Prolonged illness	2 (1.5%)	5 (2.3%)	8 (1.9%)	13 (3.1%)
N	144	233	462	422
<i>Insufficient time to study:</i> High chore burden takes up to one hour or more	141 (97.3%)	229 (98.3%)	438 (94.8%)	457 (98.5%)
N	144	233	462	464
Does not listen to girl before decisions about her education are made	14 (9.7%)	52 (22.3%)	69 (14.9%)	94 (20.3%)
Does not agree that investing in girl-child education is worth it even when funds are limited	4 (2.8%)	3 (1.3%)	16 (3.5%)	8 (1.7%)

4.5 Target setting for the learning outcome

Based on the baseline learning outcome among in-school girls, the target at midline for literacy and numeracy is 4.51 and 3.56 respectively. This will be above what the value is at baseline. The literacy target for evaluation point 2 is provided by grade and it indicates that girls who would be in grade 10 by midline should achieve a 3.9 score above and beyond their counterparts in the control school. For girls that would be in grade 11 by endline, the literacy target is estimated at 4.1 while girls that will be in grade 12 are expected to perform up to 4.9 above and beyond the control group by endline.

Numeracy targets by grade is also provided and it shows that in-school girls in grade 10 by evaluation point 2 should achieve a score of 2.1 above their counterparts while those in grade 11 and 12 should have 2.6 and 4.4 respectively, above and beyond those in the control schools. These targets are as indicated on the outcome spreadsheet.

Table 50: Target setting for learning outcome

Target generated by the outcome spreadsheet (ISG)		Evaluation point 2	Evaluation point 3
		Literacy	4.51
	Numeracy	3.56	3.56

4.6 Cohort tracking and target setting for the transition outcome

Over the course of the project implementation, OPM will adopt an innovative approach of using phone tracking to confirm status of cohort girls over the years and in addition to this, few on-site spot checks in select schools. This will be done twice each year by the programme team and the evaluation team respectively in the intervention areas. OPM has proposed to conduct this after the baseline and before the endline evaluation studies. The cohort tracking will seek to collect information about programme awareness, ascertain the retention of study participants and their transitional outcome.

Basically, for the effective tracking of cohort girls, a concise but detailed tool will be developed to include at least the following basic characteristics:

- Name of head of household of where girl lives and her primary caregiver if different,
- Phone numbers of caregiver and head of household and one other person that might know about the cohort girl's whereabouts within a three-year period
- Community name, address, GPS locations of the cohort girl's school/learning space and any other relevant information that could aid the tracking process.
- Obtain phone number of at least 2 other persons (e.g. community/traditional leader, teacher, girl ambassadors) outside girl's school/learning space that would know about her whereabouts in 3 years' time

In addition to the above, OPM would be leveraging on some programme-level data to triangulate its findings and to inform learning throughout project implementation.

The findings above show a baseline transition rate of 98% for the learning sample in the intervention group. Using the estimated targeted increase as provided on the outcome spreadsheet, this will go above 100 percentage point and become almost unrealistic for the programme to achieve. As previously recommended, the rate of transition among in-school girls needs to be redefined so that academic achievements can be objectively assessed.

However, for those out-of-school, the overall transition rate for the treatment group is at 48%. Following the proposed targeted increase provided on the outcome spreadsheet, the target transition rate for the programme at midline is 58%, then at endline is expected to increase by additional 8 percentage point to become 66%. The recommended target transition rates throughout the project life span as indicated on the outcome spreadsheet is therefore;

Table 51: Target setting for transition outcome

	Evaluation point 1	Evaluation point 2	Evaluation point 3
Target generated by the outcome spreadsheet (ISG)	97%	~100%	~100%
Target generated by the outcome spreadsheet (OSG)	48%	58% (BL+10%)	66% (BL+18%)

4.7 Sustainability Outcome

In this section, we have described the current levels of sustainability at each level (community, school, system). As this is baseline, not much is being done as the programme activities are yet to fully commence within the intervention areas.

On the school level, governance structures are seen to be taking innovative steps that are in line with the programme objectives. To foster sustainability, it is essential for the programme to work closely with such structures or stakeholders, leveraging on their existing activities.

Similarly, at the community level, gatekeepers such as community leaders, parents and spouses of programme beneficiaries are culturally relevant to its success. It is important to note that gatekeepers are already addressing relevant communal issues such as child protection independent of the programme. Hence, it is imminent that the programme partners with these stakeholders to achieve success and sustainability.

Evidence below buttresses the assertion that there is some level of activities at the school and community level that the programme can leverage on to ensure sustainability beyond the programme’s life span.

*“(Referring to rape in his community) Yes, you know like that kind of issue, if they come to me, I always refer them to the police station because at that level, it is a criminal issue”
Gatekeeper, KII, FCT.*

*“I have a suggestion and is a social one, if is going to be possible, if engine can collaborate with PTAs of schools to have a kind of awareness campaign even if it is going to be a road show or something serious in a kind of campaign either a television programme, drama or something that can make parents/guidance be enlightened
- Participant, SBMC FGD, Nyanya*

*“yes, we have like you know, all organisation have budget and they have development they record in a year. So as at last year in our budget we check on where we have challenges. And I know this year all the schools hav e budget and the budget they have is who it would affect. I have this problem, and in the coming year, this is what we would do to put things in place. To me this is what I can think of, in all the schools.”
- Participant SBMC FGD Kano*

*“another thing that we can do is to collaborate with churches and mosques to create this awareness because most of the Nigerians are either Christians or Muslims.
- Participant, SBMC FGD, Nyanya*

*“there was a committee that we have that assists the poor and those that their parents cannot provide school uniforms for them. We make sure we give them school uniform”
Gatekeeper, KII, Kano state*

Table 52 the Sustainability Scorecard, outlining the description of each score.

Table 52: Sustainability indicators

Sustainability Indicators	Baseline Sustainability Score (0-4)	Additional notes
Community Level (average score): 1		
Indicator 1: 80 faith and traditional leaders advocate for girls'	Score 0	No indication from the data and the programme report that was reviewed shows that this target group

Sustainability Indicators	Baseline Sustainability Score (0-4)	Additional notes
education, integrating key gender findings from the programme		advocates for integrated gender findings from programme.
Indicator 2 -70% of parents and primary gatekeepers support girls' rights to education	Score 2	About 80% of girl's primary caregivers reported that they support girl's education. This is important to the success of the programme as support obtained from stakeholders ensure the uptake of the support provided to target beneficiaries by the programme.
Indicator 3 - 50% of gatekeepers and community members support OSGs to go back to school	Score 1	Majority of husbands and gatekeepers reported that OSGs are doing better in business and have no need to go back to school. Through programme activities, diverse economic opportunities abound for girls who are not in-school and who cannot re-enrol to benefit. This success is more certain when the programme carries along the indirect beneficiaries like the husbands, parents, gatekeepers and other community members.
Indicator 4- 40% of community members and gatekeepers understand child protection and gender issues and are taking initiatives to address these issues at the community level	Score 1	Findings from the qualitative study indicate that gatekeepers are taking steps to specifically address child protection issues, but not gender issues in their communities
School Level (average score): 0		
Indicator 1: 50 ENGINE II schools update/establish Code of Conduct incorporating gender and protection issues	Score 1	About 31% (14 out of 45 schools) of the surveyed schools reported to have developed and are using the code of conduct document to address gender and child protection issues in the schools.
Indicator 2 - 50% of programme schools adapt ENGINE learner centred teaching methodology	Score 0	None of the teachers in schools that were surveyed was using a learner-centred teaching methodology.
Indicator 3- 50% of Learning Space Facilitators transfer ENGINE's learners' centred teaching methodology to non-ENGINE teachers within their schools/communities	Score 0	None of the ENGINE II learning space facilitators have been trained and able to transfer the skills required to facilitate the learner-centred teaching methodology to non-ENGINE teachers within their schools/communities.
Indicator 4 - 5 non-programme schools replicate ENGINE model.	Score 0	No evidence of programme replication in control schools.
System Level (average score): 1		
Indicator 1: 1 NYSC community development service adopts ENGINE methodology for NYSC corps members across all states in Nigeria	Score 1	The programme report provides some detail on the advocacy visits and potential collaboration that the programme could have with the NYSC. (Refer to Q2 report)
Indicator 2 - 50% of SAG members take action to address gender and protection issues at the State level	Score 1	There was no visible indication on the activities of SAG members towards addressing gender and protection issues
Indicator 3 - 1 Federal and 2 State Governments recognises ENGINE's contribution towards the education and economic	Score 1	The programme report shows that there is some level of partnership with the respective state governments that is implementing the programme.

Sustainability Indicators	Baseline Sustainability Score (0-4)	Additional notes
empowerment of marginalised girls in Nigeria		
Indicator 4- 3 State Governments are aware on the key barriers to girls' education and economic empowerment and are taking supportive actions	Score 1	There is an indication of partnership building up with the individual state governments where programme activities are being carried out.
Overall Score: 1		

ENGINE II aims to transform the future of marginalised Nigerian girls by fulfilling their potential in education and work leveraging on structures and systems within the schools and communities of intervention.

At the end of the project phase, ENGINE II would have increased support for girls' education and gender related issues by targeting parents, husbands, community leaders and influencers through the SHERo campaign. SHERo campaign is a strategic Behaviour Change Communication approach targeted at a network of people and or systems that contribute to the push and pull factors that are critical to a girl's ability to successfully learn or transit. These will include but will not limited to the households, communities, school systems, business environment and the larger policy and governance systems. This network of influencers will be targeted through various community level interventions to support girls' decision-making process. The SHERo activities will include advocacies, policy dialogues, community-based film festivals, gender trainings, audio/video and print BCC messages.

SHERo campaign will target girls themselves to make informed decisions while targeting other stakeholders such as Parents, Husbands, community leaders, religious leaders, men's and mothers' groups and community organisations to change negative perceptions and attitude to girls in order to remove barriers facing girls and young women.

ENGINE II gender analysis report highlights barriers to girls' education to include negative social norms, perception and attitude of adolescent girls which has resulted in disparity between boys' and girls' enrolment, retention and completion of education. Girls have higher burden of domestic work and where there are limited resources within the household, the girl is made to drop out of school for the boys in the family to continue their education. Strategic behaviour communication will be targeted towards the girls and her community to be able to perceive her positively and support her education. This will be achieved through community buy in of the programme objectives and their involvement in implementation design through the partnership with local implementing partners who understand the context of communities where we work.

Table 53: Changes needed for sustainability

	Community	School	System
Change: what change should happen by the end of the implementation period	Increased support for girls' education and gender related issues in the community. Girls' parents, husbands and community leaders support girls to thrive.	Content knowledge and pedagogical skills of teachers would have improved considerably. Learners participate in learning with fun and learning outcomes achieved. School	Strengthened capacity of government to sustain interventions.

	Community	School	System
		environment is gender friendly.	
Activities: What activities are aimed at this change?	<ul style="list-style-type: none"> Behaviour Change Communication through SHEro campaign. Advocacy and sensitisation. Community based film festivals. Policy dialogues. 	<ul style="list-style-type: none"> Learner Centred Teacher Training. Integrated learning app/mobile library Gender Training Developing School Charters Training of PTAs 	<ul style="list-style-type: none"> System strengthening and Mentoring. Duty bearers statutorily responsible for providing ENGINE II supported interventions are leading implementation-MoE, AME, NERDC, Teachers, Guidance and Counsellors (Child and Vulnerable Adult protection)
Stakeholders: Who are the relevant stakeholders?	Girls, Parents, Husbands, community leaders, religious leaders, men's and mothers' groups, community organisations	Girls, Teachers, Parents/Husbands, Principals, Zonal Supervisors, Directors School Services, MDAs	Commissioners for Education and Directors in charge relevant parastatals (AME)- Teachers. Guidance and Counsellors, PTAs etc
Factors: what factors are hindering or helping achieve changes? Think of people, systems, social norms etc.	<p>Hindering:</p> <ul style="list-style-type: none"> i. Deep rooted social norms and negative perceptions of adolescent girls ii. Household poverty <p>Helping:</p> <ul style="list-style-type: none"> i. Buy-in of community leaders and working through existing community structures ii. Strategic Behaviour Change communication strategy and content iii. Working through local partners that understands state specific local context. 	<p>Hindering:</p> <ul style="list-style-type: none"> i. Costs of teacher training and retraining ii. Low capacity of teachers iii. Structured school calendar iv. Low attendance rates v. Minimal involvement of PTA in school management vi. Gender barriers faced by girls that may result in drop-out such as early marriage. <p>Helping:</p> <ul style="list-style-type: none"> i. Working through school authority including the SMoE. ii. Willingness of teachers to change 	<p>Hindering:</p> <ul style="list-style-type: none"> i. Bureaucratic processes within government are hindering the pace of implementation. ii. Policy influencing and systems strengthening is a long-term process. <p>Helping:</p> <ul style="list-style-type: none"> i. Kaduna, Kano, Lagos and the FCT are all reform states so support technical improvements and innovation by ENGINE II ii. Availability of accurate data and involvement of external evaluator to measure progress.

5 Key Intermediate Outcome Findings

This section presents the key findings on the Intermediate Outcome (IO) indicators. For each of the programme's IOs, the overall evaluation methodology as described in section 2 above was applied to measuring the programme IOs. In details, we have discussed the respective IOs and the data that was collected with respect to the target group. Our discussions also provided insights into the key characteristics of the sub-groups and other factors (e.g. barriers) that might be affecting them.

In each of the IO sections, we have distinguished between quantitative and qualitative data, integrating data of both types in a consistent narrative of the findings. We have also provided results disaggregated by subgroups.

5.1 Attendance

One of the key intermediate outcomes of the ENGINE programme is improved attendance in school for ISGs and in learning centres for OSGs, as improved attendance is a key step in improving learning outcomes of beneficiaries. The performance of pupils in any learning environment is somewhat dependent on attendance. This is key as it helps to ensure that students do not fall behind academically and developmentally. The program's ambition is for marginalised girls to actively seek to attend secondary school and to maintain their attendance at school through to completion. The strategy for increasing attendance and retention of your beneficiaries at their current education point, and as they transition to new classes / schools / learning environments during the project is multi-fold.

- Build girls motivation to attend through mentors, peer support and positive role models
- Enable girls' attendance through specific steps which address attendance barriers e.g. scholarships, inclusive attitudes of gatekeepers
- Support school and state governance in using and maintain management information systems (MIS) for attendance
- Schools actively reach out to marginalised girls as soon as possible in the drop out process to problem solve and encourage retention

This section reports data on school/learning space attendance as recorded in the girl questionnaire and household questionnaire. Additionally, we report findings on attendance based on the qualitative study.

5.1.1 Link to Outcomes

This intermediate outcome seeks to measure the number of marginalised girls who record improved attendance at safe space learning centres and at classrooms. The programme links this intermediate outcome to Outcome 1, learning, and Outcome 2, transition. Learning outcomes can be improved in girls who attend school and the learning spaces regularly. Similarly, girls who attend school and learning spaces regularly are expected to learn the necessary skills to transition through life successfully.

The rationale provided by the programme is logical, and the IO is appropriately worded. However, it is important to note that there might be a bias in attendance reporting for ISGs. While attendance for OSGs is measured by learning centre attendance records which are maintained by the programme, attendance for ISGs relies primarily on self-reporting by the girls. School attendance is an additional method listed on the logframe, but anecdotal evidences shows that school records are often inaccurate or incomplete. We recommend that the programme trains school governance structures, including the principals, on the importance of keeping accurate and complete attendance records. This will ensure that measurement of

attendance can be verified using two separate sources, and girls' self-reporting can be confirmed for accuracy.

5.1.2 Tools for Measurement

Attendance data was obtained from three main sources: the girl questionnaire, the household questionnaire and the qualitative study, as indicated in the logframe. OSG attendance at the learning centres could not be measured at baseline, as there were no activities in place at the time of the baseline study. Additionally, for ISGs, the school register was not used to measure attendance. Bi-annual spot checks would be conducted by the programme team as well as the evaluation team respectively at different time-points i.e. during cohort tracking.

5.1.3 Sampling

The same sampling protocol used for measuring outcomes for cohort girls, was used for measuring attendance. The questionnaire was administered to 10 randomly selected ISGs who were enrolled into the study because the LSCs or school principals in treatment schools identified them as ENGINE girls, and girls that were enrolled into the study because they met the enrolment criteria in control schools. As previously described, the household questionnaire was administered to the primary care giver of the girl, or any adult household member that could speak about her well-being.

For the qualitative study, the sampling was conducted according to the criteria described in Section 2.5. Primarily, questions about attendance were asked to the girl, her household member, the SBMC/PTA, teachers and gatekeepers.

5.1.4 Attendance as reported by girl

While designing the girl questionnaire, questions were included to probe girls about how many days they were absent from school in the 30 days, and in the 5 days preceding the day of the survey visit, when the school was open. Girls were also asked about their main reasons for being absent from school. The table below (Table 54) describes the results obtained when these questions were administered.

In both the intervention and control population, a high proportion of girls reported that they attended school more than half the time (more than 15 days) in the last 30 days when school was open. Girls who reported being absent from school in the last 30 days were further probed on whether they had missed school in the 5 days preceding the survey visit. A higher percentage of girls in the intervention population (74%) reported that they had not been absent from school in the last 5 days when compared to girls in the comparison population (70%). Similarly, a higher proportion of girls in the control population (7%) reported that they had missed school 3-5 times in the last 5 days, when compared to girls receiving the intervention (5%).

Table 54: Attendance rates from Girl Questionnaire

<i>Factor</i>	<i>Intervention (Baseline)</i>	<i>Control (Baseline)</i>	<i>Source</i>
Attends school half the time in the last 30 days (>15 days)	457 (99.3%)	450 (98.3%)	GQ_B08
Attends school less than half the time in the last 30 days (<15 days)	3 (0.7%)	8 (1.7%)	GQ_B08
Not absent from school in the last 5 days	182 (74.3%)	157 (69.8%)	GQ_B09
Absent from school 1 – 2 days in the last 5 days	51 (20.8%)	52 (23.1%)	GQ_B09
Absent from school 3 – 5 days in the last 5 days	12 (4.9%)	16 (7.1%)	GQ_B09

5.1.5 Disaggregated Attendance Data

The tables below present the number of girls who reported that they attended school more than 15 days in the last 30 days and 5 days respectively preceding the survey visit. As listed in the logframe, the data has been disaggregated by state, current class, age, disability and marginalization criteria. Data on religion was not collected at baseline. Therefore, we are not able to disaggregate by religion. The disability data presented in these tables is based on the proportion of girls that reported that they have a lot of difficulty performing the tasks.

Table 55: Girls' attendance rate in the last 30 days before survey by key characteristics

	Treatment (Baseline)	Control (Baseline)
<i>Factor</i>	Attends school half the time in the last 30 days (>15 days)	Attends school half the time in the last 30 days (>15 days)
State		
FCT	130 (28.5%)	127 (28.2%)
Kaduna	177 (38.7%)	174 (38.7%)
Kano	150 (32.8%)	149 (33.1%)
Current Class		
JSS 3	80 (17.5%)	127 (28.2%)
SS 1	110 (24.1)	128 (28.4%)
SS 2	267 (58.4%)	195 (43.3%)
Age		
17 Years	270 (59.1%)	278 (61.8%)
18 Years	149 (32.6%)	123 (27.3%)
19 Years	26 (5.7%)	26 (5.8%)
20 Years	8 (1.8%)	11 (2.4%)
21 Years	2 (0.4%)	2 (0.4%)
22 Years	1 (0.2%)	8 (1.8%)
23 Years	1 (0.2%)	2 (0.4%)
Disability		
Difficulty Seeing	3 (0.7%)	8 (1.8%)
Difficulty Hearing	2 (0.4%)	3 (0.7%)
Difficulty Walking	2 (0.4%)	5 (1.1%)
Difficulty Communicating	7 (1.5%)	5 (1.1%)
Difficulty Remembering Things	9 (2%)	18 (4%)
Difficulty with Self Care	1 (0.2%)	1 (0.2%)
Marginalization Criteria		
Married on or Before 18 years	6 (1.3%)	11 (2.4%)
Had a Child on or Before 18 years	4 (0.9%)	12 (2.7%)
Divorced	2 (0.4%)	0 (0%)
Widowed	3 (0.7%)	2 (0.4%)
Orphaned	157 (34.4%)	241 (53.6%)
Have Sick Parent/Guardian	90 (19.7%)	91 (20.2%)

Table 56: Girls' attendance rate in the last 5 days before survey by key characteristics

	<i>Treatment (Baseline)</i>	<i>Control (Baseline)</i>
<i>Factor</i>	Absent from school 1-5 times in last 5 days	Absent from school 1-5 times in last 5 days
State		
FCT	13 (20.6%)	13 (19.1%)
Kaduna	34 (54.7%)	38 (55.9%)
Kano	16 (25.4%)	17 (25.0%)
Current Class		
JSS 3	15 (23.8%)	26 (38.2%)
SS 1	14 (22.2%)	16 (23.5%)
SS 2	34 (54%)	26 (38.2%)
Age		
17 Years	32 (50.8%)	43 (63.2%)
18 Years	24 (38.1%)	18 (26.5%)
19 Years	4 (6.35%)	3 (4.4%)
20 Years	3 (4.8%)	1 (1.5%)
21 Years	0 (0.0%)	0 (0.0%)
22 Years	0 (0.0%)	3 (4.4%)
23 Years	0 (0.0%)	0 (0.0%)
Disability		
Difficulty Seeing	2 (3.2%)	0 (0.0%)
Difficulty Hearing	0 (0.0%)	0 (0.0%)
Difficulty Walking	0 (0.0%)	1 (1.5%)
Difficulty Communicating	1 (1.6%)	1 (1.5%)
Difficulty Remembering Things	1 (1.6%)	4 (5.9%)
Difficulty with Self Care	1 (1.6%)	0 (0.0%)
Marginalization Criteria		
Married on or Before 18 years	2 (3.2%)	3 (4.4%)
Had a Child on or Before 18 years	0 (0.0%)	4 (5.9%)
Divorced	0 (0.0%)	0 (0%)
Widowed	0 (0.0%)	0 (0.0%)
Orphaned	25 (39.7%)	32 (47.1%)
Have Sick Parent/Guardian	8 (12.7%)	18 (26.5%)

5.1.6 Attendance as reported by the household

The Household questionnaire, aimed at eliciting information from the girl's primary caregiver, was designed to include similar questions as the girl questionnaire, with the aim of triangulating the data from both questionnaires. The table below (Table 57) describes the results obtained when these questions were administered.

In the household questionnaire, respondents reported that their wards regularly attended school, with about 99% reporting that their wards attended school for more than 15 days in the last 30 days when the school was open in the intervention and comparison populations. Like in the girl questionnaire, primary caregivers who reported that their wards were absent from school in the last 30 days were further probed on whether they had missed school in the 5 days preceding the survey visit. About 70% of primary caregivers in both

the intervention and control population reported that their wards had not been absent from school in the last 5 days.

Table 57: Attendance rates from Household Questionnaire

Factor	Intervention (Baseline)	Control (Baseline)	Source
Attends school half the time within the last 30 days (>15 days)	450 (99.5%)	451 (99.5%)	HQ_C03
Attends school less than half the time within the last 30 days (<15 days)	2 (0.4%)	2 (0.4%)	HQ_C03
Not absent from school in the last 5 days preceding the survey	59 (71.1%)	55 (68.8%)	HQ_C04
Absent from school 1 – 2 days in the last 5 days	23 (27.7%)	21 (26.3%)	HQ_C04
Absent from school 3 – 5 days in the last 5 days	1 (1.2%)	4 (5%)	HQ_C04

5.1.7 Factors affecting attendance

The tables below show the major reasons reported for being absent from school as recorded in the Girl and Household questionnaires.

Using the girl questionnaire, the main reason recorded for missing school was own/family illness. About 47% of girls in the intervention population and 58% of girl in the control population reported that they had missed school for this reason. Additionally, about 10% of girls in the intervention population and 13% of girls in the control population reported that they missed school because they were unable to pay their school fees.

The household questionnaire reported a similar trend as the girl questionnaire, with the dominant reason for missing school being own/family illness. About 53% of primary care givers in the treatment population, and 66% in the control population reported that their wards missed school due to this reason. Unpaid school fees were also reported to be a deterrent to school attendance, with 16% of primary care givers in the treatment population, and 14% of primary care givers in the control population reporting that their wards missed school due to an inability to pay school fees. See Table 58 and Table 59 for more.

Table 58: Factors affecting school attendance from girl questionnaire

Factor	Intervention (Baseline)	Control (Baseline)	Source
Own/family illness	54 (47.4%)	40 (58.8%)	GQ_B10
Transport Problems	2 (1.8%)	6 (8.8%)	GQ_B10
Social or religious obligations (funerals, weddings, etc)	11 (9.6%)	6 (8.8%)	GQ_B10
Market/commercial activity	3 (2.6%)	2 (2.9%)	GQ_B10
Errands/Domestic Chores	5 (4.4%)	9 (13.2%)	GQ_B10
Farming	3 (2.6%)	0 (0%)	GQ_B10
Unpaid school fees	12 (10.5%)	9 (13.2%)	GQ_B10

Table 59: Factors affecting school attendance from household questionnaire

Factor	Intervention (Baseline)	Control (Baseline)	Source
Own/family illness	75 (53.6%)	95 (66%)	HQ_C05
Transport Problems	6 (4.3%)	3 (2.1%)	HQ_C05
Social or religious obligations (funerals, weddings, etc)	22 (15.7%)	19 (13.2%)	HQ_C05
Market/commercial activity	3 (2.1%)	2 (1.4%)	HQ_C05
Errands/Domestic Chores	3 (2.1%)	9 (6.2%)	HQ_C05
Farming	1 (2.6%)	1 (0%)	HQ_C05
Unpaid school fees	23 (16.4%)	20 (13.9%)	HQ_C05

The qualitative study across different respondents was used to further explore reasons responsible for students' absenteeism as well as what activities stakeholders were engaging in to mitigate this issue. The majority of in-school participants agreed that there has been improvement in attendance as indicated by the data above and information from the qualitative study suggested that the main reason was based on health grounds as respondents said they missed school when they or any household member were sick. Other notable reasons that came up ranged from girls having to stay back at home to help with house chores or have to go to the market and/or run errands.

Excerpts below are direct quotes from participants to support the findings;

“Yes, like me if my younger ones are on mid-term break I miss school to stay with them.”
- Participant FGD, Nyanya Abuja

“When a family member like mother is sick, then will have to stay home to take care of the house.”
- Participant, ISG FGD, Zaria, Kaduna State

“When someone is sick or when someone is dead, and your mother would attend the burial, you have to sit at home.”

- Participant, ISG FGD, Kumbotso, Kano state.

There are also persisting barriers related specifically to girls' attendance in schools. Stakeholders attested to the presence of barriers to school attendance. Major barriers mentioned during the discussion include household chores and other activities like farming and supporting parent's trade.

This appears to be common knowledge as presented in the quotes below;

“... Girls, some of them wake up, they wake up like around 4 o'clock, like 5 o'clock but they might come to school around 8 because they will first of all, boil water for their young[er] ones, take, bathe them, do all these things”.
- Participant, Boys IDI, FCT

“they don't go to school regularly, because we are farmers, some of them if they have farm work, really they will say they should go to farm, so that will make them not go to school and again some of them if they don't have school fees to pay it will make them not to go to school...“they complain about families' inability to afford the school fees and if I have anything, I can assist them..”.
- Gatekeeper KII, FCT

Although barriers to attendance exist, there is also evidence that factors such as a lack of motivation affects attendance. This lack of motivation could be attributed to the idea of schooling not appealing to them or as a result of peer pressure. This sentiment is captured in the quotes below:

“When they come to school only because their friends are coming to school, so when those friends don't come to school, they too won't come or when they are not friends again, they won't come to school because they don't even know why they should come to school”

- Participant, ISG FGD, Gonin Gora, Kaduna

“Some will still miss school just because they don't feel like coming to school that day. Some will even come to school but they will not enter.”

- Participant, ISG FGD, Nyanya Abuja

“The girls are always around, the boys come around when they feel like. When it's break time, they could decide to just go home, not minding.”

- Participant, SBMC FGD, Zaria

To improve school attendance, the programme might leverage on the SBMC/Gatekeepers as well as parents and husbands. Findings from this study have pointed evidence that the SBMC and the parent have a vital role to play in creating an enabling environment for improved school attendance irrespective of gender. In different discussions, participants mentioned how the caregivers, teachers and SBMC are working hard to drive attendance. The below quotes support this finding:

“the issue of girls not coming to school and sometimes you don't see them is common, the only thing is that since we have the PTA representative two among the staff we just try to have direct communication with the parents, by the time that we discovered that the situation doesn't change, sometimes we invites parents if the situation doesn't change we inform the PTA chairman and he himself from time to time come to the school to get those names and meet with the parents.”

- Participant, SBMC FGD, FCT, Abuja

“there was a committee we have that assist the poor- and those that are parents cannot provide school uniforms for them; we make sure we give them school uniforms

- Gatekeeper KII –Kano

“and the reason why we don't miss school is that when you have a full attendance in a whole term, some of us are thinking that such a person can be awarded at the end of the term, and that is why we don't like to miss school.”

- Participant, ISG FGD, Kumbotso LGA, Kano state

“I don't miss school, because my parents would not let me stay at home.”

- Participant, ISG FGD, Kumbotso LGA, Kano state

An incentive for the students' regular attendance is for the stakeholder / school to ensure that classes and teachers are at the duty post regularly.

“I personally go around the classes to ensure these students stay in class after been admitted. They know I know their homes and parents, and they are aware I do round checks, they won't want to commit truancy because they don't want me talking to their parents about that.”

- Participant, SBMC FGD, Rumin Duko, Zaria

5.1.8 Baseline Values

The attendance baseline value for ISGs is 52%. This value was obtained by calculating the number of girls who reported that they had not missed school at all in the last 30 days. Although this value is higher than the midline target value of 40%, we don't anticipate any ceiling effects, considering that the baseline study was conducted in a period when other constraints that prevent student attendance were not prominent, such as heavy rainfall or farming. However, we propose that the midline target be slightly revised to 60% cumulative, and the endline target kept at 75% cumulative. As the learning space centres had not been activated at the time of the baseline visit, therefore the baseline value for attendance among OSGs is 0.0%.

Intermediate outcome 1: Number of marginalised girls who record improved attendance at safe space learning centres and at classrooms			
Indicator	BL value	Is IO indicator fit for purpose? (Yes/No)	Additional comments: (If IO indicator is not fit for purpose, please outline your recommendation (e.g. remove it/add a different one etc.))
1.1 Number of marginalised girls who achieve at least 75% attendance at the learning centres.	0.0%	Yes	Learning centre is one of the structures that could foster sustainability after the exit of the programme. Ensuring that girls keep regular attendance and participate in the girls' fora can help the programme achieve its objectives on improving learning outcomes and life skills. Given the current status, the programme needs to roll out its monitoring plan so as to achieve the 48% target above baseline by midline and 76% by endline.
1.2: Percentage of ENGINE II ISGs reporting improved attendance at school.	52.4%	Yes	Attendance is already high among the in-school girls. This is important to the programme achievements and girls' learnings; therefore, it needs to be sustained. However, given the baseline value, targets at subsequent evaluation points are almost unrealistic and should be revised. In addition to this, it is recommended that other measures outside of self-reports by girls should be taken to track attendance. This can include cohort tracking reports as well as updated/completed school attendance registers.

5.2 Quality of teaching

Another key intermediate outcome of the ENGINE programme is improved teaching quality by training teachers to use learner centred teaching methodologies, with the aim of improving learning outcomes of beneficiaries. To provide quality teaching and accelerate learning outcomes, the programme needs: Trained teachers who can understand and implement the national curriculum, Pathways for accelerated learning and re-entry to formal education, Tailored learning and tracking of individual girls learning outcomes. ENGINE II will upskill teachers, providing them with quality pedagogical content tailored to the needs and interests of marginalised girls. The primary aim of these activities is to improve learning outcomes in girls. Improving teacher quality would lead to an improvement in how the girls learn in school, which leads to better performance. This section reports data on teaching quality, with data reported in the teacher questionnaire, girl questionnaire and the household questionnaire. We also report findings from the qualitative study.

5.2.1 Link to Outcomes

This intermediate outcome seeks to measure the number of teachers using learners centred teaching methodology both at learning centres and at classrooms. The programme links this intermediate outcome to Outcome 1, learning, as an improvement in teaching quality is absolutely essential to improve learning outcomes in girls (Masino and Nino-Zarazua, 2016; Bietenbeck, et.al. 2017). The rationale provided by the programme is logical, and the IO is appropriately worded.

5.2.2 Tools for Measurement

As indicated in the logframe, teaching quality was measured with the Principles of Adult Learning Scale (see link on below). From the logframe, girl perception on teacher quality should have been measured using qualitative study only. However, the girl questionnaire and household questionnaire included questions to probe on improved perception, to allow for triangulation of findings. Additionally, classroom observations were conducted to determine if teachers were using learner centred methodologies.

5.2.3 Sampling

The PALS questionnaire was administered to teachers enrolled in the study. The selected teacher was a teacher who teaches Math or English to students between JSS3 and SS2. Preference was given to a teacher who meets the previously stated criteria, and was trained on ENGINE I. The girl and household questionnaires were administered to their respective respondents as previously described.

For the qualitative study, the sampling was conducted according to the criteria described in Section 2.5. Primarily, questions about teaching quality were asked to the girls, boys and teachers.

5.2.4 Using PALS tool to assess teaching

The Principles of Adult Learning Scale (PALS) (J. Conti, 1979) was administered to the ISG teachers and OSG LSCs. The PALS is a questionnaire made up of 44 questions used to determine if ENGINE teachers and Learning Space Coordinators (LSCs) practice teaching methodologies that are suited to adult learners as described in the adult learning literature. The questionnaire uses a modified Likert scale, and teachers are asked to indicate the frequency with which they practice or deal with students and/or classroom situations described in each item.

All the questions were subsequently grouped to reflect 7 factors which include learner-centred activities, personalising instruction, relating to experience, assessing student needs, climate building, participation in the learning process and flexibility for personal development. If the teachers' mean score is lower than or equal to the mean for each factor, it suggests that the teachers have possible areas for improving a more learner-centred approach to teaching. Consequently, if the total mean score is less than or equal to 146, it indicates that the teacher uses a teacher-centred approach to teaching, while a total mean score higher than 146 indicates that the teacher uses a learner-centred approach to teaching. Scores near 146 indicate that the teacher uses a combination of learner-centred and teacher-centred approach to teaching.

Across each factor, the teachers recorded a score lower than the standard mean score, indicating that they have possible areas of improving their teaching style to become more learner-centred. Overall, the results from the PALS questionnaire indicate that the teachers in the intervention and control groups use a teacher-centred approach to teaching, with a total mean score on 96.3 in the intervention group, and 100.4 in the control group. The OSG LSCs had a similar mean score of 96.3.

The results suggest that there are no differences in teaching methods between ENGINE LSCs and teachers and teachers in control schools. This means that overall, teachers use a teacher centred approach.

Table 60: Assessment of teaching methodology using PALS scale

PAL Scale			ISG			OSG	
Factor	Mean	S.D.	Intervention	Control	SD Intervention group	Intervention	SD Intervention group
1. Learner-Centred Activities	38	8.3	27.7	29.2	8.3	29.8	9.84
2. Personalising Instruction	31	6.8	22	21.4	6.1	21.5	6.55
3. Relating to Experience	21	4.9	11.7	13.3	4.2	11.6	5.73
4. Assessing Student Needs	14	3.6	7.8	9.3	2.9	7.6	3.28
5. Climate Building	16	3	8.1	8.7	2.9	8.3	3.45
6. Participation in the Learning Process	13	3.5	8.8	8.7	3.9	8.1	3.44
7. Flexibility for Personal Development	13	3.9	10.2	9.8	3.6	9.5	4.03
Total	146		96.3	100.4		96.3	

5.2.5 Girls' perception on teaching quality

The girl questionnaire was used to assess the proportion of ISGs who report an improved perception of teacher's teaching quality (Table 61). Using Likert Scale, a series of questions were asked to the girls with the aim of understanding their opinions on teaching quality in their schools. The following table present the findings on girls' perception on teaching quality.

Overall, the results from the girl questionnaire suggest that ISGs have a positive perception about their teachers. 96% of girls in the treatment and control populations strongly agree or agree that their teachers make them feel welcome in class. Conversely, 18% and 20% strongly agree or agree that their teachers are often absent from class in the intervention and comparison populations respectively. About 85% of girls in the intervention population reported that their teachers use a different language to explain if they don't understand, encourage students during lessons, use instructional materials, and suggest ways to study after school. Similar numbers were reported in the control population.

Table 61: Perception of girls on teaching quality

Perception on Teaching Quality			
Factor	Intervention (Baseline)	Control (Baseline)	Source
Strongly agree or agree			
Teacher makes me feel welcome	440 (95.7%)	439 (95.9%)	GQ_B11
Teacher often absent from class	84 (18.2%)	93 (20.3%)	GQ_B12
Often OR Sometimes			
Teacher uses a different language if student does not understand	387 (84.2%)	390 (85.1%)	GQ_B13
Teacher encourages students during lesson	413 (89.8%)	422 (92.2%)	GQ_B14
Teacher uses instructional materials	386 (83.9%)	378 (82.5%)	GQ_B14a
Teacher suggests ways to study after school/at home	402 (87.4%)	389 (84.9%)	GQ_B15

5.2.6 Disaggregation of Girls perception on teaching quality

The table below presents the disaggregation of girls who reported that their teachers are often absent from class. This table is disaggregated by state, current class, age, disability and marginalization criteria.

Table 62: Girls' perception on teacher's absenteeism by key characteristics

	Treatment (Baseline)	Control (Baseline)
State		
FCT	27 (31.0%)	32 (32.7%)
Kaduna	38 (43.7%)	40 (40.8%)
Kano	22 (25.3%)	26 (26.5%)
Current Class		
JSS 3	18 (20.7%)	32 (32.7%)
SS 1	18 (20.7%)	26 (26.5%)
SS 2	51 (58.6%)	40 (40.8%)
Age		
17 Years	51 (58.62%)	50 (51.0%)
18 Years	34 (39.1%)	36 (36.7%)
19 Years	1 (1.2%)	9 (9.2%)
20 Years	1 (1.2%)	2 (2.0%)
21 Years	0 (0.0%)	0 (0.0%)
22 Years	0 (0.0%)	1 (1.0%)
23 Years	0 (0.0%)	0 (0.0%)
Disability		
Difficulty Seeing	1 (1.2%)	1 (1.0%)
Difficulty Hearing	1 (1.2%)	1 (1.0%)
Difficulty Walking	1 (1.2%)	2 (2.0%)
Difficulty Communicating	2 (2.3%)	1 (1.0%)
Difficulty Remembering Things	3 (3.5%)	5 (5.1%)
Difficulty with Self Care	1 (1.2%)	0 (0.0%)
Marginalization Criteria		
Married on or Before 18 years	2 (2.3%)	2 (2.0%)
Had a Child on or Before 18 years	1 (1.2%)	4 (4.1%)
Divorced	1 (1.2%)	0 (0%)
Widowed	1 (1.2%)	1 (1.0%)
Orphaned	33 (37.9%)	63 (64.3%)
Have Sick Parent/Guardian	19 (21.8%)	16 (16.3%)

5.2.7 Household perception on teaching quality

On Table 63, about 38% of household respondents in the intervention and control schools reported that the teachers taking their wards provide excellent teaching services. In addition, when asked how they perceived improvement in the ability of the teachers to pay attention to the specific learning needs of girls, slightly above three-quarter responded in the affirmative.

Table 63: Household perception on teaching quality

	Intervention (Baseline)	Control (Baseline)	Source
N	452	453	
Described teaching quality as "excellent"	173 (38.3%)	168 (37.1%)	HQ_C11_1
Improved teaching ...			
Ability to pay attention to the specific learning needs of [GIRL]	351 (77.7%)	351 (77.5%)	HH_C13_1

	Intervention (Baseline)	Control (Baseline)	Source
Style adjusted to suit students' needs	332 (73.5%)	324 (71.5%)	HH_C14_1
Qualities to provide and receive feedback to and from the students	331 (73.2%)	314 (69.3%)	HH_C15_1
Qualities to encourage critical thinking	343 (75.9%)	333 (73.5%)	HH_C16_1
Qualities have allowed for equal participation of all students in class	328 (72.6%)	302 (66.7%)	HH_C17_1
Qualities to teach academic subjects in a simpler and easy to understand version	315 (69.7%)	504 (67.1%)	HH_C18_1

To explore the perception on teaching quality, the direct beneficiaries of classroom teachings were interviewed. From information gathered, we can deduce that the learners perceive that the teachers use a learner-centred teaching methodology to meet each student need. This is also supported by findings from the girls' questionnaire where a high proportion of girls alluded to this. However, in actual practice, the PALS reported a contrary result.

Overall, results from girls' interviews indicated that they perceived that their teachers were committed and effective. In response to some of the questions, the following were said;

"There are some teachers they are using passionate that after the normal lesson they will even ask the students to come to them personally in their lesson time for more explanation and if you are a person that wants to learn, you will surely go to that teacher for more explanation, so there are some teachers, they have private time for those of them that find it difficult because our capacities are not the same."
 - Participant, Female FGD– ISG FCT

"She uses materials, she uses herself, she uses the classroom, she uses some people in the classroom."
 - Participant, ISG FGD, Gonin Gora, Kaduna

"And if we don't understand, the teacher will cite an example that will make us to get what he is teaching us."
 - Participant, ISG FGD, Kumbotso, Kano

However, this opinion was not shared by some other students as described below;

"I will want them to nurture their way of understanding let them understand study very hard so that whatever things they are transmitting to these students will not be standard so that when we too go out we will be able to give quality and concrete education to others."
 - Participant, Female FGD– ISG FCT

"it's just that we are faced with some challenges of some teachers not being able to have a good method of teaching, they teach us but nobody understands"
 - Participant, Female FGD - ISG Kaduna

"My problem is with some teachers that will not come to the class during their lesson hour and they are there having double period with the girls, and a teacher in there another one will be outside waiting for him to come out but we (the boys) will at times not have any teacher in the class"
 - Participant, Boys IDI – Kano

The importance of having teaching and instructional materials for use by the teachers cannot be overemphasised. Further into the findings, some teachers were asked about availability of resources to aid teaching. There were mentions of school management making resources available to teachers. The statement below supports this finding.

“Honestly, for the resources except if you didn't ask for it, but if you need and you meet the senior master that you need materials for your job he would inform the principal and she is also doing her best in that aspect.”

- Teacher KII, Kano

“We have a lot of teaching materials like practical materials we use in physics, chemistry and other ones and home department and catering, we have materials that are used in cooking and other things...”

- Teacher KII, Kano.

On the contrary, some other teachers opined that non-availability or the insufficiency of teaching materials affect their teaching. Below are some quotes in relation to this;

“It's not so good but its fair. Honestly, it's not enough. Government helps out with materials but it's never enough. Sometimes they send text books, but it's never enough for even a single class. They brought Math's, English, social studies textbooks to be given to each student but that wasn't possible, so a student just got one subject textbook instead of the three.”

- Teacher KII, Kaduna

The diagrams they give us are not enough, even materials. Sometime, I sacrifice my own money to buy books for them.”

- Teacher KII, FCT, Abuja

5.2.8 Baseline Values

The results from the PALS questionnaire indicate that the baseline value for number of teachers using learners centred teaching methodology both at learning centres and at classrooms is 0, i.e. no teacher reported using learner centred methodologies. The target listed in the logframe for midline is 150, and endline is 200.

In terms of percentage of ISGs who report improved perception on teacher's teaching quality, the baseline value is 34%. This value was calculated by recoding and regrouping questions B11 – B15 in the girl questionnaire. The options “strongly agree and agree”, and “often and sometimes” were regrouped into one group, and other options into another group. The row total was summed up out of 6. A threshold score of 5 was set for positive perception on teaching quality. Therefore, girls who reported positively on 5 or above questions were considered to have a positive perception on teaching quality, while girls who reported positively on 4 or below questions were considered to have a negative perception on teaching quality. The target listed in the logframe is the baseline value + 30% by midline. Endline values are currently stated at 50% cumulative. However, this should be revised and increased to 70% based on the current values to avoid ceiling effects.

Intermediate outcome 2: Teaching Quality - Number of teachers who demonstrate the application of learners' centred teaching learning methodology			
Indicator	BL value	Is IO indicator fit for purpose? (Yes/No)	If IO indicator is not fit for purpose, please outline your recommendation (e.g. remove it/add a different one etc.)
2.1 Number of teachers using learners centred teaching methodology both at learning centres and at classrooms	0.0%	Yes	This is one of the most important factors that could influence how girls learn. The findings from this study depicts that teachings are currently not tailored to meet the specific need of each learner thereby validating the importance of equipping teachers with the skills that could help them to be more learner-centred.
2.2: Percentage of ISGs who report improved perception on teachers' teaching quality	33.5%	Yes	Baseline findings indicate that girls are affected by how their teachers treat them, thereby validating the importance of what they think about their teachers' delivery. This if positive, can contribute to how girls learn in the classroom.

5.3 Economic empowerment

A major intermediate outcome of the ENGINE programme is to provide increased access to economic opportunities, in order to enable marginalised girls' create better financial futures, build assets and gain autonomy to control their own financial resources. This section reports data on economic empowerment of OSGs. Data was collected from the girl questionnaire, household questionnaire and the qualitative study.

5.3.1 Link to Outcomes

This intermediate outcome seeks to measure the percentage of marginalised girls who evidence increase in their financial situation and report access to economic opportunities. This IO is specific to OSGs only. The programme links this intermediate outcome to Outcome 2, transition. An increase in financial situation and increased access to economic situations is pertinent for OSGs to transition through key stages of life. The rationale provided by the programme is logical, and the IO is appropriately worded.

5.3.2 Tools for Measurement

In addition to the household survey listed on the logframe as the tool of measurement for this intermediate outcome, the girl questionnaire was also used, as we felt it would be more accurate to get information about any changes in income from the girl herself, rather than her household members. Data from both sources were triangulated. Other tools on the logframe include Girl Mapping tool developed by MC and MC internal value chain integration monitoring data, which would be used by the program to measure this intermediate outcome.

5.3.3 Sampling

The same sampling protocol used for measuring outcomes for cohort girls, was used for measuring economic empowerment. The questionnaire was administered to 10 randomly selected OSGs who were enrolled into the study because the LSCs identified them as as ENGINE girls, and girls that were enrolled into the study because they met the enrolment criteria in control communities. As previously described, the household questionnaire was administered to the primary care giver of the girl, or any adult household member that could speak about her well-being.

For the qualitative study, the sampling was conducted according to the criteria described in Section 2.5. Primarily, questions about economic opportunities were asked to the girl, her parent or husband, and the LSCs.

5.3.4 Girl's economic empowerment

OSGs were asked if they are currently active in any business. There are obvious residual effects of ENGINE I, as forty eight percent of girls in the treatment population reported in the affirmative, compared to 25% of girls in the control population. Girls in the treatment population reported to have higher earning power compared to girls in the control population. Interestingly, when asked about profit making, similar trends were observed in the treatment and control populations, where about 70% of girls reported making profit between 1-1000 naira. Only girls in the intervention population report making profit between 10001-35000.

Table 64: Business characteristics of OSG in the intervention group

Factor	Intervention (Baseline)	Control (Baseline)	Source
Currently actively involved in any business	223 (48.2%)	117 (25.2%)	GQ_C06
How many hours a day			GQ_C06b
< 1 hour	17 (7.8%)	2 (1.8%)	
1 – 4 hours	69 (31.7%)	46 (41.1%)	
4 – 8 hours	61 (28%)	36 (32.1%)	
More than 8 hours	58 (26.6%)	21 (18.8%)	
Payment or Income			GQ_C06c
N0	1 (0.5%)	5 (4.5%)	
N1 – 1000	60 (27.5%)	52 (46.4%)	
N1001 – 10000	133 (61%)	50 (44.6%)	
N10001 – 200000	21 (9.6%)	4 (3.6%)	
Profit			GQ_C06d
N0	1 (0.5%)	5 (4.5%)	
N1 – 1000	155 (71.1%)	78 (69.6%)	
N1001 – 10000	54 (24.8%)	26 (23.2%)	
N10001 – 35000	3 (1.4%)	0 (0%)	
Time frame			GQ_C06e
Hourly	4 (1.8%)	5 (4.5%)	
Daily	84 (38.5%)	64 (57.1%)	
Weekly	90 (41.3%)	31 (27.7%)	
Monthly	33 (15.1%)	10 (8.9%)	

A high percentage reported that they spend their income on supporting family and using it for personal needs. It is noteworthy that a higher percentage of girls in the treatment population (28%) reported that they spend their income on replenishing stock than girls in the control group (15%), suggesting that they have some level of financial literacy. This is further corroborated by a higher percentage of girls in the treatment group (29%) reporting that they save their money, compared to 18% in the control group. See Table 65.

When asked about changes in their income, more girls in the treatment group (56%) reported an improvement in their incomes, compared to the control group (41%). Conversely, a higher percentage of girls in the control group (38%) reported no changes in their incomes, compared to 23% of girls in the treatment group.

Table 65: Income expenditure of OSG in business

Factor	Intervention (Baseline)	Control (Baseline)	Source
Income Expenditure			
Replenishing stock	62 (28.4%)	17 (15.2%)	GQ_C06g
Petty Trading	13 (6%)	2 (1.8%)	GQ_C06g
Cater for children	68 (31.2%)	43 (38.4%)	GQ_C06g
Support family income	127 (58.3%)	70 (62.5%)	GQ_C06g
I save it in the bank/savings_group/cooperative	63 (28.9%)	20 (17.9%)	GQ_C06g
Use it for personal needs	101 (46.3%)	60 (53.6%)	GQ_C06g
Pay debt or service loans	3 (1.4%)	1 (0.9%)	GQ_C06g
OSG Income change			
Has income changed in the last 12 months			GQ_C06f
Improved	122 (56%)	46 (41.1%)	
Stayed the same	50 (22.9%)	43 (38.4%)	
Gotten worse	44 (20.2%)	20 (17.9%)	

Overall, good and profitable opportunities available to girls were similar across the treatment and control groups. Both groups reported food retail, hairdressing and catering as good and profitable businesses. However, there were some differences. A higher percentage of girls in the intervention group reported

Coca-Cola sales as a lucrative business, while a higher percentage of girls in the treatment group reported makeup as a lucrative business. This is obvious because ENGINE I exposed beneficiaries to Coca-Cola sales.

The intervention and control groups reported similar barriers to starting a business. Both groups reported money, equipment, shop and skills as being the things needed to start a business in their communities. See Table 66 below.

Table 66: Access to economic opportunities

Factor	Intervention (Baseline)	Control (Baseline)	Source
Good and profitable opportunities			GQ_C10
Coca-Cola sales			
Catering	127 (27.4%)	67 (14.4%)	
Food Retail	126 (27.2%)	136 (29.2%)	
Hairdressing	180 (38.9%)	177 (38.1%)	
Makeup	134 (28.9%)	148 (31.8%)	
Shoe/bag making	58 (12.5%)	98 (21.1%)	
	49 (10.6%)	45 (9.7%)	
What is needed to start business?			GQ_C11
Money			
Skills	446 (96.3%)	431 (92.7%)	
Equipment	122 (26.3%)	132 (28.4%)	
Permission	267 (57.7%)	242 (52%)	
Shop	43 (9.3%)	40 (8.6%)	
	138 (29.8%)	140 (30.1%)	

5.3.5 Disaggregated Economic Empowerment Data

Table 67 below presents the number of OSGs who reported that they were actively involved in a business. Table presents the number of OSGs who reported an increase in their income. As listed in the logframe, the data has been disaggregated by state, age, disability and marginalization criteria. Data on religion was not collected at baseline. Therefore, we are not able to disaggregate by religion. The disability data presented in these tables is based on the proportion of girls that reported that they have a lot of difficulty performing the tasks.

Table 67 Girls' currently in business by key characteristics

	Treatment (Baseline)	Control (Baseline)
State		
FCT	53 (24.3%)	28 (25.0%)
Kaduna	86 (39.5%)	42 (37.5%)
Kano	57 (26.2%)	28 (25.0%)
Lagos	22 (10.1%)	14 (12.5%)
Age		
17 Years	20 (9.2%)	11 (9.8%)
18 Years	31 (14.2%)	19 (17.0%)
19 Years	38 (17.4%)	18 (16.1%)
20 Years	58 (26.6%)	21 (18.8%)
21 Years	25 (11.5%)	9 (8.0%)
22 Years	28 (12.8%)	13 (11.6%)
23 Years	18 (8.3%)	21 (18.8%)

	Treatment (Baseline)	Control (Baseline)
Disability		
Difficulty Seeing	3 (1.4%)	0 (0.0%)
Difficulty Hearing	0 (0.0%)	1 (0.9%)
Difficulty Walking	2 (0.9%)	2 (1.8%)
Difficulty Communicating	1 (0.5%)	1 (0.9%)
Difficulty Remembering Things	1 (0.5%)	1 (0.9%)
Difficulty with Self Care	0 (0.0%)	1 (0.9%)
Marginalization Criteria		
Married on or Before 18 years	105 (48.2%)	51 (45.5%)
Had a Child on or Before 18 years	81 (37.2%)	46 (41.1%)
Divorced	10 (4.6%)	13 (11.6%)
Widowed	6 (2.8%)	3 (2.7%)
Orphaned	71 (32.6%)	33 (29.5%)
Have Sick Parent/Guardian	49 (22.5%)	35 (31.3%)

Table 68: Girls that report improved income by key characteristics

	Treatment (Baseline)	Control (Baseline)
State		
FCT	32 (26.2%)	14 (30.4%)
Kaduna	49 (40.2%)	19 (41.3%)
Kano	30 (24.6%)	9 (19.6%)
Lagos	11 (9.0%)	4 (8.7%)
Age		
17 Years	12 (9.8%)	3 (6.5%)
18 Years	17 (13.9%)	9 (19.6%)
19 Years	23 (18.9%)	10 (21.7%)
20 Years	37 (30.3%)	7 (15.2%)
21 Years	12 (9.8%)	2 (4.4%)
22 Years	9 (7.4%)	8 (17.4%)
23 Years	12 (9.8%)	7 (15.2%)
Disability		
Difficulty Seeing	3 (2.5%)	0 (0.0%)
Difficulty Hearing	0 (0.0%)	1 (2.2%)
Difficulty Walking	0 (0.0%)	1 (2.2%)
Difficulty Communicating	1 (0.8%)	1 (2.2%)
Difficulty Remembering Things	1 (0.8%)	1 (2.2%)
Difficulty with Self Care	0 (0.0%)	0 (0.0%)
Marginalization Criteria		
Married on or Before 18 years	65 (53.3%)	20 (39.1%)
Had a Child on or Before 18 years	51 (41.8%)	18 (39.1%)
Divorced	6 (4.5%)	3 (6.5%)
Widowed	1 (0.8%)	2 (4.4%)
Orphaned	44 (36.1%)	12 (26.1%)
Have Sick Parent/Guardian	23 (18.9%)	15 (32.6%)

5.3.6 Household Questionnaire

The table below presents findings on knowledge of girls learning and/or business opportunities. It is evident that there are more girls in the intervention areas (65%) who were enrolled in a skill acquisition training be it paid or unpaid compare to their peers in the control areas (22%). This is consistent with the findings from the girls' questionnaire.

Table 69: Girls on vocational training as reported from the household

Household on girl's vocational training			
Factor	Intervention (Baseline)	Control (Baseline)	Source
Enrolled in vocational training	298 (64.5%)	102 (22.22%)	HH_D01
Nature of vocational training			HH_D03
Paid Employment	43 (14.43%)	14 (13.59%)	
Unpaid Employment	252 (84.56%)	88 (85.44%)	
Girl's Income Changed			HH_D04
Improved	35 (76.09%)	8 (57.14%)	
Stayed	9 (19.57%)	3 (21.43%)	
Gotten Worse	2 (4.35%)	3 (21.43%)	

Economic empowerment appears to be an impactful outcome from ENGINE I. This conclusion is drawn from residual evidence as several OSGs reported an increase in income, business diversification and expansion. This is reflected from the strong emotions displayed by the girls when this topic was introduced. It is important to note that these strong emotions were on both sides of the spectrum, while some girls were extremely positive and excited others were angry and dissatisfied. These feelings are captured below:

"it also help some of us that doesn't have money the opportunity to go and learn catering work, they also gave some of us coke and the materials that we use for selling them, some of us don't have the money to buy it."

- Participant, OSG FGD, Byazhin Community, FCT

"truly there is progress. Truly like me it covers my secret, because it's from there I get what to buy food for my children to take to school. if I wasn't doing this, I would not be getting, maybe I would be begging I don't know. This is the way that I know that it is covering my secret."

- Participant, OSG FGD, Kudenda Community, Kaduna State

"There is a sewing machine that has being kept for the past 10 years without being used, but ENGINE taught us how to do business so we can help ourselves, that is why I enrol into skill acquisition school, I learn how to make bags, shoes and interior decoration"

- Participant, OSG FGD, Dala LGA, Kano state.

"My question is about the money that they sent to some people, some people didn't get"

- Participant, OSG FGD, Kaduna

The strong sentiments emoted by the girls were also displayed by their caregivers, husbands and gatekeepers:

"Yes, I have seen changes. The mineral they gave her through this ENGINE programme she sold it the profit she made she saved it and added some from other outside job she's did she now use the money to buy fridge"

-Parent KII - OSG Lagos

"She learnt Liquid soap making, I think perfume, and some shoes and bags making because we have two ENGINE girls in this family although her sister has just been enrol into the program, she has learnt how to make shoes but Bilkisu makes liquid soap"

- Parent KII, Kumbotso Community, Kano state.

“Before she started ENGINE, she could not make hair, she could not make hair. But after she started her learning at ENGINE, she makes hair, fix hair, makes hair wigs, and several others. The aspect at which she’s learning, she’s really making good efforts that I noticed and even our co-tenants and neighbours can testify to it.”
 - KII parent, OSG Lagos

“what they haven’t done well, is to put more effort for others- like the coca cola business items brought, not everyone has them, so they should try to give more people.”
 - Husband KII, FCT

“I just want to say to them to please keep the promise... You know I told you earlier that I was the LSC for out of school girls, and they promised that they would empower them with something that they could do their business but until now nothing.”
 -Teacher KII,

5.3.7 Baseline Values for Economic Opportunities

The baseline value for percentage of OSGs reporting increase in income is 56%. This value was obtained from the girl questionnaire, based on the number of girls reporting increased income in the past 12 years (GQ_C06f). This high baseline value poses a risk for ceiling effects based on the current targets in the logframe. We strongly recommend that the target values are revised to prevent the ceiling effects. The midline target should be reduced to 10% above baseline from 30% above baseline. Likewise, the endline target should be reduced to 30% above baseline value.

The baseline value for percentage of OSGs who report access to alternative livelihood opportunities and skills is 29%. This value was measured using the household questionnaire where household members were asked if there is access to alternative livelihood opportunities in the community (HQ_D05). The target for midline is 30% above baseline, and endline is 50% above baseline.

These baseline values are mainly due to residual effects of ENGINE I. If these activities are sustained in ENGINE II, we expect a similar rapid increase in economic outlook of the girls. Therefore, our suggestions above hold.

Intermediate outcome 3: Percentage of marginalised girls who evidence increase in their financial situation and report access to economic opportunities			
Indicator	BL value	Is IO indicator fit for purpose? (Yes/No)	Additional comments: (If IO indicator is not fit for purpose, please outline your recommendation (e.g. remove it/add a different one etc.))
3.1 Percentage of OSGs reporting increase in income	56%	Yes	An improved income depicts that a girl can easily meet her needs, thereby transitioning out of the marginalisation status and less vulnerable to negative pressures.
3.2: Percentage of OOS girls who report access to alternative livelihood opportunities and skills	29%	Yes	This intermediate outcome is important to the sustainability of the programme. Access to other means of income can ensure that girls have more economic opportunities through which they can sustain their livelihood.

5.4 Life skills and Decision-making skills

A major intermediate outcome of the ENGINE programme is an improvement in life skills, defined as the ability to take significant decisions in life, have set goals in life and work towards it. Additionally, results from ENGINE I indicated that there was huge gap in knowledge of reproductive health (RH) education and skills amongst beneficiaries. Therefore, menstrual hygiene and management (MHM) is a major component

under the life skills curriculum, making improved knowledge and attitude around menstrual health hygiene and management an important intermediate outcome. This section reports data on life skills, self-esteem and MHM knowledge and attitude, with data reported in the girl questionnaire. We also report findings from the qualitative study.

5.4.1 Link to Outcomes

This intermediate outcome seeks to measure the percentage of girls who demonstrate increased knowledge on ENGINE II life skills curriculum. This includes the ability to make better decisions, and improved knowledge and attitude around menstrual health hygiene and management. The programme links this intermediate outcome to Outcome 1, learning, Outcome 2, transition, and Outcome 3, sustainability. The programme assumes that improved decision-making skills would allow girls make better decisions that would improve learning and transition outcomes. Additionally, improved life skills would ensure that the changes implemented in girls would be sustained beyond the project's lifespan. The rationale provided by the programme is logical, and the IO is appropriately worded.

5.4.2 Tools for Measurement

This intermediate outcome was measured using the girl questionnaire, which included the ladder of life test, as well as questions incorporated to assess menstrual health hygiene knowledge and attitude. Other tools in the logframe, include the pre and post-tests, which would be used by the program to measure this intermediate outcome.

5.4.3 Sampling

The same sampling protocol used for measuring outcomes for cohort girls, was used for measuring life skills. The questionnaire was administered to 10 randomly selected ISGs and OSGs who were enrolled into the study because the principals and LSCs identified them as ENGINE girls, and girls that were enrolled into the study because they met the enrolment criteria in control communities.

For the qualitative study, the sampling was conducted according to the criteria described in Section 2.5. Primarily, questions about life skills were asked to the girl, her parent or husband.

5.4.4 Decision-making Skills

The ability to make informed decisions by the girls are presented on Table 70. It is evident that girls are less involved to independently make major life decisions such as whether or not to go to school (26%). This is in contrast to making minor decisions such as how time is spent with friends (60%).

Table 70: Girls ability to make decisions

Factor	Intervention (Baseline)	Control (Baseline)	Source
<i>N</i>	923	923	
Whether or not will go to school			GQ_D21
I decide	237 (25.7%)	258 (27.9%)	
I decide jointly with family	305 (33.0%)	281 (30.4%)	
My family decides for me	381 (41.3%)	384 (41.6%)	
Continue in school pass this year			GQ_D22
I decide	246 (26.7%)	251 (27.2%)	
I decide jointly with family	276 (29.9%)	255 (27.6%)	
My family decides for me	401 (43.5%)	417 (45.2%)	
What age you will get married			GQ_D23
I decide	359 (38.9%)	340 (36.8%)	
I decide jointly with family	176 (19.1%)	153 (16.6%)	
My family decides for me	388 (42.0%)	430 (46.6%)	

Factor	Intervention (Baseline)	Control (Baseline)	Source
Work after finishing school			GQ_D24
I decide	404 (43.8%)	378 (40.9%)	
I decide jointly with family	218 (23.6%)	204 (22.1%)	
My family decides for me	301 (32.6%)	341 (36.9%)	
Type of work after school			GQ_D25
I decide	464 (50.3%)	451 (48.9%)	
I decide jointly with family	218 (23.6%)	191 (20.7%)	
My family decides for me	301 (32.6%)	281 (30.4%)	
How you spend free time			GQ_D26
I decide	572 (61.9%)	530 (57.4%)	
I decide jointly with family	145 (15.7%)	170 (18.4%)	
My family decides for me	206 (22.3%)	223 (24.2%)	
How often you spend time with friends			GQ_D27
I decide	557 (60.4%)	556 (60.2%)	
I decide jointly with family	144 (15.6%)	155 (16.8%)	
My family decides for me	222 (24.1%)	212 (22.9%)	
How you spend your money			GQ_D28
I decide	595 (64.5%)	582 (63.1%)	
I decide jointly with family	148 (16.0%)	140 (15.2%)	
My family decides for me	180 (19.5%)	201 (21.8%)	

5.4.5 Disaggregated Decision-Making Data

Tables below presents the disaggregated decision-making data for ISG and OSG. Girls who reported “I decided” for 7 or higher questions were classified as having good decision-making skills. Girls who reported “I decide” for 3 – 6 questions were classified as having some decision skills, while girls who reported below 3 questions were classified as having poor decision-making skills. This table presents the proportion of girls who reported good decision-making skills. The data is disaggregated by state, age, disability and marginalization criteria. Data on religion was not collected at baseline. Therefore, we are not able to disaggregate by religion. The disability data presented in these tables is based on the proportion of girls that reported that they have a lot of difficulty performing the tasks

Table 71: ISG Decision making skills by key characteristics

	Treatment (Baseline)	Control (Baseline)
State		
FCT	38 (54.3%)	31 (44.3%)
Kaduna	30 (42.9%)	30 (42.9%)
Kano	2 (2.86%)	9 (12.9%)
Current Class		
JSS 3	12 (17.1%)	16 (22.9%)
SS 1	16 (22.9%)	20 (28.6%)
SS 2	42 (60%)	34 (48.6%)
Age		
17 Years	38 (54.3%)	38 (54.3%)
18 Years	23 (32.9%)	20 (28.6%)
19 Years	4 (5.7%)	7 (10.0%)
20 Years	4 (5.7%)	2 (2.9%)
21 Years	0(0.0%)	0 (0.0%)
22 Years	0 (0.0%)	3 (4.3%)
23 Years	1 (1.4%)	0 (0.0%)

	Treatment (Baseline)	Control (Baseline)
Disability		
Difficulty Seeing	0 (0.0%)	0 (0.0%)
Difficulty Hearing	0 (0.0%)	0 (0.0%)
Difficulty Walking	0 (0.0%)	2 (2.9%)
Difficulty Communicating	4 (5.7%)	0 (0.0%)
Difficulty Remembering Things	1 (1.4%)	4 (5.7%)
Difficulty with Self Care	0 (0%)	0 (0.0%)
Marginalization Criteria		
Married on or Before 18 years	0 (0.0%)	3 (4.3%)
Had a Child on or Before 18 years	1 (1.4%)	3 (4.3%)
Divorced	0 (0.0%)	0 (0%)
Widowed	0 (0.0%)	0 (0.0%)
Orphaned	22 (31.4%)	32 (45.7%)
Have Sick Parent/Guardian	17 (24.3%)	15 (21.4%)

Table 72: ISG Decision making skills by key characteristics

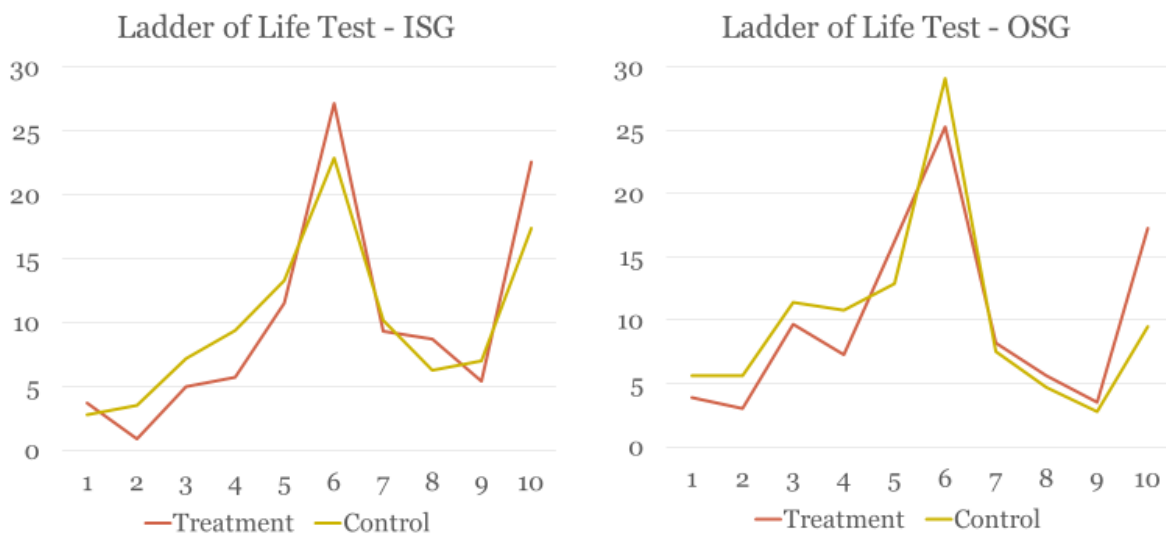
	Treatment (Baseline)	Control (Baseline)
State		
FCT	40 (36.7%)	20 (20.6%)
Kaduna	20 (18.4%)	25 (25.8%)
Kano	4 (3.7%)	9 (9.3%)
Lagos	45 (41.3%)	43 (44.3%)
Age		
17 Years	11 (10.1%)	19 (19.6%)
18 Years	15 (13.8%)	16 (16.5%)
19 Years	22 (20.2%)	10 (10.31%)
20 Years	22 (20.2%)	18 (18.6%)
21 Years	15 (13.8%)	13 (13.4%)
22 Years	12 (11.0%)	9 (9.3%)
23 Years	12 (11.0%)	12 (12.4%)
Disability		
Difficulty Seeing	3 (2.8%)	2 (2.1%)
Difficulty Hearing	1 (0.9%)	1 (1.0%)
Difficulty Walking	2 (1.8%)	1 (1.0%)
Difficulty Communicating	1 (0.9%)	1 (1.0%)
Difficulty Remembering Things	1 (0.9%)	0 (0.0%)
Difficulty with Self Care	0 (0.0%)	0 (0.0%)
Marginalization Criteria		
Married on or Before 18 years	34 (31.2%)	25 (25.8%)
Had a Child on or Before 18 years	37 (33.9%)	39 (40.2%)
Divorced	3 (2.8%)	6 (6.2%)
Widowed	4 (3.7%)	3 (3.1%)
Orphaned	38 (34.9%)	39 (40.2%)
Have Sick Parent/Guardian	24 (22.0%)	38 (28.9%)

5.4.6 Self Esteem

Self-esteem was measured using the Cantril Ladder of Life scale (Cantril 1966). On a ladder of 0-10, with the top of the ladder (10) representing the best possible life, and the bottom of the ladder (0) representing the worst possible life, girls were asked to select the step on the ladder that they felt represented their current life.

In both the ISG and OSG population, a high proportion of girls reported that they felt they were at step 6 in their current lives. In the treatment population, 27.2% and 25.3% of girls in the ISG and OSG intervention groups respectively reported that they were on step 6. Similarly, in the control groups, 22.9% and 29.1% in the ISG and OSG populations reported that they were on step 6. Interestingly, 22.6% of girls in the treatment cohort reported that they felt that they were at step 10 i.e. living their best possible lives, compared to 17.4% in the control cohort. This difference was consistent in the OSG population, where 17.5% of girls in the treatment population reported that they were at step 10, compared to 9.5% in the control population. It is also noteworthy that there are differences between ISG and OSG, as a higher proportion of ISG reported that they were at step 6 or 10, when compared to the OSG.

Figure 4: Ladder of life test (Self-Esteem) by ISG and OSG



In addition to economic empowerment, the qualitative study suggests the presence of life skills in the girls. Most of the participants reported increased assertiveness and decreased aggressiveness. However, when asked what they would do if they realised they have been cheated or taken advantage of, there seems to be more traits of aggressiveness among the OSGs. Some lines below from the discussions reiterates this.

“I will slap her back.....I won’t stand back and just look at you”
 - Participant, OSG FGD, Kudenda, Kaduna

“I will react badly back either I slap the person or I find something like wood to hit the person. It depends on my mood”
 - Participant, OSG FGD, Ojo, Lagos

“If he didn’t apologise, I will just curse him”
 - Participant, OSG FGD, Kumbotso, Kano

“I will leave him because maybe that is his way, but if he continues to pick me out to make trouble, then I would react by giving him space, then talking to people around us to understand my situation and deal with him”

- Participant, ISG FGD, Rimin Doko, Kaduna

“.....If I am being cheated, I will just walk away and say if you cheat me, another person would cheat you”

- Participant, ISG FGD, Nyanya, FCT

The ability to know oneself is an important skill required to navigate through life. In addition to this, one's ability to manage inter-personal relationships and negotiate through difficult paths in life is essential. This capability does not develop unaided but must be learnt. While certain life skills may be acquired through every day experiences, they are not sufficient to adequately equip girls for active roles required of them in a complex society. Evidence observed among the beneficiaries of the previous round of ENGINE was the acquisition of some of these vital skills.

“before I was very shy to stand up and answer questions in class was a problem but now, am really brave and bold.”

- Participant, Female OSG FGD, Lagos

“You see before ENGINE came when people are talking about self-reliance you have no confidence to talk at all. But ENGINE came and taught us how to talk to people, taught us to be independent. Now we have more confidence to interact with people without being afraid like before.”

- Participant, Female ISG FGD, Kaduna

A good number of guardians and parents also reported obvious life skills in girls evident by better communication and predisposition to situations. Below are a few quotes;

“From the beginning she doesn't know how to approach people, but during this business or whatsoever I see she is changing her life. Even with me at home, she used to amend the talk, because she used to talk harsh or something like that but now she is coming down”

-Husband KII, Kaduna

“she talks in way that draws attention of people that would buy things at her place. If a customer comes, she talks in way that the person will feel happy, that even if he buys, he will come back again.”

-Parent KII, Kaduna

5.4.7 Menstrual Hygiene and Management

MHM knowledge and attitude was assessed using questions incorporated into the girl questionnaire. The aim of these questions was to understand the knowledge, practices and perceptions of the girls regarding menstrual hygiene and management. The following tables summarise our findings on MHM knowledge and attitude.

5.4.7.1 Menstrual health knowledge

Majority of ISGs reported that they learned about menstruation before they started menstruating at 68% in the treatment cohort and 66% in the control cohort. About 40% of girls reported that their mothers were their most important source for information about menstruation, followed by schoolteachers or LSCs at about 20%. Similar to the ISGs, about 50% of girls reported that reported that their mothers were their most important source for information about menstruation, followed by schoolteachers or LSCs at about 18%. These numbers were consistent across the treatment and comparison populations.

When asked about the knowledge of alternative words to describe menstruation, ISGs displayed more-in-depth knowledge, when compared to OSGs.

Table 73: Knowledge of girls on menstrual health hygiene and management

Factor	Intervention (Baseline)	Control (Baseline)	Source
ISG menstrual health knowledge			
First time learned about menstruation			GQ_E03
Before	313 (68%)	305 (66.4%)	
After	146 (31.7%)	150 (32.7%)	
MOST important source of information about menstruation			GQ_E05
Mother	204 (44.4%)	182 (39.7%)	
Teacher/LSC	105 (22.8%)	79 (17.2%)	
Other words to describe menstruation			GQ_E08
Period	271 (58.9%)	282 (61.4%)	
Time of the month	241 (52.1%)	273 (58.8%)	
Menses	5 (1.1%)	6 (1.3%)	
Mother Nature's gift	13 (2.8%)	10 (2.2%)	
Monthly visitor	189 (41.1%)	163 (35.5%)	
Out-of-school menstrual health knowledge			
First time learned about menstruation			GQ_E03
Before	307 (66.3%)	306 (65.9%)	
After	155 (33.5%)	157 (33.8%)	
MOST important source of information about menstruation			GQ_E05
Mother	236 (50.9%)	218 (46.9%)	
Teacher/LSC	76 (16.4%)	80 (17.2%)	
Other words to describe menstruation			GQ_E08
Period	70 (15.2%)	64 (13.9%)	
Time of the month	70 (15.1%)	(15.9%)	
Menses	131 (28.5%)	130 (28.3%)	
Mother Nature's gift	147 (31.7%)	118 (25.4%)	
Monthly visitor	1 (0.2%)	0 (0%)	

Several iterations from the discussions with target girls indicate that majority have developed the right attitude towards menstrual health hygiene and management. This supports the findings from the girls' questionnaire indicating that more girls reported desirable hygienic menstrual practices. During the discussion, there was a unanimous feedback from participating girls who expressed more on their state of being during their cycle.

When asked what comes to their minds when they hear the word menstruation, different responses were given, among which are;

"I will not always happy when I hear the word because I use to have difficult time during this period, I will just be angry without anybody offending me."

- Participant, Female FGD– OSG Kano

"When I am on my menstruation, my body will not be okay by me. I think about it as if everybody knows that I am seeing my menstrual cycle"

- Participant, Female FGD, ISG, Kumbotso, Kano

"Me personally, when it wants to come like two weeks, it will start paining me already. I will feel like I want be a boy."

- Participant, FGD - ISG, Nyanya

“and when you start you will be lazy and caution for you not to get stained, so that some people will not see blood. You keep checking your body not to get stained.”
 - Participant, Female FGD– OSG Kano

During the discussions, we explored if girls have seen any changes in their menstrual hygiene since the ENGINE programme started. Consistently across board, it can be deduced that the girls’ attitude and disposition to menstrual hygiene have improved. To these changes, they attributed their learning to schoolteachers while some stated that they were taught by their mothers at home.

Some of the responses are captured in the quotes below:

“yes! There are changes, we were not all that matured about it, and we go out of the way to do things. But now we look after ourselves hygienically and we use the pad not to get stained.”
 - Participant, OSG FGD, Kumbotso, Kano

“before I was using piece of clothes but now I use ‘ALWAYS’ so you see there is changes.”
 - Participant, OSG FGD, Kano.

“before when we were on our menses we don’t use to take our bath but now we take our bath regularly.”
 - Participant, OSG FGD, Kumbotso, Kano

“yes! My mother told me that if a man touches me when am menstruating I will get pregnant but in school my home economics teacher taught me how to take care of myself and make myself clean”
 - Participant, OSG FGD, Shomolu/Bariga Lagos

5.4.8 Baseline Values

The baseline value for percentage of girls reporting improved decision-making capabilities for life choices is 56%. This value was calculated by recoding and regrouping questions D21 – D28 in the girl questionnaire. The options “I decide for myself, and I decide jointly with my family” were regrouped into one group, and the other option into another group. The row total was summed up out of 8. A threshold score of 6 was set for good decision-making skills. Therefore, girls who reported positively on 6 or above questions were considered to have good decision-making skills, while girls who reported positively on 5 or below questions were considered to have bad decision-making skills. The target listed in the logframe is 30% by midline and 50% by endline. However, baseline values are already high and suggest the possibility of ceiling effects. The targets should be revised to 65% at midline and 80% at endline to avoid ceiling effects.

In terms of percentage of girls reporting improved knowledge around menstrual health hygiene and management (MHM), the baseline value is approximately 4%. This was calculated using question E07 in the girl questionnaire, by measuring the proportion of girls that reported at least 2 out of 4 options (1, 2, 3 or 9). The target stated in the logframe is 30% by midline, and 50% by endline.

The baseline value for percentage of girls reporting improved attitude towards menstrual health hygiene and management is 51%. This was calculated using question E07 in the girl questionnaire, by measuring the proportion of girls that reported at least 3 out of 5 options (4, 5, 6, 7 or 8). The target stated in the logframe is 20% by midline, and 40% by endline. There are obvious ceiling effects. Therefore, we suggest that the midline target be changed to 60%, and endline target to 80%.

Intermediate outcome 4: Life Skills - Percentage of girls who demonstrate increased knowledge on ENGINE II life skills curriculum			
Indicator	BL value	Is IO indicator fit for purpose?	Additional comments

		(Yes/No)	(If IO indicator is not fit for purpose, please outline your recommendation (e.g. remove it/add a different one etc.))
4.1 Percentage of girls reporting improved decision-making capabilities for life choices	56.2%	Yes	Although this is interesting to assess at subsequent evaluation points, but the target at midline and endline will be too high given the baseline value and should be revised.
4.2: Percentage of girls reporting improved knowledge around menstrual health hygiene and management (MHM)	4.4%	Yes	Knowledge on MHM is poor and therefore needs to be improved. It is interesting to know that girls practice what they are not rightly informed about, hence, the programme team has a gap to fill.
4.3: Percentage of girls reporting improved attitude towards menstrual health hygiene and management	50.8%	Yes	As earlier stated, most girls reported to practice good MHM thus resulting into an unrealistic target by midline and endline. It is recommended that this is revised to a value more measurable at subsequent evaluation points.

5.5 School governance and management – SBMC

For ENGINE II to sustain its outcomes, it is necessary to obtain a continuous support and uptake of programme activities by the schools' governance structure. To measure this outcome, we collected data from several sources including the girl questionnaire, household questionnaire, school survey, SBMC questionnaire, and during the qualitative study conducted across different group.

5.5.1 Link to Outcomes

This intermediate outcome seeks to measure SBMCs and PTAs that take actions to make school an enabling and supportive environment for both girls and boys. This includes taking actions to make the school an enabling environment and demonstrating improved awareness of key barriers faced by marginalized girls and boys. The programme links this intermediate outcome to Outcome 3, sustainability. The programme assumes that by creating a supportive environment, sustainability of the program's activities can be ensured. A supportive environment is defined by activities such as providing child care so girls can attend school/trainings, following up with households where girls are not attending school, improving school sanitation and safety systems for girls, putting a code of conduct in practice, taking action taken against harassing and bullying. Moreover, it assumes that improving the school governance's awareness of barriers would ensure that it takes steps to address them beyond the programs lifespan. The rationale provided by the programme is logical, and the IO is appropriately worded.

5.5.2 Tools for Measurement

This intermediate outcome was measured using the school survey, girl questionnaire and SBMC questionnaire. Other tools in the logframe, include the pre and post-tests, which would be used by the program to measure this intermediate outcome.

5.5.3 Sampling

The same sampling protocol used for measuring outcomes for cohort girls, was used for measuring school governance. The girl questionnaire was administered to 10 randomly selected ISGs and OSGs who were enrolled into the study because the principals and LSCs identified them as ENGINE girls, and girls that were enrolled into the study because they met the enrolment criteria in control communities.

The school survey was administered to the principal or vice principal of ENGINE treatment schools or control schools. The SBMC questionnaire was administered to the school governance structures: SBMC or

PTA. Where available, the questionnaire was also administered to CBMC or CAC members in the communities.

For the qualitative study, the sampling was conducted according to the criteria described in Section 2.5. Primarily, questions about school governance were asked to SBMC/PTA members.

5.5.4 School Survey

In this section, we present the data obtained from the school survey. The school principal or vice principal was asked about the presence of functional governance structures, based on meetings held in the current school year (2017/18).

Overall, a high percentage of schools in the treatment (84%) and control (77%) populations presented evidence to prove that they had active school governance structures that had conducted meetings in the current school year (September 2017 – March 2018). It is noteworthy that about 10% of schools had governance structures that had not met since before 2017. It is important to note that SBMC in schools are independent of the programme as presented from our findings.

Table 74: Presence of school governance structure

	Intervention (Baseline)	Control (Baseline)	Source
Before 2017	4 (9.1%)	4 (8.9%)	SS_B02
Jan – Mar 2017	1 (2.3%)	2 (4.4%)	SS_B02
Apr – Jun 2017	0 (0%)	3 (6.7%)	SS_B02
Jul – Sept 2017	2 (4.5%)	1 (2.2%)	SS_B02
Oct – Dec 2017	11 (25%)	11 (24.4%)	SS_B02
Jan – Mar 2018	26 (59.1%)	24 (53.3%)	SS_B02

Results from the school survey suggest that the SBMC is most actively involved in developing facilities and infrastructure, with 92% of principals and 84% of principals reporting that the SBMC/PTA carries out these activities. A higher percentage of principals in the treatment population (61%) reported that their SBMC/PTA are actively involved in addressing gender issues such as bullying and sexual harassment compared to the control population at 44%. This could be an indication of a knock-on effect of the programme during its first round of implementation.

Interestingly, a higher percentage of principals in the control group (75%) reported that their SBMC/PTA was involved in improving attendance compared to the treatment group (54%). About 36% of principals in the intervention schools reported that their SBMC/PTA are involved in advocacy for teacher recruitment compared to the control group at 42%.

Table 75: SBMC/PTA activities

	Intervention (Baseline)	Control (Baseline)	Source
Enrolment	18 (40.9%)	18 (40%)	SS_B03
Attendance	24 (54.5%)	34 (75.6%)	SS_B03
Gender Issues	27 (61.4%)	20 (44.4%)	SS_B03
Facilities and Infrastructure	40 (91.9%)	38 (84.4%)	SS_B03
SAME Advocacy	13 (29.5%)	12 (26.7%)	SS_B03
Advocacy for teacher recruitment	16 (36.4%)	19 (42.2%)	SS_B03
Give teachers stipend	21 (47.7%)	17 (37.8%)	SS_B03

5.5.5 Knowledge of girls on the activities of SBMC/PTA

The girl questionnaire was designed to probe the girls on their knowledge of the governance systems in their schools. About 93% of girls in the intervention group reported that their school had a governance system. Overall, results from the girl questionnaire suggest that governance systems in treatment schools are more active than control schools. A higher proportion of girls in the treatment school reported that their SBMC/PTA was actively involved in improving enrolment, attendance, teaching quality, gender issues, and facilities and infrastructure.

Table 76: Knowledge of girls on SBMC/PTA Activities

	Intervention (Baseline)	Control (Baseline)	Source
Presence of school governance structure			
Has school governance system	428 (93%)	410 (89.5%)	GQ_B17
Does not have school governance system	32 (7%)	48 (10.8%)	GQ_B17
SBMC/PTA activities			
Enrolment	203 (47.4%)	150 (36.6%)	GQ_B18
Attendance	262 (61.2%)	214 (52.2%)	GQ_B18
Gender Issues	170 (39.7%)	115 (28.0)	GQ_B18
Facilities and Infrastructure	273 (63.8%)	246 (60%)	GQ_B18

5.5.6 SBMC Questionnaire

SBMC members were asked about any activities they had conducted in the past year to make the school more conducive for learning whilst improving school and teaching quality. Seventy-seven percent of SBMC/PTA in intervention schools reported discussing with the parents and guardians of learners to allow their wards to come to school. This was particularly higher within the control schools and agrees with data from the school survey. The research protocol also included the sighting of documents such as minutes of meetings held by the SBMC, photograph of activities, attendance registers for activities performed by the committees in the schools. About 53% of the committees were able to present one form of evidence at the intervention schools compared to 41% in the control schools.

To promote conducive learning environment, predominant activities carried out by the SBMC/PTA was in renovating existing school infrastructure, with a higher proportion in the intervention schools (52%) than in the control schools. A higher proportion of control schools (48%) reported to be doing more activities around improving security than intervention schools (31%).

Table 77: SBMC/PTA activities to facilitate conducive learning environment in-school

	Intervention (Baseline)	Control (Baseline)	Source
Attendance			
Discuss with parents/guardians to allow students to come to school	26 (76.5%)	31 (91.2%)	SBMC_C01a
Provide financial support to students	3 (8.8%)	5 (14.7%)	SBMC_C01a
Provide textbooks, exercise books and stationery free of charge	3 (8.8%)	8 (23.5%)	SBMC_C01a
Provide uniforms free of charge	0 (0%)	4 (11.8%)	SBMC_C01a
Provide free food in school	0 (0%)	0 (0%)	SBMC_C01a
Speak directly with girls to encourage them to come to school	13 (38.2%)	5 (14.7%)	SBMC_C01a
Provide girl-friendly environment such as toilets, hand-washing, drinking water, etc.	8 (23.5%)	5 (14.7%)	SBMC_C01a
Provide counselling unit that girls can go to when they have problems	6 (17.6%)	6 (17.6%)	SBMC_C01a
Evidence available	18 (52.9%)	14 (41.2%)	SBMC_C01b
Conducive learning environment			
Provide day care for girls with children	0 (0%)	0 (0%)	SBMC_C03a
Renovated existing infrastructure	15 (51.7%)	12 (44.4%)	SBMC_C03a
Built new infrastructure	10 (34.5%)	4 (14.8%)	SBMC_C03a
Improving school security	9 (31%)	13 (48.1%)	SBMC_C03a
Provide portable drinking water	5 (17.2%)	8 (29.6%)	SBMC_C03a
Take measures against external security threats	4 (13.8%)	6 (22.2%)	SBMC_C03a
Address issues of violence in school	6 (20.7%)	6 (22.2%)	SBMC_C03a
Female teachers' enrolment	2 (6.9%)	4 (14.8%)	SBMC_C03a
Increase or create girls-only toilets	4 (13.8%)	3 (11.1%)	SBMC_C03a
Establish/strengthen girl-counselling unit	4 (13.8%)	3 (11.1%)	SBMC_C03a
Evidence available	15 (51.7%)	14 (51.9%)	SBMC_C03b

5.5.7 Disaggregated SBMC Activities

The proportion of SBMC reporting that they have undertaken activities to improve school environment is disaggregated in the table below. The data is disaggregated by state, committee type and type of respondent.

Table 78: SBMC activities by key characteristics

	Treatment (Baseline)	Control (Baseline)
State		
FCT	8 (27.6%)	10 (37.0%)
Kaduna	9 (31.0%)	11 (40.7%)
Kano	12 (41.4%)	6 (22.2%)
Committee type		
SBMC	14 (48.3%)	9 (33.3%)
PTA	15 (51.7%)	18 (66.7%)
Main Respondent		
Chair	11 (37.9%)	11 (40.7%)
Vice-Chair	1 (3.5%)	0 (0.0%)
Secretary	14 (48.3%)	2 (7.4%)

For the out-of-school population, the governance structures put in place from ENGINE I are the Community Action Committee also referred to as Community-Based Management Committee in some other places. It was observed that in most communities (control communities inclusive), these structures were not known thus resulting in a small sample size. CAC/CBMC members were asked about any activities they had conducted in the past year in order to make the learning centre/community a more conducive environment and improve school quality.

Table 79: CBMC activities to facilitate conducive environment for OSG

	Intervention (Baseline)	Source
Attendance		
Discuss with parents/guardians to allow girls to come to learning centre	7 (70%)	SBMC_D01a
Community sensitisation by going door to door	3 (30%)	SBMC_D01a
Community sensitisation at large community events	2 (20%)	SBMC_D01a
Enrolment drives	4 (40%)	SBMC_D01a
Organised meetings with community members	2 (20%)	SBMC_D01a
Organised meetings with religious and traditional leaders	2 (20%)	SBMC_D01a
Speak directly with girls to encourage them to come to learning center	3 (30%)	SBMC_D01a
Provide textbooks, exercise books and stationery free of charge	1 (10%)	SBMC_D01a
Provide girl-friendly environment	0 (0%)	SBMC_D01a
Provide counselling unit that girls can go to when they have problems	2 (20%)	SBMC_D01a
Evidence available	3 (30%)	SBMC_D01b
Learning Outcomes		
Monitored girls' attendance	5 (62.5%)	SBMC_D02a
Monitored teacher attendance	2 (25%)	SBMC_D02a
Spoke to girls' parents/guardians about performance	4 (50%)	SBMC_D02a
Spoke to girl about her performance	7 (87.5%)	SBMC_D02a
Reviewed tests scores	0 (0%)	SBMC_D02a
Observed classes	1 (12.5%)	SBMC_D02a
Evidence available	2 (25%)	SBMC_D02b
Conducive learning environment		
Provide day care for girls with children	1 (14.3%)	SBMC_D03a
Renovated existing infrastructure	3 (42.9%)	SBMC_D03a
Improving school security	2 (28.6%)	SBMC_D03a
Take measures against external security threats	1 (14.3%)	SBMC_D03a
Provide girl-friendly environment	2 (28.6%)	SBMC_D03a
Provide counselling unit	3 (42.9%)	SBMC_D03a
Evidence available	3 (42.9%)	SBMC_D03b

Comprehensive discussions with the SBMCs and PTAs around governance issues within the school as well as in the community points to the fact that most of the schools have put measures in place to contribute towards school development whilst tackling barriers faced by students. Even though most of the measures were not programme driven, information provided gives an insight into models and/or existing structures that the programme can leverage on. Therefore, it can be safe to say that the sustainability of the programme to some extent relies on community-level structures such as this. A few direct quotes from the participants are quoted below:

“Now in this holiday, if you’ll come tomorrow you’ll meet us here, we will be training the students for junior class 3 because of their placement examination. Then the SS 2 for qualify then the senior

secondary school SS 3 for their final exams we will be starting from 9am to 12 pm. Each subject every teacher will have 1 hour with them... Yes, it is SMBC that initiated it.”

- Participant, SBMC FGD, Kano

I have a suggestion and is a social one, if is going to be possible, if engine can collaborate with PTAs of these schools here today or more schools to have a kind of awareness campaign even if it is going to be a road show or something serious in a kind of campaign either a television programme, drama or something that can make parents/guidance be enlightened for us to move forward. It either a girl education or anything but education is education.

- Participant SBMC FGD, Abuja

“there is the issue of insecurity; with the help of SBMC and those that care for the children make sure they did something. They are the ones who take the children to their homes, because of the issue of the insecurity. They don’t want anything to make them be afraid, for them not to attend school. So, they’re being secured, and we will get what we want that will make them to attend school.”

- Participant, SBMC FGD, Kano

5.5.8 Baseline Values

The baseline value for the Percentage of School Based Management Committees- SBMCs/PTAs that take actions to make school an enabling environment is 13%. This was calculated using question C03a in the SBMC questionnaire, by measuring the proportion of SBMC/PTA that reported at least 3 out of 10 options. The target stated in the logframe is 30% above baseline by midline, and 70% above baseline by endline.

Also, the level of awareness of the SBMC/PTA members on the key barriers that marginalised girls are faced with was at 0%. As designed by the programme, improved awareness will be achieved through specialised trainings organised for the committee members and this was yet to commence as at the time of the baseline study and therefore at the ground level. This is also the case on the proportion of girls and women with increased awareness on protection and gender issues. The target set on the logframe for improved awareness among SBMC/PTA members is 30% above baseline and 50% cumulative by endline. For increased awareness among girls and young women, the target is set at 40% and 60% cumulative at midline and endline respectively.

Intermediate outcome 5: SBMCs and PTAs take actions to make school an enabling and supportive environment for girls			
Indicator	BL value	Is IO indicator fit for purpose? (Yes/No)	Additional Comments (If IO indicator is not fit for purpose, please outline your recommendation (e.g. remove it/add a different one etc.))
5.1: Percentage of School Based Management Committees- SBMCs/PTAs that take actions to make school an enabling environment	13.3%	Yes	This is important to quantify the different activities and the dimension in which they are being carried out by the SBMC/PTA members at the school to ensure it is conducive for learning.
5.2: Number of SBMCs/gatekeepers reporting improved awareness on key barriers faced by marginalised girls	0.0%	Yes	This will inform on the progress made in terms of awareness among SBMC/gatekeepers on key barriers that girls face in school and within their community.
5.3: Percentage of girls and young women demonstrating increased awareness on protection and gender issues	0.0%	Yes	This is also important and complementary to the activities of the SBMC/PTA in schools. It reports on the level of buy-in of beneficiary households to make protect girls and address gender discrimination issues.

6 Conclusion & Recommendations

In conclusion, the ENGINE II baseline survey unearthed findings that may prove useful in the implementation of the ENGINE programme, as well as assist in refining the programme's future action. The sections below sum up the core findings and our recommendations for improving programme activities and achieving intended results

6.1 Conclusions

Beneficiary Characteristics and Barriers

There was no statistically significant difference between the age groups of the in-school and out-of-school population that were included in the evaluation sample. The proportion of girls with disability was 5% and 3% among ISG and OSG respectively. The likelihood of the sampled households who are living below the poverty line is 53.4%. This is evident in the number of households that reported that lack of funds was the main reason for girls who were out of school. About one-third of the intervention girls were orphaned and approximately 1 out of every 5 girls lives with a sick household member. Safety to and from school as well as within the schools was observed to be a challenge particularly when such girls have to travel 30 minutes or longer to get to school.

Consequently, the ENGINE programme may want to apply interventions that will specifically seek to address this broad multifaceted issue holistically to have an impactful intervention. This would not affect the theory of change rather it is expected to help the programme target its activities specifically to each girl's needs and desist from using the "one size fits all" approach.

Learning Outcome

The performance of the in-school girls in literacy and numeracy was quite poor with a mean score of approximately 16 and 6 respectively. Among the out of school, the mean score for literacy and numeracy was higher at 34 and 60. Further analysis by subtasks clearly presents the subject areas that the girls found difficult to answer. From the results, most of in-school girls did not attempt the numeracy assessment subtasks 2 (34%) and 3 (52%), while 26% of the OSG was unable to attempt the subtask 3 of the literacy. This level of analysis can inform the programme on how effectively their intended activities can be planned to meet the needs of the learners.

Disability was evidently a barrier to those who were impaired based on the Washington group of questions on child function that was administered to target girls. Other notable barriers include orphanhood, long-distance travel to and from school, safety issues within and outside (way to and from) the school, uneducated primary caregiver and poor status of the household.

The rate of proficiency by grade was also poor both for the in-school and out-of-school population. None of the OSG was proficient in the grade one literacy task, less than 20% could read fluently as expected of an established grade 2 learner and when assessed on comprehension of short paragraph, less than 1 out of 10 girls was found proficient. The OSG appeared to be more grounded in numeracy subtask 1 with a proficiency level of almost 60% but were deficient in terms of identifying missing numbers and basic arithmetic that is expected to be known by a grade 2 and 3 learner respectively.

With about 23% being established in comprehension and providing answers to analytical inferential question, literacy among in-school girls is very low. A much lower proportion (<15%) was observed when they were tasked on essay writing. This level of performance as at baseline indicates that the programme

will need a strategic plan of engagement with the target girls in order to improve their learning outcomes above and beyond their counterparts in the control areas.

Transition Outcome

The result of the benchmark sample when compared with the evaluation sample depicted similar pathways thus validating their comparability.

Transition rate was quite high (>95%) among the in-school girls and this could be attributed to the “no child left behind” policy that is being practiced in the Nigerian education system today. This almost guarantees that a child moves from one grade to the next even without achieving a pass mark and thus creates a bias to the transition pathway of this target group. It is important for the programme consider providing a standard definition for transition especially among the in-school group.

Among the out-of-school group, the transition pathways were more flexible as the different economic and educational opportunities available to this group were explored. As at baseline, none of the OSG was found to have re-enrolled back into formal education. Almost 50% were actively involved in one form of business or the other, while more than 1 out of every 10 girls reported to have expanded or diversified on the business they were involved in. It is however not impressive to observe more than half of the girls not being engaged in any form of business thus making them susceptible to societal pressure and negative vices which could counter the ENGINE intervention is not carefully managed.

As was observed under learning outcomes, transition among in-school girls is adversely impacted by poverty and living with a sick household member. Being married, having a child before 18 years and/or being a part of a poor household, mostly affected the transition rate of the out-of-school girls.

Sustainability Outcome

From our findings, the SBMC/PTA leadership have demonstrated great sense of ownership and responsibility in the management of the school system, mainly on social facilities and infrastructural development. However, they were found to be lacking on issues around gender issues and child protection; it may not be sufficient to train them on these and expect them to perform brilliantly afterwards, rather it is important to help them to identify and prioritize these issues with a view of addressing them within their communal governance structures.

As findings from this survey shows that community stakeholders like the gatekeepers, influencers and the likes have considerable influence on the girls in their community as well as the girls’ guardians, parents or family members, it is important that the programme leverage on these existing structures for uptake and sustainability. Obtaining their buy in might uphold their sense of ownership in the programme as they will want to see it succeed in their communities.

There is yet to be an active form of engagement with the government except with a few actors. Likewise, there was no evidence of the replication of the ENGINE programme in other schools or communities as at the time of these baseline.

Intermediate Outcome

Attendance

Although attendance as reported by the girls and their household caregivers was impressive with over 90% of the girls being in school for more than half of the time under study. However, the barriers to attendance in schools and in learning spaces if not tackled early and appropriately, could hinder the anticipated success of the programme. Several contextual factors such as support from the household,

teacher's reception of learners in class, school fights, rape and other nefarious activities were some of the issues raised as a challenge to attendance in school. The programme should seek ways that will address the factors affecting attendance thereby contributing to improved learning outcomes.

Teaching Quality

Even though when interviewed, the teachers felt that they were performing within the best of their capacity, the analysis of the interview using PALS tool indicated otherwise, thus suggesting the poor quality of teaching that is being served to the learners. It is important that teachers are competent enough to be able to identify each girl's learning capacity, then tailor learning needs to suit this reality. It is expected that with this teaching style, learners will go a long way to become proficient in their overall learning outcomes.

Economic Empowerment

From the results, the residual impact of the ENGINE I programme could be seen in the business performance of those that were still active. More than half of the target beneficiaries has said their income improved in the last 12 months to the baseline survey. This is evident in high earning power observable among the intervention girls, an indication of the impact of ENGINE I and the potential of what ENGINE II can afford the girls.

However, it is important that the profit made from the girls' business is utilised in a most productive manner that could sustain her through life. Most of the girls in business had reported that they used the proceeds from their business to sustain the rest of their family (58%) or meet personal needs (46%). This is obviously not a credible practice that could sustain the business. Only a few said they replenish their stock (28%) or keep a savings (29%) out of the business profits.

Life skills, including Menstrual Health and Hygiene

Strategically taking advantage of the life skills demonstrated by the girls and sustaining them should be one of the focus of the programme. As indicated by the findings from the qualitative and quantitative surveys, stakeholders mentioned the girls displaying some evidence of life skills knowledge and the programme should seek to sustain this. However, decision making remains quite sensitive, especially due to the culture in programme states.

In addition, there is evidence that girls are displaying better attitudes to menstrual health and hygiene, but the general knowledge of the menstrual cycle is relatively low and could predispose girls to early and unplanned pregnancy.

School Governance and Management

It is impressive that the school leadership and the girls are aware of the school-based management committees and their activities. Reports from the quantitative survey also showed that the SBMC/PTA were mostly involved in the construction or renovation of social amenities and infrastructure within the school and community. In addition, some SMB/PTA were involved in advocacy and solicitation of support for the school's development. Evidence of such activities conducted were available for sighting and verified in some instances.

Among out of school girls, the community-based management committee or community action committees were also observed to be engaging parent/guardians of the girls to allow their ward(s) to attend the learning centres, conduct door-to-door mobilization in a bid to foster regular attendance. Additionally, CBMCs/CACs monitored their learning outcomes, observe their participation during lessons as well as ensure that the neighbourhood is girl-friendly.

6.2 Recommendations

Overall Project Organization

As at the time of submission of the report, the program is yet to provide the external evaluator with comprehensive enrolment data of all its beneficiaries. We recommend that the program team try to improve on synergizing programme outputs that is essential to its evaluation to prevent unnecessary setbacks. One key takeaway is to create a unified database and ensure all partners are trained on how to use it. We also strongly require that the program team provide an updated enrolment data of all its ENGINE II beneficiaries ahead of future evaluation activities.

It is extremely important that the database of beneficiaries is updated to include the exact sub-interventions a girl is being exposed to. For example, if an in-school girl is receiving after-school lessons, but not receiving scholarships, this information should be included in the database. This also ensures accurate tracking of the beneficiaries.

We strongly recommend that the Mercy Corps Nigeria team play a more active role in validating that the ENGINE program is being implemented according to the protocols stated. Our findings suggest an obvious disconnection between the expectations of the MC team, and what the state implementation partners are doing. We recommend the following activities:

- A thorough validation of ENGINE II beneficiaries. Pictures of the girls enrolled should be taken at baseline with detailed information using open source software that would be linked to the database. This is to ensure that any replacement of girls who might exit the program is done in a systematic and approved manner.
- MC team should work closely with the state implementation partners to ensure that they understand the vision and mission and ensure that they are aligned with the project objectives. From our field experience with them, we perceive that they have a different view of the project objectives. Working closely with the state implementation partners will reduce the likelihood of errors and ensure that girls are enrolled into the program based on the eligibility criteria as defined in the protocol.
- Activities of the state implementation partners should be monitored, reviewed closely, and more regularly by the Mercy Corps team. This could be achieved by conducting random stop check visits to the field. These spot checks should be carried out without pre-informing the implementation partners. However, upon arrival on the field, we suggest the inspection is carried out in a collaborative way so that the implementing partners don't think of it as some form of harassment.
- State Team Leads should be given more autonomy and authority to audit the activities of the state implementation partners. Where necessary, the state team leads should be empowered to review and audit their financial records, especially as related to program implementation.

Learning Outcomes

The findings suggest that in order to improve learning outcomes, the programme has to input intensive efforts to improve literacy and numeracy skills in the in-school and out of school groups. The points below list our recommendation to achieve this aim:

- Out of School Numeracy and Literacy Scores: Overall mean numeracy scores are high. However, subtask analysis reveals skills gaps in identifying missing number, performing subtractions and solving word problems. We suggest that the program targets these skills gaps specifically, in order to fill these skills gaps. Mean literacy scores are low. Subtask analysis reveal that the skills gaps

that need urgent attention include letter sound identification. Specifically, we recommend that MC incorporates phonics lessons into its out of school syllabus. Moreover, lessons targeted at improving reading speed and accuracy are essential to improving learning outcomes in this group. Overall, scores are lower in Kano, Kaduna and FCT. These states require more intense efforts to achieve the aim of improving learning outcomes.

- **In-School Numeracy and Literacy Scores:** Mean numeracy and literacy scores are very poor, and improving learning outcomes for this group poses a particular challenge for the program. Numeracy skills gap analysis reveal gaps across all subtasks. Similarly, literacy skills gaps analysis reveals similar results across all subtasks, especially with comprehension and inferential skills, and writing short essays. These low scores are observed across all states. Therefore, exhaustive methods are required to improve learning outcomes in this group. After school programs are essential, and girls need to be taught basic English reading and writing skills.
- **Life skills:** Results suggest residual effects of ENGINE I on life skills among the girls. However, out of school girls reported higher life skills than in-school girls. It is imperative that the MC team intensifies its life skills training for the in-school girls, especially for girls in lower grades and younger girls.
- The program is already proposing a plan to develop a needs-based approach to improving overall learning outcomes. We suggest that this plan is implemented in order to identify the weaknesses in individual girls and develop lesson plans to specifically address the limitations.
- Training teachers on learner-centered methodologies is absolutely essential to improving learning outcomes in girls. We suggest that the program develops a plan to empower teachers with skills that could help them tailor their teaching styles to meet each girl's learning needs. It's important that MC makes an effort for teachers to understand the learning outcomes as listed in the report and understand the skills gaps that need to be address. This will enable them to work more efficiently and achieve the needed goals.

Transition

It is vital and non-negotiable that the program changes its transition pathway definition for in-school girls. This is because the “*no child left behind*” concept of the education system in the intervention states almost guarantees that a child moves from one grade to the next even without achieving a pass mark, which creates a bias of positive transition in this population. We suggest that positive transition is defined as achieving at least a pass mark in 5 subjects, including Math and English. This can be measured by reviewing girls' school report card for the previous term, at each evaluation point.

With more than half of the OSG currently not involved in any gainful economic opportunities, it is pertinent for the programme to review its steps from ENGINE I close out activities and mitigate a re-occurrence of leaving behind this magnitude of economically inactive out-of-school girls by the time ENGINE II is over. This can be better managed by ensuring girls explore sustainable business opportunities that is marketable and non-seasonal within their neighbourhood. Much more, encourage and support girls to take on vocational and skill acquisition trainings that can help them to maintain and sustain a stable source of income beyond grants and like financial supports they could get. The programme can also partner with state governments and philanthropic organizations or entities to support girls on such ventures.

Sustainability

To ensure sustainability of the program's activities, the high transfer rate of principals and school administrators must be reduced during the implementation period. We suggest that the program engages

closely with stakeholders to prevent the transfer of school principals while the programme is being implemented. Several education-based programmes in Nigeria have utilized this approach successfully in the past and the ENGINE programme team can borrow some learning from such projects.

Strengthening the interactions between implementers at the national level with focal persons at the state level (state implementing partners) can to a large extent have some effect on the smooth implementation of interventions. In order to ensure uptake and sustainability of project goals, we recommend that the program engage more closely with the key stakeholders to ensure that they buy into the program activities and feel a sense of ownership of program, which increases the likelihood of sustainability of program activities. Making ENGINE a positive “brand name” would go a long way to ensure sustainability of the programme activities.

SBMC/PTA and community leadership have demonstrated great sense of ownership and responsibility in the management of the school system and the community. Therefore, the programme should put structures in place to guarantee active engagement, regular monitoring and an effective flow of communication while the programme lasts and beyond.

SBMC/PTA members are primarily focused on facilities and infrastructure development. To improve gender-related challenges, it may not be sufficient to only train them on gender issues and child protection; the program must ensure that they identify gender issues and child protection as priority issues with a view to addressing this themselves. For example, SBMC/PTA members need to understand that it's not enough to just build facilities, as gender issues may prevent girls from having access to the facilities.

Other recommendations

To avoid any ambiguity about the enrolment of girls into the program by principals, we recommend that the eligibility criteria be reworded to include “coming from a poor household based on the Poverty Probability Index (PPI) tool for Nigeria”. This implies that the economic status of the girls’ household needs to be assessed based on the criteria set out in the standardised PPI tool before she can be said to come from a poor household.

Results from the teacher questionnaire suggest a low level of teacher competence, especially with their pedagogical skills. We emphasize the need for improving teacher quality, as any success that would be recorded in the program is highly dependent on teachers. Improving teacher soft skills such as critical thinking and problem solving would also be essential to improving teacher quality. Other education programmes have used this approach in the past¹⁶.

There is an essential need for the programme to actively address factors that affect attendance in schools and learning spaces. The scholarships being awarded would go a long way to address the barrier of an inability to pay school fees. However, other factors such as girls missing school because of chores and errands need to be addressed on a household level. We recommend that the program conduct some household sensitization workshops to help parents/guardians understand the importance of regular attendance to improving girl education. This activity can be coordinated by the SBMC/PTA to ensure uptake and sustainability. The CAC must also include parents of girls, who can then conduct advocacy visits to other parents/guardians to ensure that they are actively involved in the education of their wards.

¹⁶ <https://www.britishcouncil.org.ng/programmes/education/schools-projects/connecting-classrooms/core-skills-training>

We recommend that the programme trains school governance structures, including the principals, on the importance of keeping accurate and complete attendance records. This will enable a more accurate measurement of attendance. Additionally, we strongly recommend that based on the baseline values for ISG attendance (IO Indicator 1.2), the midline target be revised to 60%, and the endline target revised to 75%. For girls who are out-of-school (IO Indicator 1.1), it is important for the programme to roll out effective monitoring plans that would help it to achieve the targeted numbers above the zero baseline (midline:10000; endline:15872).

As earlier stated in our conclusion, transition rate among in-school girls (IO Indicator 2.1) should be revised to at least 5 credits which is statutory pass mark (including Maths and English) for subjects taken during the previous term before the evaluation. This will provide a true reflection of learners' performance and transition through key stages of education as against the "leave no child behind" concept that is currently evident in our schools today. Endline targets for I.O Indicator 2.2 should be revised to prevent ceiling effects. Current endline targets are at 50% cumulative. We recommend that this be increased to 80% cumulative based on the current baseline values as well as the proposed target at midline.

We strongly recommend that the target values for I.O Indicator 3.1 (girls reporting increased income) be revised to prevent the ceiling effects. The midline target should be reduced to 10% above baseline from 30% above baseline. Likewise, the endline target should be reduced to 30% above baseline value.

Target values for I.O Indicator 4.1 (percentage of girls who report improve decision-making capabilities for life choices) need to be revised due to high baseline values. We suggest that the targets should be revised to 65% at midline and 80% at endline to avoid ceiling effects. Likewise, I.O Indicator 4.3 has high baseline values. Therefore, we suggest that the midline target be changed to 60%, and endline target to 80% so that it's more realistic and measurable.

Decision-making skills among girls need to be improved upon just as girls have been able to put to use the essential life skills needed for daily life. Given the cultural context in programme states, approaching this problem requires a concerted effort at the girl and household levels.

With respect to IO indicators 4.2 and 4.3, it is important for the programme team to match up the good hygienic practices reported by the girls to their knowledge. This in essence will make for a meaningful progress towards achieving the outcome 1.

The baseline values for the intermediate outcome 5 which is focused on empowering governance structures in the school and at the community-level is at zero except for IO Indicator 5.1 with its current value at 13%. This accentuates the fact that programme activities are not just marked off as completed but tested to ensure there is improved knowledge and awareness among the target group on protection and gender issues and other barriers affecting girls.

With regards to girls living with disabilities, the barriers reported by this group includes feeling unsafe travelling to/from school. Additionally, they report a lack of access to school facilities. It is therefore important that program works with school governance structures to improve access to school facilities and make the school a more conducive environment for girls living with disabilities.

The programme needs to work closely with school and community stakeholders to improve girl safety en-route and while in school. The school and community governance structures are already taking steps to address school safety issues. The programme can leverage on these existing interventions or seek to improve/financially support these interventions to ensure their implementation.

Programme contribution: Response to conclusions and recommendations

- Programme response to evaluators' comments on gender approach used and how well gender is integrated through the programme.

Annexes

Annex 1: Logframe

[Annex 1 : BL Logframe](#)

Annex 2: Outcomes Spreadsheet

[ISG_OSG Outcome Spreadsheet](#)

Annex 3: Key findings on Output Indicators

This annex should be completed by the programme.



The evaluator should hand over any output-related data to the programme to enable the programme to populate the following tables.


Fill in the table below with every Output Indicator, means of verification/sources, and the frequency of data collection. Please include output indicators for which data collection has not yet taken place and state when data collection for these will take place.

Table 80: Output indicators

Logframe Indicator	Output	Means of verification/sources	Collection frequency
Number and Indicator wording		List all sources used.	E.g. monthly, quarterly, annually. NB: For indicators without data collection to date, please indicate when data collection will take place.
Output 1: Enhanced learning experiences for marginalised ENGINEII girls in target areas			
Output 1.1: 0		Programme reports	Monthly
Number of Learning Centres Facilitators trained and mentored on learners' centred teaching methodology to improve learning outcomes			
Output 1.2: 0%		Programme reports	Monthly
Percentage of eligible OOS girls supported by the project to re-enter formal education.			
Output 1.3:		Programme reports	Annually

Logframe Indicator	Output	Means of verification/sources	Collection frequency
0	Number of IS girls registered for Senior School Certificate Examination (SSCE)		
...			
Output 2: Increased asset building skills and income-generation for marginalised ENGINE girls in target areas			
Output 2.1: 0	Number of OSGs provided with 'level 2' vocational training on business and entrepreneurship skills.	Programme reports Training attendance records	Monthly
Output 2.2: 50%	Percentage of OSGs enrolled in learning centres reporting access to financial services	Programme reports Programme Enrolment data	Monthly
Output 2.3: 1	Number of income generating opportunities created for ENGINE II girls in partnership with community based value chains	Programme reports Signed agreements/MOUs	Monthly
Output 2.4: 1	Number of partnerships signed with the private sector for the business diversification and expansion of ENGINE II OSGs	Programme reports Signed agreements/MOUs	Monthly
...			

Logframe Indicator	Output	Means of verification/sources	Collection frequency
Output 3: Enhanced life skills training opportunities for marginalised ENGINE girls in target areas			
Output 3.1: 0	Number of girl ambassadors trained to provide peer- to- peer mentoring to non-ENGINE II girls	Programme reports Training attendance records	Monthly
Output 3.2: 3	Number of meetings where participants/community members take decisions to promote girls education	Programme reports Meeting attendance records Meeting minutes	Monthly
Output 3.4: 0	Number of guidance counsellors trained to provide counselling to in ENGINE II school	Programme reports Training attendance records	Monthly
...			
Output 4: Improved gatekeeper commitment towards girls' education and empowerment in target areas			
Output 4.1: 30	Number of SHero advocates raising awareness on issues faced by marginalised girls in project communities	Programme reports Reports on awareness raised https://www.dailytrust.com.ng/mercy-corps-renews-support-for-21-162-marginalised-girls.html https://guardian.ng/news/36-of-girls-in-nigeria-have-one-baby-says-envoy/ https://www.africannewspage.net/2018/02/engine-ii-programme-launched-kano/ https://guardian.ng/news/36-of-girls-in-nigeria-have-one-baby-says-envoy/  SHero Campaign on Twitter.docx  Media Engagements for IWD and Program	Monthly

Logframe Indicator	Output	Means of verification/sources	Collection frequency
Output 4.2: 0 Number of action plans developed by SBMC/PTAs and other stakeholders to make gender friendly schools		Programme reports Meeting attendance records Meeting minutes/Action plans	Monthly
...			
Output 5: Expanded protection policies and practices benefitting adolescent girls and young women in target areas and nationally			
Output 5.1: 0 Number of girls trained on gender and protection issues		Programme reports Training attendance records	Monthly
Output 5.2: 1 Number of campaigns initiated to address key barriers to girls education and empowerment		Programme reports Reports on campaigns initiated  Media Engagements for IWD and Program	Monthly
Output 5.3: 0 Number of schools developing/re-enforcing/updating school policies and codes of conduct on bullying, harassment, exploitation and abuse.		Programme reports Records of developed, updated or re-enforced policies	Monthly

Report on the Baseline values/Baseline status of each Output Indicator in the table below. Reflect on the relevancy of the Output Indicator for your Intermediate Outcomes and Outcomes and the wider Theory of Change based on the data collected so far. Are the indicators measuring the right things? What do the Baseline values/Baseline status mean for the implementation of your activities?

Table 81: Baseline status of output indicators

Logframe Indicator	Output	Baseline status/Baseline values Relevance of the indicator for the programme ToC	Baseline status/Baseline values
Number and Indicator wording		What is the contribution of this indicator for the programme ToC, IOs, and Outcomes? What does the Baseline value/status mean for your activities? Is the indicator measuring the right things? Should a revision be considered? Provide short narrative.	What is the Baseline value/status of this indicator? Provide short narrative.
Output 1: Enhanced learning experiences for marginalised ENGINEII girls in target areas			
Output 1.1: Number of Learning Centres Facilitators trained and mentored on learners' centred teaching methodology to improve learning outcomes		This is an indicator of teaching quality as it shows the frequency of training to learning space facilitators and records the tests/mentoring provided to facilitators. It directly supports IO 2.1 and Outcome 1	0 The programme was to have trained 400 teachers by March 2018, but due to challenges with recruiting an educational consultant, the programme is working with a revised and approved timeline for implementation.
Output 1.2: Percentage of eligible OOS girls supported by the project to re-enter formal education.		This indicator measures the programme's effort to support girls who do not attend school to gain functional literacy and numeracy or to conclude secondary school. It directly supports IO 1.1, 4.1 and Outcomes 1 and 2	0 The programme commences out of school learning spaces in July 2018 and would be motivating beneficiaries to return to school. Additionally, the programme would conduct community advocacy to encourage parents, husbands and community leaders to support these beneficiaries with returning to school.
Output 1.3: Number of IS girls registered for Senior School Certificate Examination (SSCE)		This indicator measures the programme's ability to support girls who attend school to transition to tertiary institutions. It directly supports IO 1.1, 1.2 and Outcomes 1 and 2	The Senior School Certificate Examination (SSCE) registration for the current academic year had closed by the time implementation of activities started. This activity would be measured in the next academic year (September 2018 – July 2019)
...			
Output 2: Increased asset building skills and income-generation for marginalised ENGINE girls in target areas			
Output 2.1: Number of OSGs provided with 'level 2' vocational training on business and entrepreneurship skills.		This indicator measures the programme's efforts to support OSGs to gain additional skills to expand or diversify business acquired on ENGINE I.	0 The programme commences out of school learning spaces in July 2018.

<p>Output 2.2: Percentage of OSGs enrolled in learning centres reporting access to financial services</p>	<p>This indicator shows how the programme has improved on initial efforts from ENGINE I to ensure the financial inclusion of beneficiaries.</p> <p>It directly supports IO 3.1, 1.2 and Outcomes 1 and 2</p>	<p>50%</p> <p>Based on the enrolment data collected at the start of the programme, 5,050 Out of the 10,077 girls enrolled already have a bank account.</p>
<p>Output 2.3: Number of income generating opportunities created for ENGINE II girls in partnership with community based value chains</p>	<p>This indicator measures the business opportunities beneficiaries can leverage on for diversification or expansion of enterprises they started on ENGINE I.</p> <p>It directly supports IO 3.1, 3.2 and Outcome 2</p>	<p>1</p> <p>The programme has leveraged on the support of Twinning to introduce beneficiaries in the FCT to the sales of ovaltine (a beverage produced by Twinning in Nigeria)</p>
<p>Output 2.4: Number of partnerships signed with the private sector for the business diversification and expansion of ENGINE II OSGs</p>	<p>This indicator measures the number of partnerships the programme has facilitated to create business opportunities for beneficiaries.</p> <p>It directly supports IO 3.1, 3.2 and Outcome 2</p>	<p>1</p> <p>The programme has leveraged on the support of Twinning to introduce beneficiaries in the FCT to the sales of ovaltine (a beverage produced by Twinning in Nigeria)</p>
<p>...</p>		
<p>Output 3: Enhanced life skills training opportunities for marginalised ENGINE girls in target areas</p>		
<p>Output 3.1: Number of girl ambassadors trained to provide peer- to- peer mentoring to non-ENGINE II girls</p>	<p>This indicator shows how the programme has leveraged on girl fora activities to increase the reach of the lifeskill training provided to beneficiaries.</p> <p>It directly supports IO 3.1, 3.2 and Outcomes 1 and 3</p>	<p>0</p> <p>Girl fora activities are to commence in September 2018.</p>
<p>Output 3.2: Number of meetings where participants/community members take decisions to promote girls education</p>	<p>This indicator shows how the programme has facilitated community support to encourage girl child education</p> <p>It directly supports IO 1.1, 1.2, 5.2 and Outcomes 1, 2 and 3</p>	<p>3</p> <p>In March 2018, the programme facilitated community discussions in the FCT, Kaduna and Kano States, during these discussion, community members pledged support to beneficiaries and girl child education.</p>
<p>Output 3.3: Number of guidance counsellors trained to</p>	<p>This is an indicator of teaching quality as it equips teachers on the programme to support girls in providing knowledge on life skills and to counsel girls as needed.</p>	<p>0</p> <p>The programme has selected guidance counsellors. training them before the</p>

provide counselling to in ENGINE II school	It directly supports IO 1.1, 1.2, 3.2, 4.1, 4.2, and Outcome 1 and 2	commencement of ISG learning centres in September 2018.
...		
Output 4: Improved gatekeeper commitment towards girls' education and empowerment in target areas		
Output 4.1: Number of SHERo advocates raising awareness on issues faced by marginalised girls in project communities	This is an indication of the programme's gathering of community and individual support for beneficiaries. It directly supports IO 1.1, 1.2, 5.1, 5.2, and Outcome 1, 2 and 3	30 Since the end of the inception phase of ENGINE II, a total of 30 individuals and organisations have contributed their voices within community gatherings, on traditional and new media to support the cause of marginalised girls.
Output 4.2: 0 Number of action plans developed by SBMC/PTAs and other stakeholders to make gender friendly schools	This indicator measures how the programme has worked with the SBMCs/PTAs of schools to understand the importance of gender friendly schools for quality education It directly supports IO 1.1, 1.2, 5.1, 5.2, 5.3 and Outcome 1, 2 and 3	0 The programme commences in school learning spaces in September 2018.
...		
Output 5: Expanded protection policies and practices benefitting adolescent girls and young women in target areas and nationally		
Output 5.1: 0 Number of girls trained on gender and protection issues	This indicator shows how the programme has leveraged on girl fora activities to increase the reach of the lifeskill training provided to beneficiaries. It directly supports IO 5.3, and Outcomes 1 and 3	0 Gender and protection trainings for beneficiaries are to commence in July 2018.
Output 5.2: 1 Number of campaigns initiated to address key barriers to girls education and empowerment	This indicator shows how the programme has facilitated community support to encourage girl child education and transition It directly supports IO 1.1, 1.2, 5.2 and Outcomes 1, 2 and 3	1 The programme used the IWD 2018 to launch the SHERo campaign in the FCT, Kaduna and Kano States.
Output 5.3: 0 Number of schools developing/re-enforcing/updating school policies and	This indicator shows how the programme has facilitated the support of schools to encourage girl child education It directly supports IO 1.1, 1.2, 5.2 and Outcomes 1, 2 and 3	0 The programme commences work with schools in September 2018.

codes of conduct on bullying, harassment, exploitation and abuse.		
---	--	--

List all issues with the means of verification/sources or the frequency of data collection which require changes or additions.

Table 82: Output indicator issues

Logframe Indicator	Output	Issues with the means of verification/sources and the collection frequency, or the indicator in general?	Changes/additions
Number and Indicator wording		E.g. inappropriate wording, irrelevant sources, or wrong assumptions etc. Was data collection too frequent or too far between? Or no issues?	E.g. change wording, add or remove sources, increase/decrease frequency of data collection; or leave as is.
Output 1: Enhanced learning experiences for marginalised ENGINEII girls in target areas			
Output 1.1: Number of Learning Centres Facilitators trained and mentored on learners' centred teaching methodology to improve learning outcomes		Target set was based on a beneficiary size of 21,162 girls. This assumption no longer holds true.	Target to be revised
Output 1.2: Percentage of eligible OOS girls supported by the project to re-enter formal education.		Target set was based on a beneficiary size of 21,162 girls. This assumption no longer holds true.	Target to be revised
Output 1.3: Number of IS girls registered for Senior School Certificate Examination (SSCE)		Target set was based on a beneficiary size of 21,162 girls. This assumption no longer holds true.	Target to be revised
Output 2: Increased asset building skills and income-generation for marginalised ENGINE girls in target areas			
Output 2.1: Number of OSGs provided with 'level 2' vocational training on business and entrepreneurship skills.		Target set was based on a beneficiary size of 21,162 girls. This assumption no longer holds true.	Target to be revised
Output 2.2: Percentage of OSGs enrolled in learning centres reporting access to financial services		Target at baseline higher than programme projections	Target to be revised
Output 2.3: Number of income generating opportunities created		No issues	Leave as is

Logframe Indicator	Output	Issues with the means of verification/sources and the collection frequency, or the indicator in general?	Changes/additions
	for ENGINE II girls in partnership with community based value chains		
	Output 2.4: Number of partnerships signed with the private sector for the business diversification and expansion of ENGINE II OSGs	No issues	Leave as is
	...		
Output 3: Enhanced life skills training opportunities for marginalised ENGINE girls in target areas			
	Output 3.1: Number of girl ambassadors trained to provide peer- to- peer mentoring to non-ENGINE II girls	Target set was based on a beneficiary size of 21,162 girls. This assumption no longer holds true.	Target to be revised
	Output 3.2: Number of meetings where participants/community members take decisions to promote girls education	No issues	Leave as is
	Output 3.3: Number of guidance counsellors trained to provide counselling to in ENGINE II school	Target set was based on a beneficiary size of 21,162 girls. This assumption no longer holds true.	Target to be revised
	...		
Output 4: Improved gatekeeper commitment towards girls' education and empowerment in target areas			
	Output 4.1: Number of SHero advocates raising awareness on issues faced by marginalised girls in project communities	No issues	Leave as is
	Output 4.2: Number of action plans developed by SBMC/PTAs and other stakeholders to make gender friendly schools	No issues	Leave as is

Logframe Indicator	Output	Issues with the means of verification/sources and the collection frequency, or the indicator in general?	Changes/additions
...			
Output 5: Expanded protection policies and practices benefitting adolescent girls and young women in target areas and nationally			
Output 5.1: Number of girls trained on gender and protection issues		Target set was based on a beneficiary size of 21,162 girls. This assumption no longer holds true.	Target to be revised
Output 5.2: Number of campaigns initiated to address key barriers to girls education and empowerment		No issues	Leave as is
Output 5.3: Number of schools developing/re-enforcing/updating school policies and codes of conduct on bullying, harassment, exploitation and abuse.		No issues	Leave as is

Annex 4: Beneficiary tables

This annex should be completed by the programme.

Please fill in the tables below. Individuals included in the programme's target group should be direct beneficiaries of the programme.

Table 83: Direct beneficiaries

Beneficiary type	Total programme number	Total number of girls targeted for learning outcomes that the programme has reached by Endline	Comments
Direct learning beneficiaries (girls) – girls in the intervention group who are specifically expected to achieve learning outcomes in line with targets. If relevant, please disaggregate girls with disabilities in this overall number.	Total number of beneficiaries – 16,005* In-School-Girls – 5,928 (Disabled ISG beneficiaries – 97 girls) Out-of-School girls – 10,077	[This may equal the total programme number in the outcomes spreadsheet and in the column to the left, or may be less if you have a staggered approach]	

	(Disabled beneficiaries – 123 girls)	OSG – 123	
--	--------------------------------------	-----------	--

* To be reviewed when enrolment is finalised in Lagos state

Table 84: Other beneficiaries

Beneficiary type	Number	Comments
Learning beneficiaries (boys) – as above, but specifically counting boys who will get the same exposure and therefore be expected to also achieve learning gains, if applicable.	NA	
Broader student beneficiaries (boys) – boys who will benefit from the interventions in a less direct way, and therefore may benefit from aspects such as attitudinal change, etc. but not necessarily achieve improvements in learning outcomes.	NA	
Broader student beneficiaries (girls) – girls who will benefit from the interventions in a less direct way, and therefore may benefit from aspects such as attitudinal change, etc. but not necessarily achieve improvements in learning outcomes.	TBD	
Teacher beneficiaries – number of teachers who benefit from training or related interventions. If possible /applicable, please disaggregate by gender and type of training, with the comments box used to describe the type of training provided.	TBD	
Broader community beneficiaries (adults) – adults who benefit from broader interventions, such as community messaging /dialogues, community advocacy, economic empowerment interventions, etc.	NA	

- Tables 3-6 provide different ways of defining and identifying the programme's target groups. They each refer to the same total number of girls, but use different definitions and categories. These are girls who can be counted and have regular involvement with programme activities.
- The total number of sampled girls in the last row of Tables 3-6 should be the same – these are just different ways of identifying and describing the girls included in the sample.

Table 85: Target groups - by school

School Age	Programme definition of target group (Tick where appropriate)	Number targeted through programme interventions	Sample size of target group at Baseline
Lower primary		NA	
Upper primary		NA	
Lower secondary	✓	TBD	890 girls

Upper secondary	✓	TBD	3,624 girls
Total:			[This number should be the same across Tables 3, 4, 5 & 6]

Table 86: Target groups - by age

Age Groups	Programme definition of target group (Tick where appropriate)	Number targeted through programme interventions	Sample size of target group at Baseline
Aged 6-8 (% aged 6-8)			
Aged 9-11 (% aged 9-11)			
Aged 12-13 (% aged 12-13)			
Aged 14-15 (% aged 14-15)			
Aged 16-17 (%aged 16-17)	✓	TBD	2,161 girls
Aged 18-19 (%aged 18-19)	✓	TBD	6,357 girls
Aged 20+ (% aged 20 and over)	✓	TBD	7,223 girls
Total:			[This number should be the same across Tables 3, 4, 5 & 6]

Table 87: Target groups - by sub group

Social Groups	Programme definition of target group (Tick where appropriate)	Number targeted through programme interventions	Sample size of target group at Baseline
Disabled girls (please disaggregate by disability type)	✓	220+ (TBD)	220
Orphaned girls	✓	2,103 + (TBD)	2,103
Pastoralist girls			
Child labourers			
Poor girls and girls who cannot attend school due to their peculiar home circumstance	✓	6,747+ (TBD)	6,747
Other – Girls who were married before 18	✓	1,443+ (TBD)	1,443

Social Groups	Programme definition of target group (Tick where appropriate)	Number targeted through programme interventions	Sample size of target group at Baseline
Other – Girls who were pregnant or had a child before 18	✓	903+ (TBD)	903
Other – Girls who have a chronically ill parent or spouse	✓	887+ (TBD)	887
Other – Girls who are divorced or widowed	✓	111+ (TBD)	111
Other – Girls who attend a faith based school (Islamiyya) or who had not completed junior secondary school	✓	2,643+ (TBD)	2,643
Other – Girls who are from a single headed household	✓	2,966 (TBD)	2,966
Other – Girls who did not attend primary school	✓	439+ (TBD)	439
Total:			16,005*

*Some beneficiaries fall into multiple categories

Table 88: Target groups - by school status

Educational sub-groups	Programme definition of target group (Tick where appropriate)	Number targeted through programme interventions	Sample size of target group at Baseline
Out-of-school girls: have never attended school	✓	9,673+ (TBD)	9,673
Out-of-school girls: have attended school, but dropped out	✓	404+ (TBD)	404
Girls in-school	✓	5,928+ (TBD)	5,928
Total:			16,005

5: MEL Framework

[ENGINE II MEL Framework](#)

Annex 6: External Evaluator's Inception Report

[Annex 6 - ENGINE II Inception report](#)

Annex 7: Data collection tools used for Baseline

[Annex 7 - ENGINE BL Data Collection Tools](#)

Annex 8: Datasets, codebooks and programs

[Annex 8 - ENGINE II BL Datasets](#)

Annex 9: Learning test pilot and calibration

[Annex 9 - Learning test pilot and calibration report](#)

Annex 10: Sampling Framework

[Annex 10 - Sampling Framework](#)

Annex 11: Control group approach validation

[Annex 11 - Control group validation approach](#)

Annex 12: External Evaluator declaration

[Annex 12: External Evaluator Declaration](#)

Annex 13: Project Management Response

ENGINE II programme management response on the EE's recommendations.

Overall Project Organization

As at the time of submission of the report, the program is yet to provide the external evaluator with comprehensive enrolment data of all its beneficiaries. We recommend that the program team try to improve on synergizing programme outputs that is essential to its evaluation to prevent unnecessary setbacks. One key takeaway is to create a unified database and ensure all partners are trained on how to use it. We also strongly require that the program team provide an updated enrolment data of all its ENGINE II beneficiaries ahead of future evaluation activities.

ENGINE II response: This recommendation is welcomed by the programme team and is in line with its MEL strategy. The MEL team has strategies in place to provide training to all staff including partners on different types of data collection tools, that will be used during the programme lifetime. As for the unified database, Mercy Corps uses CommCare software for data collection. This is done at the state level by the field team

and automatically uploaded into the unified data set. ENGINE II will share the final enrolment dataset with the EE.

It is extremely important that the database of beneficiaries is updated to include the exact sub-interventions a girl is being exposed to. For example, if an in-school girl is receiving after-school lessons, but not receiving scholarships, this information should be included in the database. This also ensures accurate tracking of the beneficiaries.

ENGINE II response: A database had been developed by the programme, which captures willingness of beneficiaries to engage in different interventions of the programme. The programme has designed a tool, which will be used monthly to capture beneficiaries that actually receive specific interventions. It is real time data collection and as information is sent out from the field, it is automatically uploaded into the server. This dataset can be shared with the EE in subsequent evaluations.

We strongly recommend that the Mercy Corps Nigeria team play a more active role in validating that the ENGINE program is being implemented according to the protocols stated. Our findings suggest an obvious disconnection between the expectations of the MC team, and what the state implementation partners are doing. We recommend the following activities:

- A thorough validation of ENGINE II beneficiaries. Pictures of the girls enrolled should be taken at baseline with detailed information using open source software that would be linked to the database. This is to ensure that any replacement of girls who might exit the program is done in a systematic and approved manner.

ENGINE II response: Enrolment is currently carried through CommCare, which involves a photograph of each girl. Furthermore, every ENGINE II girl will be provided with an electronic ID card. It has a picture and name of the girl. As a research programme, ENGINE II cannot replace lost beneficiaries without an approval from the Fund Manager and DFID, and all replacements are done in consultation with them.

- MC team should work closely with the state implementation partners to ensure that they understand the vision and mission and ensure that they are aligned with the project objectives. From our field experience with them, we perceive that they have a different view of the project objectives. Working closely with the state implementation partners will reduce the likelihood of errors and ensure that girls are enrolled into the program based on the eligibility criteria as defined in the protocol.

ENGINE II response: We will be working with the State team to provide constant mentorship and guidance. Each State Team Lead is based in the partner's office, and their primary role is to provide guidance to the implementing partners on the programme's goal, objectives, targets and workplan. Furthermore, for every activity ENGINE II will develop a SoP/guideline to be carried out at the field. It may range from providing concept notes for organizing community sensitization meetings to providing guidelines on stationary distribution to the girls.

- Activities of the state implementation partners should be monitored, reviewed closely, and more regularly by the Mercy Corps team. This could be achieved by conducting random stop check visits to the field. These spot checks should be carried out without pre-informing the implementation partners. However, upon arrival on the field, we suggest the inspection is carried out in a collaborative way so that the implementing partners don't think of it as some form of harassment.

ENGINE II response: All activities at the field level are jointly implemented by MC and its implementing partners. Whilst, the partners lead the implementation, MC state teams are responsible for providing guidance, monitoring and quality assurance.

- State Team Leads should be given more autonomy and authority to audit the activities of the state implementation partners. Where necessary, the state team leads should be empowered to review and audit their financial records, especially as related to program implementation.

ENGINE II response: The primary role of the State Team Leads is to provide guidance to the implementing partners. In order to remove any bias, Mercy Corps has a Senior Finance Officer specially dedicated to the ENGINE II programme. He is responsible for carrying out monthly finance compliance checks for each partner across the four states.

Learning Outcomes

The findings suggest that in order to improve learning outcomes, the programme has to input intensive efforts to improve literacy and numeracy skills in the in-school and out of school groups. The points below list our recommendation to achieve this aim:

- Out of School Numeracy and Literacy Scores: Overall mean numeracy scores are high. However, subtask analysis reveals skills gaps in identifying missing number, performing subtractions and solving word problems. We suggest that the program targets these skills gaps specifically, in order to fill these skills gaps. Mean literacy scores are low. Subtask analysis reveal that the skills gaps that need urgent attention include letter sound identification. Specifically, we recommend that MC incorporates phonics lessons into its out of school syllabus. Moreover, lessons targeted at improving reading speed and accuracy are essential to improving learning outcomes in this group. Overall, scores are lower in Kano, Kaduna and FCT. These states require more intense efforts to achieve the aim of improving learning outcomes.

ENGINE II response: These points are well noted. We will prioritize our interventions in the areas mentioned above.

- In-School Numeracy and Literacy Scores: Mean numeracy and literacy scores are very poor, and improving learning outcomes for this group poses a particular challenge for the program. Numeracy skills gap analysis reveal gaps across all subtasks. Similarly, literacy skills gaps analysis reveals similar results across all subtasks, especially with comprehension and inferential skills, and writing short essays. These low scores are observed across all states. Therefore, exhaustive methods are required to improve learning outcomes in this group. After school programs are essential, and girls need to be taught basic English reading and writing skills.

ENGINE II response: ENGINE II will further carry out a learner needs assessment to identify specific areas of difficulty. Along with the baseline findings, the assessment findings will be shared with the learning centre facilitators and the school stakeholders to provide individual coaching on the challenging subjects whether it is sound identification, phonics, or reading abilities.

- Life skills: Results suggest residual effects of ENGINE I on life skills among the girls. However, out of school girls reported higher life skills than in-school girls. It is imperative that the MC team intensifies its life skills training for the in-school girls, especially for girls in lower grades and younger girls.

ENGINE II response: Well noted, focus will be given to in-school girls especially for younger girls.

- The program is already proposing a plan to develop a needs-based approach to improving overall learning outcomes. We suggest that this plan is implemented in order to identify the weaknesses in individual girls and develop lesson plans to specifically address the limitations.

ENGINE II response: The learners needs assessment and the teacher needs assessment will be carried out in Q6. The findings will be shared with the teachers, government and the girls. This will enable them to address the weaknesses.

- Training teachers on learner-centered methodologies is absolutely essential to improving learning outcomes in girls. We suggest that the program develops a plan to empower teachers with skills that could help them tailor their teaching styles to meet each girl's learning needs. It's important that MC makes an effort for teachers to understand the learning outcomes as listed in the report and understand the skills gaps that need to be address. This will enable them to work more efficiently and achieve the needed goals.

ENGINE II response: This feedback is well received. The revised Teaching & Learning of the programme addresses this specific barrier.

Transition

It is vital and non-negotiable that the program changes its transition pathway definition for in-school girls. This is because the "*no child left behind*" concept of the education system in the intervention states almost guarantees that a child moves from one grade to the next even without achieving a pass mark, which creates a bias of positive transition in this population. We suggest that positive transition is defined as achieving at least a pass mark in 5 subjects, including Math and English. This can be measured by reviewing girls' school report card for the previous term, at each evaluation point.

ENGINE II response: We agree that transiting to another grade without receiving a pass mark would not be a proper transition. However, transition for the programme does is not limited to transiting to higher grades but also passing school leaving exams such as, WAEC, NECO and JAMB. For the lower grades, transition can be defined as receiving pass marks in English and Maths. Programme's monitoring tool captures the trimester results, so that the programme can understand girl progression. This dataset will be shared with the EE.

With more than half of the OSG currently not involved in any gainful economic opportunities, it is pertinent for the programme to review its steps from ENGINE I close out activities and mitigate a re-occurrence of leaving behind this magnitude of economically inactive out-of-school girls by the time ENGINE II is over. This can be better managed by ensuring girls explore sustainable business opportunities that is marketable and non-seasonal within their neighbourhood. Much more, encourage and support girls to take on vocational and skill acquisition trainings that can help them to maintain and sustain a stable source of income beyond grants and like financial supports they could get. The programme can also partner with state governments and philanthropic organizations or entities to support girls on such ventures.

ENGINE II response: On ENGINE II, whilst economic opportunity is a focus, the main focus for the out-of-school girls is to improve their learning outcomes. Economic transition comes secondary to this. However, ENGINE II has designed specific interventions for the out-of-school girls to receive market viable vocational training opportunities link beneficiaries to entrepreneurship/internship opportunities, and access to financial services. In addition, through the learning centres ENGINE II girls will receive sessions on second level of financial and business education.

Sustainability

To ensure sustainability of the program's activities, the high transfer rate of principals and school administrators must be reduced during the implementation period. We suggest that the program engages closely with stakeholders to prevent the transfer of school principals while the programme is being implemented. Several education-based programmes in Nigeria have utilized this approach successfully in the past and the ENGINE programme team can borrow some learning from such projects.

ENGINE II response: Negotiations around this have been ongoing with the government since the beginning of the programme. We have received commitments from AME in Abuja, Kano and Kaduna to retain the

learning centre facilitators over the programme lifetime. Similar, commitment has also been received from the Ministry of Education in Kano, Kaduna and FCT. We are working towards receiving this commitment from Lagos. The programme will also reach out to other DFID programmes within Nigeria to discuss their lessons learned in this regard.

Strengthening the interactions between implementers at the national level with focal persons at the state level (state implementing partners) can to a large extent have some effect on the smooth implementation of interventions. In order to ensure uptake and sustainability of project goals, we recommend that the program engage more closely with the key stakeholders to ensure that they buy into the program activities and feel a sense of ownership of program, which increases the likelihood of sustainability of program activities. Making ENGINE a positive “brand name” would go a long way to ensure sustainability of the programme activities.

SBMC/PTA and community leadership have demonstrated great sense of ownership and responsibility in the management of the school system and the community. Therefore, the programme should put structures in place to guarantee active engagement, regular monitoring and an effective flow of communication while the programme lasts and beyond.

SBMC/PTA members are primarily focused on facilities and infrastructure development. To improve gender-related challenges, it may not be sufficient to only train them on gender issues and child protection; the program must ensure that they identify gender issues and child protection as priority issues with a view to addressing this themselves. For example, SBMC/PTA members need to understand that it's not enough to just build facilities, as gender issues may prevent girls from having access to the facilities.

ENGINE II response: This feedback is well received and highly welcome. Stakeholder engagement is one of the strongest aspects of ENGINE II. Activities have been put in place to provide trainings to SBMC/PTA on school governance and management. Furthermore, these groups will also be trained on child protection and gender. This training will enable the SBMC/PTA to identify and address the protection issues and gender barriers existing in communities/schools.

Other recommendations

To avoid any ambiguity about the enrolment of girls into the program by principals, we advise that the eligibility criteria be reworded to include “coming from a poor household based on the Poverty Probability Index (PPI) tool for Nigeria”.

ENGINE II response: The programme works with the same group of girls who were a part on ENGINE I. They were selected on the basis of marginalisation criteria that describe conditions due to poverty. This was deliberately done to avoid any bias. Considering that we are not re-enrolling girl, rewording the criteria may not be relevant, due to the programme's approach of only working with ENGINE I girls.

Results from the teacher questionnaire suggest a low level of teacher competence, especially with their pedagogical skills. We emphasize the need for improving teacher quality, as any success that would be recorded in the program is highly dependent on teachers. Improving teacher soft skills such as critical thinking and problem solving would also be essential to improving teacher quality. Other education programmes have used this approach in the past¹⁷.

ENGINE II response: This has also been identified by the programme as one of the challenges. The revised T&L strategy covers this aspect.

There is an essential need for the programme to actively address factors that affect attendance in schools and learning spaces. The scholarships being awarded would go a long way to address the barrier of an

¹⁷ <https://www.britishcouncil.org.ng/programmes/education/schools-projects/connecting-classrooms/core-skills-training>

inability to pay school fees. However, other factors such as girls missing school because of chores and errands need to be addressed on a household level. We recommend that the program conduct some household sensitization workshops to help parents/guardians understand the importance of regular attendance to improving girl education. This activity can be coordinated by the SBMC/PTA to ensure uptake and sustainability. The CAC must also include parents of girls, who can then conduct advocacy visits to other parents/guardians to ensure that they are actively involved in the education of their wards.

ENGINE II response: This is a part of the programme strategy. The gender training planned for parents, teachers, SBMCs and PTAs will cover the gender dynamics within a community. It maybe division of roles and responsibilities, time poverty and power dynamics.

We recommend that the programme trains school governance structures, including the principals, on the importance of keeping accurate and complete attendance records. This will enable a more accurate measurement of attendance. Additionally, we strongly recommend that based on the baseline values for ISG attendance, the midline target be revised to 65%, and the endline target revised to 80%.

ENGINE II response: We will use CommCare to collect attendance. It will be done through the electronic ID cards, which will be provided to all ENGINE girls. Attendance will be collected on a weekly basis and uploaded into the server. This will enable the programme to track the attendance on a regular basis and if a girl is absent for more than two weeks, then the programme team will either contact the school authorities or conduct household visits to find out the reason for her absenteeism. This approach of collecting attendance will be shared with the school stakeholders.

Endline targets for I.O Indicator 2.2 should be revised to prevent ceiling effects. Current endline targets at 50%. We recommend that this is increased to 80% based on the current baseline values.

We strongly recommend that the target values for I.O Indicator 3.1 are revised to prevent the ceiling effects. The midline target should be reduced to 10% above baseline from 30% above baseline. Likewise, the endline target should be reduced to 30% above baseline value.

ENGINE II response: This is well noted by the programme team and necessary revisions will be made on I.O indicators 2.2 and 3.1.

Target values for I.O Indicator 4.1 need to be revised due to high baseline values. We suggest that the targets should be revised to 65% at midline and 80% at endline to avoid ceiling effects. Likewise, I.O Indicator 4.3 has high baseline values. Therefore, we suggest that the midline target be changed to 60%, and endline target to 80%.

ENGINE II response: Recommendations noted. ENGINE II will revise its target for I.O indicators 4.1 and 4.3.

Decision-making skills among girls need to be improved upon just as girls have been able to put to use the essential life skills needed for daily life. Given the cultural context in programme states, approaching this problem requires a concerted effort at the girl and household levels.

The programme needs to work closely with school and community stakeholders to improve girl safety en-route and while in school. The school and community governance structures are already taking steps to address school safety issues. The programme can leverage on these existing interventions or seek to improve/financially support these interventions to ensure their implementation.

ENGINE II response: It will work with the stakeholders to identify the safety issues and the ways to mitigate it. These will be a part of the community sensitisation meetings, that will take place at the household and community level.

Disability:

On disability the baseline findings suggest:

This table has presented our findings on the proportion of girls that reported severe disability in at least one of the domains listed. In the ISG intervention group, about 5% of the treatment population reported having a disability, while approximately 9% of the control population reported having a disability. Interestingly, out of the girls that reported having any disability, the highest proportion was among those who reported having difficulty or no ability to comprehend or remember things (2% in the intervention group and 4% in the comparison group). The proportion of girls that reported having any disability in the OSG intervention group was lower than the ISG intervention group, at 3% in the treatment population, and 4% in the control population.

Based on this following was recommended by OPM: Given the differences in methodology, and the unavailability of a final dataset, it is not possible to make direct comparisons on the differences between the proportion of girls with disability in the evaluation sample and overall programme beneficiaries at the time of this report. In the future, we recommend that the programme use a standardised instrument to assess child function.

ENGINE II response: In subsequent quarters, ENGINE II will further identify girls with disabilities through its learning centres, facilitators and the girls. Once it has been identified, then the programme will work with the school authorities in supporting them in overcoming their disabilities. Some adaptations may be within the programme control such as providing wheelchairs, negotiating with the school management on constructing ramps for easy accessibility, hearing devices etc. while other forms of disability may require greater adaptations that may be beyond the scope of the programme depending on their severity. Attitudinal barriers are also critical, and work will be done to encourage acceptance and inclusion.

Recommendations on IO indicators

ENGINE II will use the EE's recommendation and will revise its midline and endline values for some IO indicators. It will be done once the baseline has been approved and will be sent to GEC for formal approval. ENGINE II agrees with the EE that all its IO indicators are fit for the programme and does not need to change.

Dissemination strategy:

The dissemination of the baseline report upon its approval will be shared with different programme stakeholders and the programme team. Firstly, the recommendations will be shared with all its programme staff, including partners and develop clear strategies to address it at the field level.

We will also share the learning outcome scores along with the teachers' teaching quality with the government officials, community and school stakeholders at each state. This is to ensure commitment from them in jointly improving the learning outcomes.

What is the programme's response to the key findings in the report? Make sure to refer to main conclusions (Section 6)

The major findings that came out from the evaluation were: poverty as the main barrier to education and the poor literacy and numeracy scores of both in-school and out-of-school girls. In light of the baseline findings, the theory of change underpinning ENGINE II remains strongly relevant.

Since, the programme works with the extremely marginalised girls, poverty has been cited as a major barrier since its first phase. ENGINE II has designed its activities and will attempt at addressing this barrier during its lifetime. It will provide scholarship grants to girls who are extremely marginalised, and cannot pay for their school fees. It will also provide text books and other learning materials needed to improve learning outcomes. It will continue to advocate with government and leverage on its funding to provide scholarships to its beneficiaries. ENGINE II has received match funding of around 700,000 GBP in year 1. Under this funding, the programme will provide life skills training to men, boys, girls and women in the community. In addition, it will also provide financial literacy training focused on household budget management to the head of the household. The programme will carry out a gender assessment to identify the household head responsible for making decisions around household budget and on girls' education. Upon identification, the programme will provide financial literacy training to them. The training will focus on the importance of saving and on household budget management, highlighting the importance of education.

The seemingly low literacy and numeracy scores of both in-school and out-of-school girls will be addressed through implementing ENGINE II' teaching and learning strategy. The low scores reflect that the focus of the programme should be on improving the learning outcomes of the students by jointly working with the girls and the teachers. The programme will carry out an assessment at two levels: student and teacher and identify gaps within the teaching learning process. These gaps will be addressed during the course of implementation.

What is the programme's response to the conclusions and recommendations in the report?

The main recommendations and the programme management responses are provided below:

i. Poverty: the main barrier to girls' education

Whilst, poverty is a larger issue in Nigeria, and is beyond the capacity of the programme to dive into the deeper issues and address it; the programme through its intervention will seek to address these barriers at the girl, household and community level. At the girl level by providing scholarship grants (for girls who are extremely marginalised); at the household level through its community sensitisation campaigns to raise awareness on the importance of girls' education and by providing financial literacy trainings to the head of the household. The baseline findings will be shared with relevant stakeholders such as, traditional and religious leaders, government officials, school stakeholders, parents and gatekeepers. These meetings will further raise awareness on the different types of barriers faced by a girl and at the same time will seek to find lasting solutions to these problems. It will be carried out through "Evidenced Based Learning Workshops".

ii. Improving learning outcomes

The low literacy and numeracy scores from EGRA/EGMA and SEGRA/SEGMA reflects the need to provide specific intervention to the teachers and to the girls. ENGINE II, through its teaching and learning strategy attempts to address these gaps in the T&L process by using the learner centred teaching methodology. At first, it will try to identify the gaps in the T&L process faced by both students and teachers through the learners' needs assessment and the teacher needs assessment. One crucial area of its strategy is to identify the learning ability of the girls. The role of the teacher here will be to address the gaps despite the girls' current grades.

In response to the "no child left behind" concept, the programme will collect trimester results to assess progression.

iii. Life skills

ENGINE II has completed the review of its Life Skills curriculum from ENGINE I. The draft version was sent to the programme implementing states. It was reviewed by key stakeholders' such as, government officials from the Ministry of Education and its line agencies, technical experts, religious and community leaders. The feedback from these states have been incorporated and has been finalised into one Life Skills curriculum. Knowledge and attitude around menstruation was also seen as a gap on ENGINE I. In the revised curriculum, ENGINE II has included menstrual, health, hygiene and management and sexual and reproductive health.

iv. Low competency level of the teachers

The teachers will be trained by the Master Trainers on learner centred teaching methodology. One key component of the training will be to assess the teachers needs and identify gaps in the T&L process. In addition to the training, ENGINE II has put monitoring, mentoring and supervisory structures in place. The monitoring of the learning centres will be led by the school Head Teacher. Master Trainers will be responsible for carrying out weekly supervision; teachers who need mentoring will be given coaching by the programme team and the Master Trainers. The coaching may be in technical areas such as, pedagogical or may be in soft skills such as classroom management. Despite all these efforts, if a teacher is unable to meet the objective then s/he will be removed from the programme and replaced with another qualified teacher.

v. Attendance at school

Attendance data will be collected through CommCare, and the data will be monitored by the programme team. If the data shows that a girl misses more than two weeks (eight sessions), then the programme will take necessary actions to mitigate absenteeism. It will be done by carrying out household visits, collaborating and with the SBMCs and PTAs. This will help us track attendance, provide timely intervention and also to track drop-outs.

One of the findings in the report showed that the parents hardly visited the schools. In order to increase their involvement, it will organise community sensitization campaigns, and work with the PTAs and SBMCs on increasing their involvement at school.

vi. Involve SBMCs and PTAs in programme activities

The baseline findings show that, whilst PTAs are active in most schools; the SBMCs, on the other hand are mostly inactive. The programme will first work with the SBMCs and in situations where they are inactive it will focus on strengthening the SBMCs. Further, SBMCs and PTAs are considered as gatekeepers and the programme will work with them in addressing the key barriers. They will also be involved in disseminating knowledge around protection and gender issues.

The management response should respond to the each of the External Evaluator's recommendations that are relevant to the grantee organisation (see Section 6). The response should make clear what changes and adaptations to implementation will be proposed as a result of the recommendations and which ones are not considered appropriate, providing a clear explanation why.

- ***Does the external evaluator’s conclusion of the project programmes’ approach to gender correspond to the project programmes’ gender ambitions and objectives?***

What changes to the logframe will be proposed to DFID and the Fund Manager?

In light of the baseline findings, the programme requests for a logframe revision on the targets. The initial logframe was designed with 21,000 girls in mind. However, the programme enrolment data shows that only 16,000 girls have enrolled into the programme. It will enrol additional 2,000 ENGINE I girls’ for a girl, with the total beneficiary number reaching 18,000. In purview of this background, the programme requests to revisit the logframe target. The revision will mainly take place at the intermediate and output level indicators.

References

Cantril, H. (1966). The pattern of human concerns. New Brunswick, N.J., Rutgers University Press.

J. Conti, G. (1979). Principles of Adult Learning Scale.

Masino, S., & Niño-Zarazúa, M. (2016). What works to improve the quality of student learning in developing countries? *International Journal of Educational Development*, 48(C), 53-65.

Jan Bietenbeck, Marc Piopiunik and Simon Wiederhold (2017). Africa's Skill Tragedy Does Teachers' Lack of Knowledge Lead to Low Student Performance? Published online before print. April 19, 2017, doi:10.3368/jhr.53.3.0616-8002R1J. *Human Resources* Summer 2018 vol. 53 no. 3 553-578

Bietenbeck, J., Piopiunik, M., & Wiederhold, S. (2018). Africa's Skill Tragedy Does Teachers' Lack of Knowledge Lead to Low Student Performance?. *Journal of Human Resources*, 53(3), 553-578.