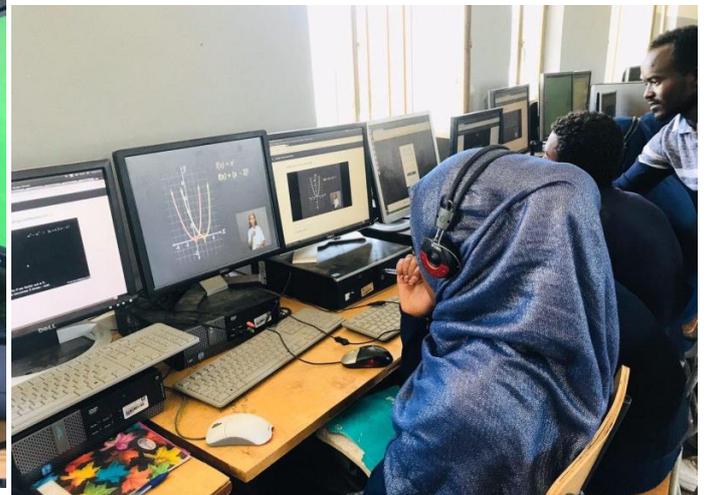


STME STARS

Project to Impact Learners' Performance in Science, Technology & Mathematics Education (STME) in Silte Zone



End of Project Report

June 2022

Table of Contents

Project Profile	3
Executive Summary	3
Project Background and Justification	5
Area of Operation, Selected Schools	7
Activities Undertaken	8
Key Results / Impact	9
Grade 10 National Exam pass rate	9
Subject pass rates	10
Student dropout rates	11
ICT Skills	12
Challenges and Key Lessons Learned	13
Stories of Change	17
Going Forward	20

I. Project Profile

Name of the project	STME STARS - Project to Impact Learners' performance in Science, Technology & Mathematics Education (STME) in Silte Zone
Area of Operation	Silte Zone, SNNPR - 5 schools
Funding Partners	Dell Technologies, Camara Education, Learning Equality
Implementing/Executing Agency	Camara Education Ethiopia in partnership with SNNPR Education Bureau, and Silte Zone Education Office
Target beneficiaries	This project aims at improving the learning outcomes of 5,440 learners (2,992 male and 2,448 females) focusing on Grade 9 & Grade 10 Maths and Physics subjects
Indirect beneficiaries	Educators, Education Bureaux, and Office Leaders
Project Duration	42 Months (Initial plan was 30 months - extended due to Covid-19)
Project Start & End time	May 2018 - October 2021 (extended due to Covid-19)
Key Results - Expected Outcomes	<ul style="list-style-type: none"> ✓ Learners will achieve improved results in Physics and Maths subjects. ✓ Learners are better equipped to transition from Grade 10 to Grade 11. ✓ Learners are better equipped to transition to science streams.

II. Executive Summary

From May 2018 to October 2021 we compared the results of five secondary schools that had been provided with computers and training by Camara Education against schools which had not. The results of this long-term study of the effectiveness of Camara's work in Ethiopia are truly impressive. In the impact schools studied, there was a dramatic increase in pass rates in Grade 10 Physics and Maths exams. The proportion of students who reported having good ICT skills increased from 13% to 84% over three academic years, while teachers' assessment of their own ICT skills also nearly doubled. Meanwhile, school dropout rates halved, against a slight increase in dropout rates in the control schools.

As the focus on education in Ethiopia shifts from providing access to improving quality, the role of the teachers and educational resources is critical. Although there were important improvements made in the availability of qualified educators and educational inputs which are indispensable for a high-quality education system, yet there is much variation across regions in

the share of qualified educators or adequately equipped educators to prepare their learners to meet the educational demands of the 21st century.¹ Often, educators lack opportunities for professional development as a result of resource constraints and distances between schools, directly impacting learners' outcomes.

Fortunately, when used effectively, ICT integration in education can transform the education system and this has been widely acknowledged around the world as well as in Ethiopia.² In fact, ICT is one of the 6 pillars identified as important for improving the quality of education in the Ethiopia Ministry of Education strategy. When done correctly with emphasis on content, educators training and focus on measuring impact, ICT integration into schools can help improve learners' learning outcomes and this has been long recognized by the United Nations and by the international community at large.³

In alignment with this strategy, between May 2018 and October 2021, Camara Education Ethiopia planned, implemented, and evaluated a project entitled: "*STME STARS - Impacting Learners' Performance in Science, Technology & Mathematics Education (STME) in Silte Zone*". This project, supported by funding and equipment from Dell Technologies, aimed at improving the learning outcomes and life opportunities of 5,440 (2,992 male and 2,448 females) Grade 9 & Grade 10 learners in Maths and Science subjects in the target area of the Silte Zone in Ethiopia. It is to be noted that the end of the project was originally scheduled for October 2020, but due to school closures in 2020 because of Covid-19, the project was extended for one more year, until October 2021.

A total of 5 secondary schools that partnered with Camara Ethiopia in 2016 were selected to take part in this intervention. The activities of this intervention include:

- Development of curriculum aligned content based on grade 9 & 10 Maths and Science Subjects;
- Development of teachers' training;
- Leadership Training Programme;
- Teachers Training Programme;
- In-school pedagogical and integration support;
- eLearning Centre Networking & Installation
- Data analysis and reporting student utilisation
- Regular monitoring visits to schools; and
- Cluster, woreda and zonal level official involvement

This Impact-focused pilot project used a monitoring and evaluation framework that was primarily intended to measure the impact of the intervention on student grades in STME subjects, namely Maths and Physics. Curriculum aligned Maths and Physics modules for grades 9 and 10 were provided and installed in these schools through Camara Learning Studio.

¹ Education Sector Development Program V (ESDP V), FDRE Ministry of Education, 2015

² The 5th ICT in Education Program Strategic Plan, FDRE Ministry of Education, 2015

³ ICT in Education, General Education Roadmap, FDRE Ministry of Education, 2012

The project objectives were as follows:

- Learners achieve improved results in Physics and Maths subjects.
- Learners are better equipped to transition from Grade 10 to Grade 11.
- Learners are better equipped to transition to science streams.

Key Results:

- ✓ Students' Grade 10 pass rate significantly improved after the project and compared to control schools.
- ✓ Students' Grade 10 Maths pass rate significantly improved after the project and compared to control schools.
- ✓ Students' Grade 10 Physics pass rate significantly improved after and compared to control schools.
- ✓ Dropout rate reduced after the project and compared to control schools.
- ✓ Students' and Teachers' ICT skills significantly improved after the project.

III. Project Background and Justification

This project was designed in 2017/18 using pertinent and contemporary data. According to the 2015/2016 Federal Ministry of Education (MoE) statistical abstract, about 26.2 million learners were enrolled into about 38,123 primary and secondary schools with over 90% enrolled in government schools. Amhara, Oromia and SNNPR regions comprise over 85% of the learners and also are the three largest regions. The Ethiopian government had made a significant focus on Education with an investment of 23% of the national budget to improve access and quality of education to both general and higher education.

In the Silte Zone, there were 331,691 learners (156,840 Female and 174,851 Male) enrolled in the 2017/18 academic year in 333 schools (299 primary and 34 secondary) in the Silte zone. From 2016 to 2018, Camara Education Ethiopia intervened in 89 schools (58 primary and 31 secondary) in the Zone and provided 1,813 computers loaded with offline educational contents to 89 schools. As a result, about 430 teachers and school leaders were trained and 54,550+ learners were able to get access to technology and digital educational resources.

STME is one of the focus areas that the Education Sector Development Programme V (ESDP V), and now also ESDP VI identified. In doing so, a linkage was made with the sector-wide Second Growth and Transformation Plan (2015 to 2020), of which one of the focuses is advancing sciences and technologies. Therefore, the focus on STME is not only aligned to the Ministry of Education focus but also contributes to the sector-wide Growth and Transformation Plan for the whole country.

While this is a significant achievement and strategic plan, there are still significant improvements to be made with respect to quality of education. This was evidenced by the National Learning Assessment conducted in 2012 on Maths and Science subjects. In Grade 10, the share of learners who achieved an average score of 50% across the five core subjects

(Mathematics, English, Physics, Chemistry, Biology) stood at 23% in the 2012 assessment. In the same assessment, only 3% achieved 75% or above in their average score.

From a closer examination of the National Learning Assessment, it can be argued that the majority of Secondary School learners did not even obtain basic competencies that are an important foundation for success in Higher Education.

Two important reasons can be identified for this; lack of educational resources and capacity of teachers to fully empower their learners. Therefore, it is imperative to use Information and Communications Technology (ICT) to provide relevant educational resources designed to help teachers deliver quality education to their learners. Implemented properly, ICT has proven to be a powerful tool for transforming how learners learn in school.⁴ However, teacher training and capacity building of educational leaders is as important as providing the hardware and software applications.

Therefore, the objective of this project's unique proposition was a holistic approach to the challenge in Ethiopia, aimed at improving the delivery and quality of education so as to impact the educational outcomes for learners in STME.

The focus of this project was not the hardware, but the important elements required to fully realize the impact and value of technology in transforming how education was delivered in schools. Furthermore, it focused on each level of the education system: learners, teachers, leaders, and the educational system.

Camara Learning Studio

Camara Learning Studio (CLS) is Camara's eLearning platform which has been developed using Kolibri and focuses on supporting the delivery of particular subjects. For this project, the focus was specifically on Maths and Physics subjects for Grades 9 and 10. CLS provides open-source content and learning materials which Camara have specifically aligned to the national curriculum in Ethiopia. Students follow their subject curriculum and complete assessments via digital content hosted on CLS so that their progress can be tracked, and results can be shared in real time.

Camara Education Ethiopia proposed to improve student learning outcomes in STME and set up a rigorous M & E framework to measure the improvements through this project. This was done by:

1. Developing Camara STME Channel to deliver curriculum aligned content and allow assessments to be created and set to students, delivering teacher training and providing ongoing in school support focused around the use of the CLS learning platform.
2. Providing relevant policy and best practice evidence and guidance to participating schools.

⁴ Education Sector Development Program V (ESDP V), Federal Ministry of Education, 2015

3. Providing an opportunity to provide data and information regarding the impact of our project support through completing rigorous Monitoring & Evaluation of activities and learning outcome measurements. The lessons and results from this project can be used and leveraged for improving future solutions, potentially at scale in cooperation with the Federal Ministry of Education as well as Regional Education Bureaux and Zonal and Woreda level Education Offices.

IV. Area of Operation, Selected Schools

This project took place in 5 schools of the Silte Zone, Southern Nations Nationalities and Peoples' Region (SNNPR) of Ethiopia, namely in Worabe Secondary school, Hayrenzi secondary school, Gensilte secondary school, Hulbareg secondary school, and Kutere secondary school.

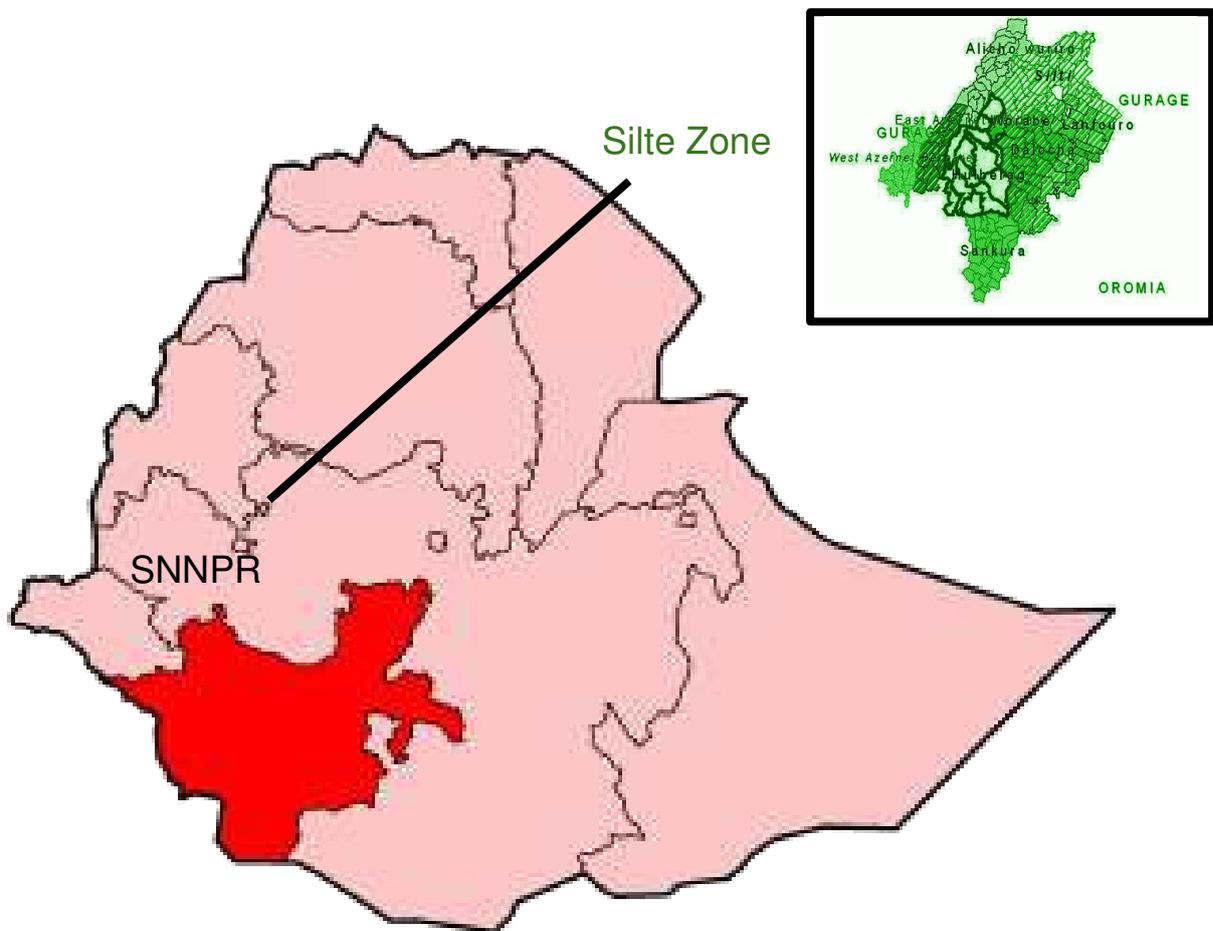


Figure IV.1: Area of Operation

	School Name	Location	Year Founded	Number of Teachers in 2018	Number of Students in 2018
1	Worabe Secondary	Worabe Town	1975	49	2,195
2	Hayrenzi Secondary	Worabe Town	2014	30	290
3	Gensilte Secondary	Gensilte	2010	28	505
4	Hulbareg Secondary	Hulbareg	1972	25	520
5	Kutere Secondary	Kutere	1975	43	1,230

Table IV.1: Selected Impact Schools' Profile

V. Activities Undertaken

Since this Impact project started in October 2018, Camara has provided the following support to the beneficiary schools:

- ✓ A networked eLearning centre consisting of 25 computers in each school
- ✓ Provision of Camara Learning Studio with curriculum aligned Maths and Physics for grades 9 and 10
- ✓ 5-day Camara Education ICT Skill builder for Educators + Camara Learning Studio Programme for Educators training, and an additional 2-day Camara Educational Leadership in the 21st Century training to a total of 61 educators in the five schools in October 2018
- ✓ 13 educational support visits have been completed to each school
- ✓ An additional 7-day training to 72 educators was provided in November 2019
- ✓ 15 technical support visits per school
- ✓ 6 monitoring visits completed per school for data collection
- ✓ Provision of 20 additional computers per school in January 2020 in partnership with Learning Equality

School Name	Total No. of PCs	Networked eLearning centre with CLS	Educational support visits	Technical support visits	M&E visits	Total Educators Trained	Total Learners Impacted
Worabe	45	•	13	15	6	32	2380
Hayrenzi	45	•	13	15	6	27	596
Gensilte	45	•	13	15	6	25	1666
Hulbareg	45	•	13	15	6	23	1753
Kutere	45	•	13	15	6	26	2163
TOTAL	225	•	65	75	30	133	8,558

Table V.1: Activities Undertaken in the 5 Impact Schools

VI. Key Results / Impact

Given that the Ethiopian Government decided to give all students in the 2019/20 school year automatic progression to the next grade due to Covid-19, we compared data from the 2017/18, 2018/19 and 2020/21 academic years for the purposes of this study. The Impact project was launched in all five schools in the 2018 school year. We have used comparison data from the year before the project launch and the years after. The results indicated are aggregates of the five schools. Where possible, we compared the results of these five schools to the SNNPR average. Otherwise, we compared them to five control schools that have not received support or computers from Camara.

Grade 10 National Exam pass rate

The Ethiopian General Secondary Education Certificate Examination (EGSECE) was an exam given at grade 10 to certify the completion of general secondary education. When developing our indicators to be reviewed for the impact schools, it had been intended that data collected from the Grade 10 National exams would be one of the metrics for analysis. However, in 2019, the MOE changed its policy and removed the Grade 10 National Exams so that only grade 8 and grade 12 exams are administered as part of the national strategy. The last year the Grade 10 National exam was administered was for the 2018-2019 school year examinations. On this announcement that the Grade 10 national examinations were being done away with, Camara Education reviewed the options for being able to obtain relevant data for this metric and it was agreed that the project and control school examination results would be used as an alternative to the national exams after these ceased.

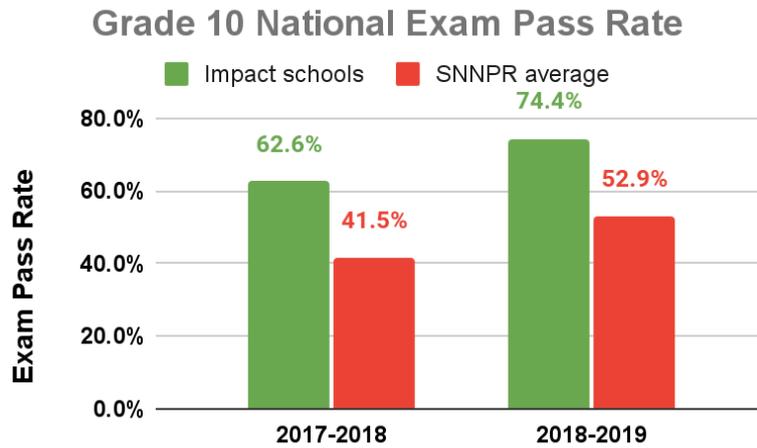


Chart VI.1: Grade 10 National Exam Pass Rate in Impact Schools versus SNNPR Average

Comparing the SNNPR average pass rate to our Impact schools over the last two years, we can see a positive trend in the 2018-2019 school year, one year after the launch of the project. The SNNPR average has also increased in 2018-2019 but remains well below the Impact schools' average.

Subject pass rates

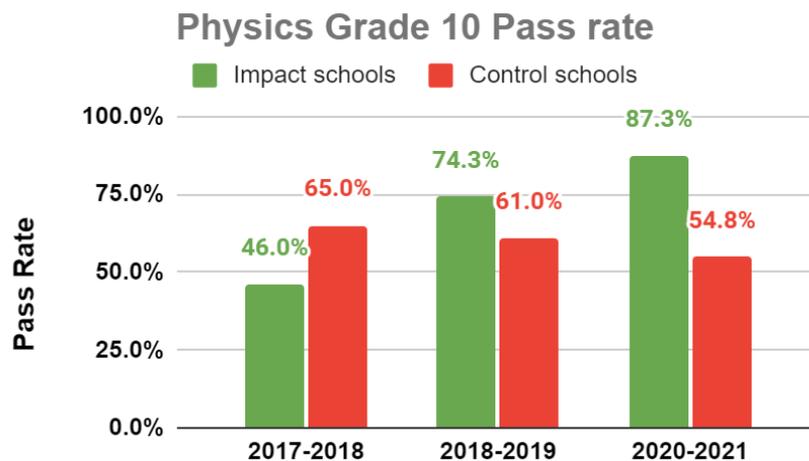


Chart VI.2: Grade 10 Physics Pass Rate in Impact Schools versus Control Schools

In this case, we compared how students in the Impact schools were faring in Physics in grade 10 versus their counterparts in the control schools. Only 46% of students from Impact schools were passing Grade 10 Physics exam in 2017-18 which was significantly lower than the control schools where 65% of students were passing the exams. However, following intervention, the pass rate for Impact school students has increased significantly, reaching 87% in the 2020-2021 school year, whereas it has decreased in the control schools post Covid-19 to 58.4%.

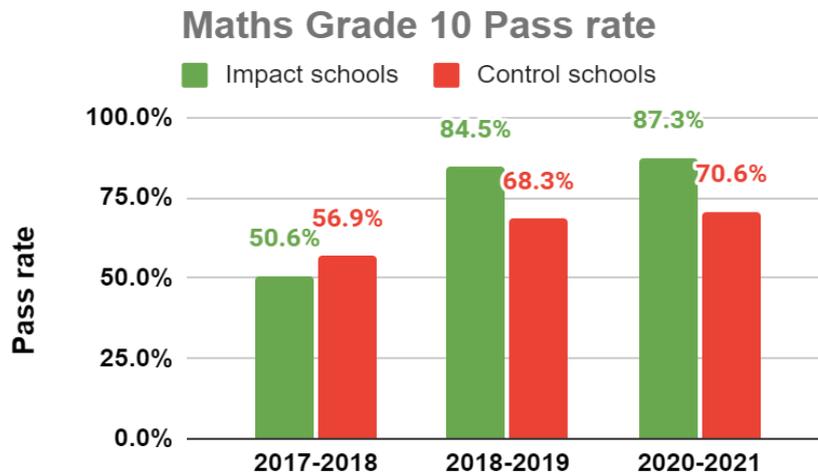


Chart VI.3: Grade 10 Maths Pass Rate in Impact Schools versus Control Schools

In the Impact schools, students in grade 10 are passing their Maths exams at a much higher rate since the project has been implemented. The control schools were performing better than the Impact schools in 2017-2018, but a significant improvement has been noted in the percentage of students within Impact schools passing their Maths Grade 10 exams in 2018/19 following the project launch and has remained in 2020/21.

Student dropout rates

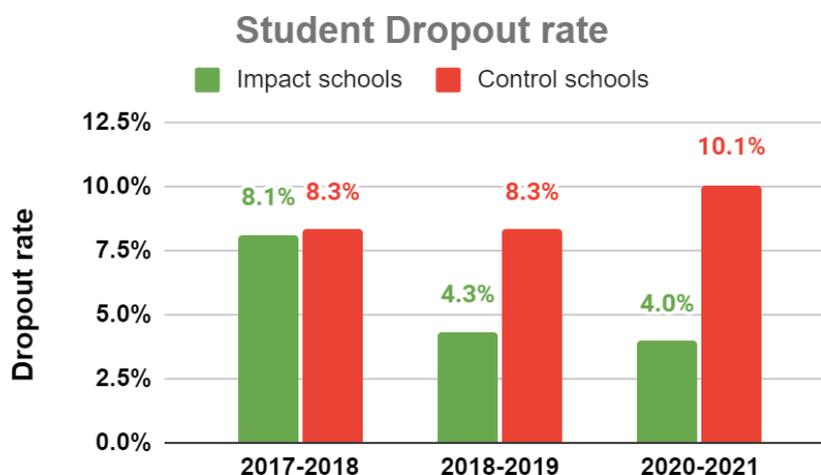


Chart VI.4: Student Dropout Rate in Impact Schools versus Control Schools

It is positive to note that since the impact project launch in 2018, dropout rates were halved in those schools, while slightly increasing in the control schools.

ICT Skills

Students who report they possess good ICT skills

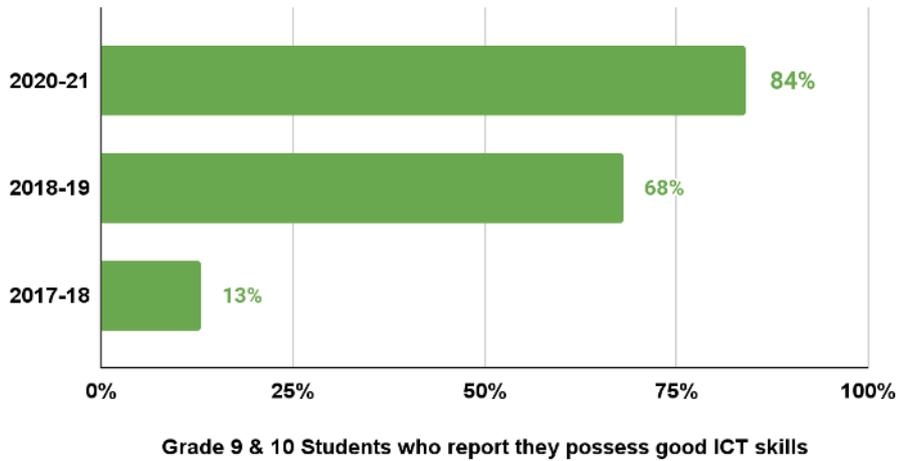


Chart VI.5: Impact Schools' Students' ICT Skills Rating from beginning to end of the project

The percentage of students in grade 9 and 10 within project schools who report having good ICT skills has significantly improved over the course of the project, starting at 13% at the beginning, and reaching 84% in the 2020/21 academic year. Students report that access to the eLearning centre, Camara Learning Studio, and most recently the formation of ICT clubs have contributed to this increase.

Teachers who possess good ICT skills

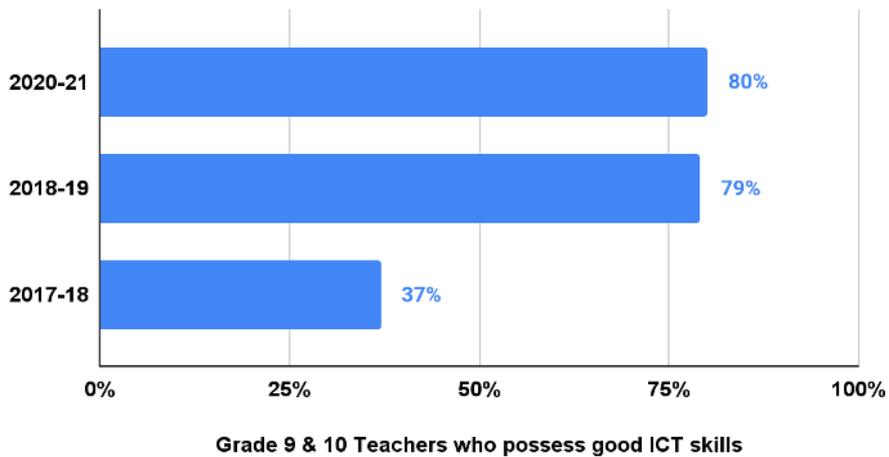


Chart VI.6: Impact Schools' Teachers' ICT Skills Rating from beginning to end of the project

Only 37% of Grade 9 and 10 teachers reported having good ICT skills in 2017/18 when the project commenced. After successive training and follow up support from Camara throughout this project, 80% of teachers in 2020/21 have good ICT skills.

These results show a clear positive trend in the Impact schools since the project has been implemented. It is unfortunate that the study was impacted by the pandemic during 2020, but the final results indicate that the learning loss resulting from Covid-19 school closures as well as the automatic passage to the next grade was not observed in the Impact schools, highlighting that the support we provided under this project was even more important post Covid-19 school closures.

Impact Schools Progress from Baseline to Endline

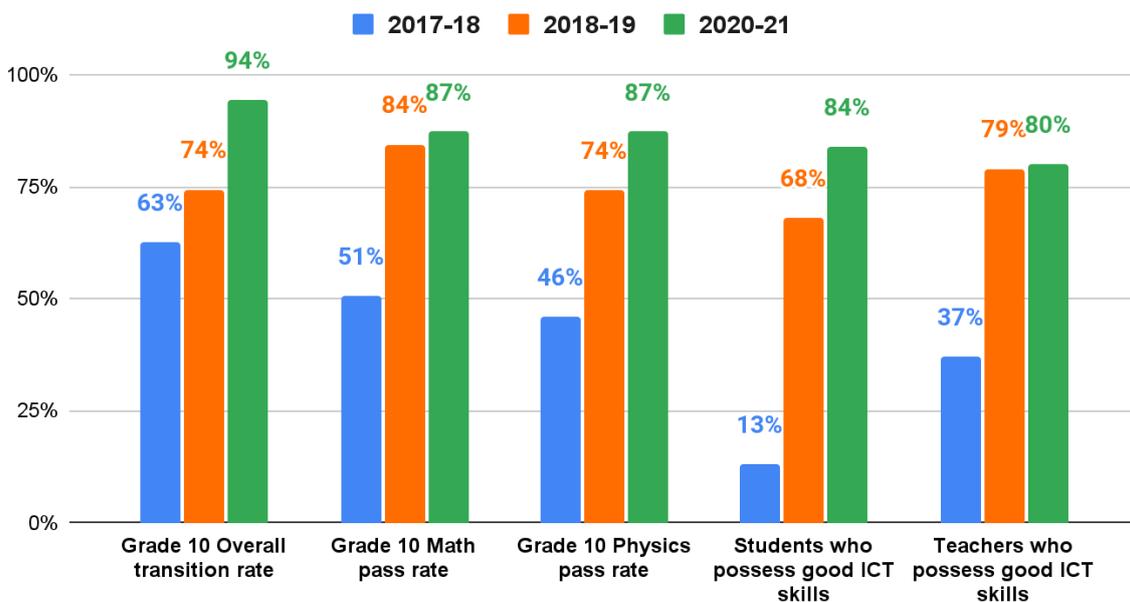


Chart VI.7: Overview of Impact Schools' Progress - From Baseline to End line

VII. Challenges and Key Lessons Learned

The support visits are crucial in getting feedback from the schools and solving any issues that may arise. It is also a process by which we can guide the schools continuously in improving their use of the eLearning centre and Camara Learning Studio. The increased contact and communications with these schools has also provided additional learning for Camara on some of the common challenges which schools are having in trying to fully integrate ICT into education even after they have received the equipment and training. We are now able to share some of this information and learning with the other schools we engage with as well as with the Ministry of Education for their future planning. The learning and information gathered

throughout the Impact Project will be considered and used within Camara for our own future project planning to ensure schools are fully supported and impact is maximised. Some of our learning is detailed below;

Lab Timetabling

Through our continuous support, the five schools have now set a timetable for using the eLearning centre during the week. This has introduced a more structured way of using the digital tools at the schools' disposal. It has also helped to ensure that all subject teachers have an understanding of when the lab is potentially free and so they can book and use the computer lab to help integrate ICT into some of their teaching and learning. The more access that students have to the computers through their learning, the more opportunity they will have to improve their digital literacy skills and become confident on using the devices.

Teacher turnover and need for additional teacher training activities

One frequent problem in schools in Ethiopia is high teacher turnover, especially in SNNPR. During the 2018/19 academic year, the national average for teacher attrition rate in secondary schools was placed at 3%, however, SNNPR had rates of almost double this figure at 5.6% for the academic year⁵, the highest of the non-emerging regions. During our support visits, a challenge reported by all schools was that a number of the teachers and school leaders that had received Camara's teacher training at the beginning of the project had left the school. We therefore decided to provide an additional 7-day training for the new educators to help ensure as many teachers as possible within the schools were able to benefit from the computer lab and integrate ICT into their teaching and learning across many subjects. This further training was provided in November 2019 for new teachers as well as those who had previously participated in training to further enhance their confidence and skills.

72 educators benefited from the additional ICT training offered to project schools. The training modules included active learning, timeline planning for Camara Learning Studio (CLS) usage, blended learning, the rotational model for blended learning, and incorporating CLS into teaching and learning. We have observed more engagement and commitment from the educators following the training. The teachers have also received Training of Trainers (ToT) and are actively encouraged to train new teachers that join the school.

Learners to computer ratio

Another feedback from the schools was that one eLearning centre with 25 computers was not enough to satisfy the needs of all students in grades 9 and 10 which has class sizes of around 60 students. The student to PC ratio was mostly 3:1 for class groups and one of the schools reported they were reducing the eLearning class sessions to 15 min per student in order to rotate three groups of 25 students in one period. This was resulting in students having insufficient time to develop their ICT skills and fully benefit from the computers within the lab.

⁵ Education Statistics Annual Abstract 2018/2019, Federal Ministry of Education of Ethiopia, 2019

To remedy this, Camara partnered with Learning Equality in 2020 to provide 20 additional computers in each of the five schools involved in the impact pilot. The additional computers were installed in January 2020. As can be seen in the graph below, usage time on Camara Learning Studio had started to increase before the schools closed in March 2020 due to Covid-19.

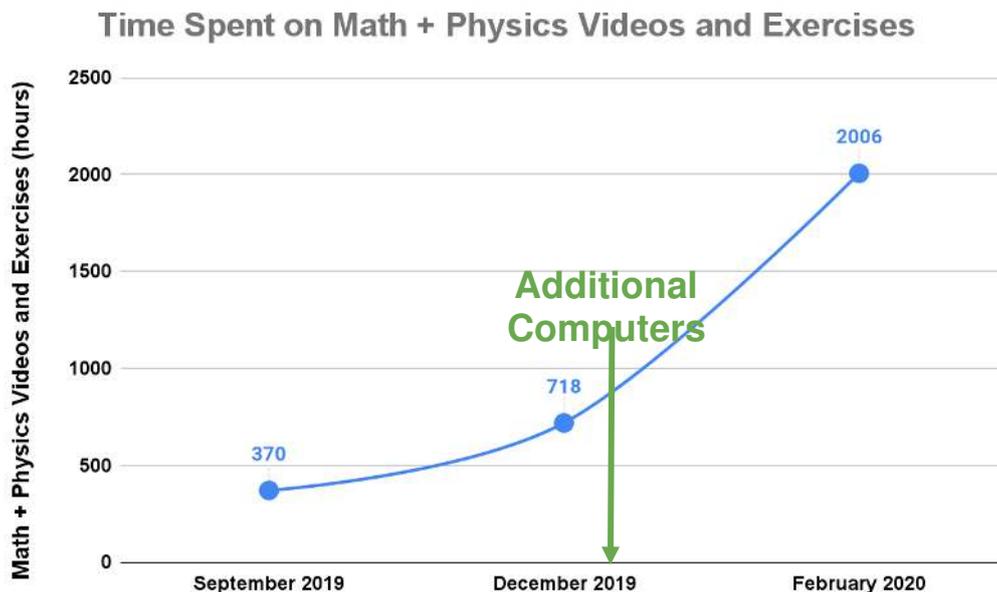


Chart VII.1: Time Spent on CLS before and after additional computers were installed

Note: The usage time records minutes of Maths and Physics videos watched and platform interaction by students through CLS, as well as time they took to complete assessments/exercises. When completing this project, the time where students used other resources available on the computers like textbooks, spreadsheets, word processors, educational games, and coding software outside of the CLS platform was not tracked. As a result of this project, we have initiated plans to develop and put in place a Network Monitoring System capable of tracking all of these activities across all the schools we work with.

Loss of Learning caused by Covid-19

During the last quarter of 2020, our team provided additional support for the Impact schools to enable students to catch up on their studies from the previous 9 months when schools had been forced to close due to Covid-19. Since students in grade 9 and 10 were granted automatic passage to the next level, having only studied one semester of the previous year due to Covid-19, it was important that they had the eLearning centres at their disposal outside class as well. Using CLS, students can follow their subject curriculum and complete assessments via digital content hosted so that their progress can be tracked, and results can be shared in real time. Following the advice and guidance that the CEE team provided to school leadership, all schools

which were involved in the Impact Project now allow students to use the eLearning centres outside of formal class when possible.

Electricity Supply

A big challenge in the area is related to the frequent power outages that occur in the schools. On average, the schools have indicated that recently power outages occur 65% of the time when the school is open. While power generators were available in all project schools, in 4 schools they were either not maintained or not being put to use most of the time due to the cost of running them. The impact is clear: when we collected data on CLS usage in the schools we have observed that in one school (Hayrenzi secondary school) which uses generators constantly, students have used CLS at least five times more than students in Worabe secondary school which doesn't use generators.

We have raised this critical issue with the zone education bureau. The head of the zone education bureau has committed to take action and try to resolve issues related to generators. They have mentioned that budget constraints can hinder their efforts though.

Technical issues

Related to the frequent power outages, there were issues throughout the project with the servers on which CLS was installed. The problems were solved thanks to our ongoing technical support visits, and with the support of the Learning Equality team when it pertained to Kolibri. Additionally, after a long spell without maintenance or use during the Covid-19 school closures, some computers had issues when schools initially reopened. Our technical team quickly resolved the issues at the start of the new school year but we do recognise that this intensive level of support is not available to all schools trying to utilize ICT for teaching and learning.

Limited time available for using hardware and setting up ICT clubs

In order to maximize use of the computer lab and provide students with increased access to computers to develop their ICT skills, the Camara team had discussed the value of starting an afterschool ICT club with school leadership within the impact schools. Students spoken to about ICT clubs during school visits outlined they were very interested in this idea. Camara therefore helped develop a curriculum for the ICT clubs which will focus on supporting students to develop their ICT skills, learn about coding and become fully aware of the educational materials available to them on the computers. ICT clubs have now been formed in all five Impact schools with proper roles and responsibilities assigned.

VIII. Stories of Change

Kalkidan is a student at Worabe Secondary and preparatory school. Founded in 1975, the school aims to provide quality education to students in the town of Worabe. Kalkidan is in Grade 11.



Kalkidan, 11th Grade Student at Worabe Secondary School

"I am currently taking my high school education in Worabe secondary school. In elementary school, I was not lucky enough to use a computer but, in this school, there is a better usage of computers. We can use the computers here in the lab to increase our educational capacity. I have chosen to study natural science and I can find different referral books and do my assignment here. It has better content, and it makes the difficult subjects easy for us. And by searching, I am able to know what I want to become in the future."

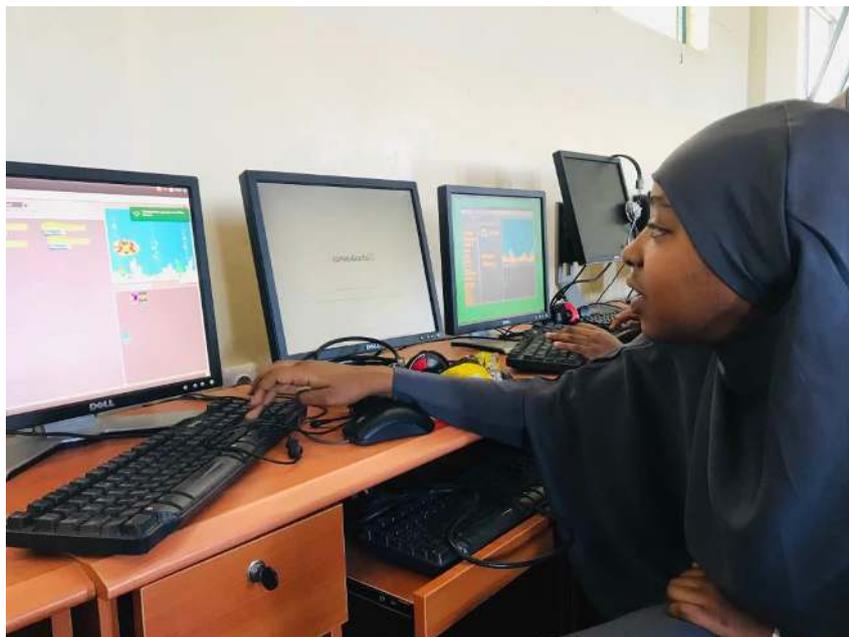
Her Maths teacher, Mr. Nasir Mohammed, had this to say:



Nasir Mohammed, Maths Teacher at Worabe Secondary School

“I have been in the teaching field for more than 35 years and have been giving education in this school for more than 11 years. Since the students started using the computers in this eLearning centre they have been more interested in their education. Previously we used to have so many challenges as they don’t have the basic knowledge of a computer but now, they have upgraded their science education and we have seen a good result regarding their education, I would like to see more students using more computers and it would be great if we can get more computers as the number of students is very high.”

Here is Hanan Nasir, an enthusiastic 17-year-old that goes to school at Hayrenzi Secondary school. She is also an active member of the ICT club set up in her school.



Hanan Nasir, ICT Club Member and Student at Hayrenzi Secondary

“This school has helped me a lot in different aspects. Students come here from different backgrounds. It has helped me to learn how to engage myself with other students. Since I started learning in this school, I have been attending e-learning classes and I have been getting so many benefits by using these computers. I am a natural science student, and the main subjects are Maths and physics. Now I am able to learn more by referring to different books and videos. The videos on physics subjects helped me a lot more than the lessons I take from the classroom. Not only for me but for the other students as well, especially for students who came from a very remote area, most of them don’t even know what a computer is. Now they are able to learn more about technology and use a computer and this is a big change for us. I have taken code training on Scratch from Camara and now have additional knowledge on coding. I want to become a software engineer and the basics for that is coding. It has helped me to create a game; the main idea of the game is for the fish not to be eaten and trying to escape. I have done this game in a very short time, I have used different instructions but am sure I will do better with more practice.”

At Gensilte secondary school, Netsanet Mengistu, an engaged teacher, shares her experience around this project.



Netsanet Mengistu, Teacher at Gensilte Secondary School

“I am a Maths teacher here at Gensilte Secondary school. Since the Impact project started we have seen a good change in students. We have taken teacher training and started to implement our learning with our students. The students were using the computers and learning a lot but then because of the pandemic Covid-19 we were unable to teach them.

The students have very much benefited by using the computers, they are interested in using and learning at the e-learning centre. We give them 40 min for each lesson. I know 40 min is not enough for them but to give access to more students that’s all the time we can give them. I can say I have seen good progress in students. We also take some exams from the computer content and give a test to our students. The students are also mastering the computers thanks to the e-learning centre.”



Logging in to Camara Learning Studio at Kutere



Learning how to code

Salima Sergutai is a 16-year-old student who is in grade 10 at Hulbareg school. She has 5 brothers and 3 sisters. This project's contributions toward her school have made a significant impact on her education.



Salima Sergutai, 16 year-old Student at Hulbareg

"The computers in my school have helped me a lot in different ways. For instance, I used them to learn more about laboratory things, for my Physics, Biology, and Chemistry lessons. I also use them to learn more about maths formulas and calculations."

The daughter of subsistence farmers, Salima aspires to be a doctor when she grows up.

IX. Going Forward

The results in this report show a clear positive trend in the Impact schools since the project has been implemented. Despite the fact that the study was impacted by the pandemic during 2020, the final results indicate that the learning loss resulting from Covid-19 school closures as well as the automatic passage to the next grade was not observed in the Impact schools, highlighting that the support we provided under this project was even more important post Covid-19 school closures.

Sustainability

Going forward, it is important to make sure all these hard earned gains in the schools are preserved and, hopefully, even improved. To this end, Camara Education will provide:

1. Additional capacity building to the Silte Zone education office, including developing a clear handbook/manual that educators can use in any school in their area.
2. Continuous updates on CLS as new content from MoE or other sources become available, and also when new features are added
3. Continue engagement with schools remotely, through telephone, Telegram channel (already started) or other social media platforms

Scalability

Camara Learning Studio's curriculum aligned content has been further expanded and includes all secondary levels and Science subjects, i.e. Maths, Physics, Chemistry, Biology for Grade 9, 10,11, 12. CLS can now be deployed in secondary schools throughout the country. Additionally, where Internet connection is available, we plan to put in place a Network Monitoring System capable of tracking all student activities remotely, and where possible provide specific support from a distance as well.

Camara Education will remain committed to supporting the delivery of STEM subjects, impacting and improving student outcomes across the country.