



Real Impact Through Technology

25
General Education Results Report 2018

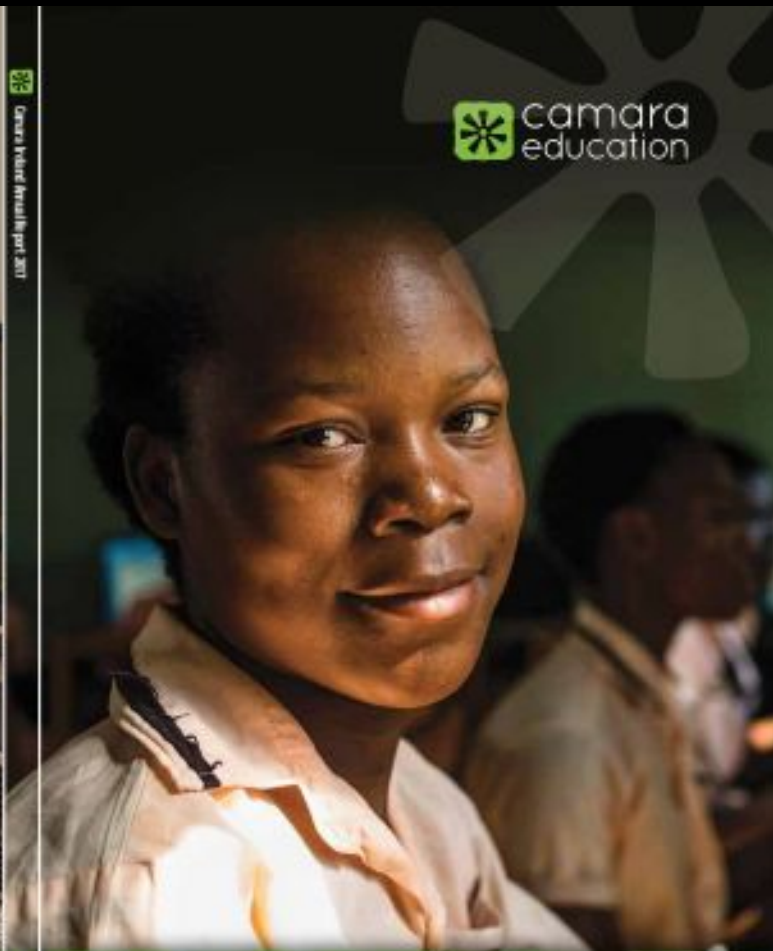


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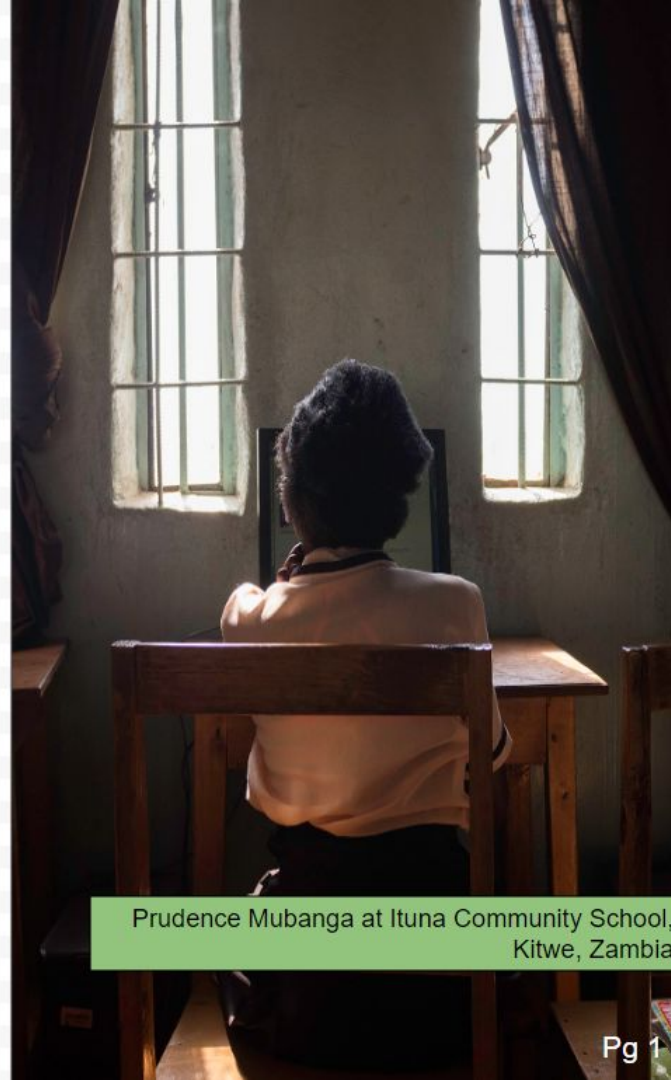
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Prudence Mubanga at Ituna Community School,
Kitwe, Zambia

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This section is all about Camara Education, our values, and the work we do. In this section, you will find out more about our strategic goals and our key challenges and achievements in 2018.
- 2** **Education**
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- 3** **Resources and Refurbishments**
This section covers information on our resource hubs and summarising the outcomes for 2018. It also explains our initiatives in the area of e-waste, detailing successes, and challenges.
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More....

About Camara



Suzyo Malakwa at Riverain Primary School,
Kitwe, Zambia

“You put a child
in front of a
computer and
what you have
done is give them
an education, an
education which
allows them to
learn not through
memorising but
through inquiring
- developing the
brain and critical
thinking in the
process.”-
Cormac Lynch,
Camara
Education
Founder

Photo

Letter from the Chairperson Paul Kenny

This year is my first year as Chair of the Board of Camara Education, having taken over the position officially in July, from Maria Mahon who chaired the board for 9 years, supporting Camara through its early development years and the achievements and challenges along the way. I want to thank Maria for all the support that she gave to me as I came to know this wonderful organisation. I wish Maria the greatest of success for the future.

We are now half way through our 2017 - 2020 strategy and making tremendous progress towards our goals of impacting another 3 million learners during these four years. 2018 was our second year of the iMlango2 Project in Kenya where we are working in 205 schools impacting 180,000 learners with an emphasis on Girls education. In Ethiopia we are in the final year of our Phase II agreement with the Ministry of Education and on track to impact over 1m learners during this 3 year programme. Dell again partnered with us this year to deliver this. These are really phenomenal numbers of learners impacted in Kenya and Ethiopia. In Ireland we are working with a number of partners such as ForÉige, Google and the ESB, to deliver programmes both in formal and informal learning environments..... This year we also launched our Zamstem project in Zambia. This project focuses on 55 schools with an emphasis on STEM subjects - we are in year one of a 3 year project with Irish Aid as our lead partner.

In Ethiopia we also launched our Product Development Centre where we now have a local team working on the development of education products and systems. This team is based in Addis and will develop the educational products we need to support the skills development of educators in the countries where we are working.

This year we were honoured to win a Good Governance Award for non-profits, presented by Carmichael House. This is an initiative that recognises and encourages adherence to good governance practice by nonprofits in Ireland. It was judged by our 2017 annual report. This was produced predominantly with the support of volunteers and staff and we are enormously grateful to our volunteers for all of their work on this report.

In May 2018 we saw the introduction of the (General Data Protection Regulation) GDPR which brought some new challenges to our operations in Dublin. Our refurbishment operations have been run for the past 13 years predominantly by volunteers who have come to us from all walks of life, some of whom have been volunteering with us since the very beginning. GDPR caused us to look at the security of our facility, our processes and our operations and our certifications as an organisation refurbishing IT and it drove a decision to close our refurbishment operations in Dublin and outsource this operation. This process had commenced before the end of 2018. This does not remove our reliance on the donation of computers and related technology. We continue to actively look for companies to donate to us but are in a position now to offer a more complete service to them. This change in how we manage our refurbishment was a huge step for Camara Education but it allows our team to focus on achieving the impact of the education programmes we are delivering.

In June John Fitzsimons moved on from Camara after 8 wonderful years, during which Camara grew significantly in terms of both the breadth and depth of the work that it does. As John departed Jean Cox-Kearns took on the role of CEO. Jean has supported Camara since 2010 in various ways, and was on the Board for 2 years from 2015 to 2017. It is fantastic to have her come on board now to take Camara through its next phase of development.

Photo

Letter from the CEO Jean Cox-Kearns

Like our Chair, this is my first year as CEO of Camara Education and what an amazing year it has been. I stepped into John Fitzsimons shoes in June as he stepped down after eight years of leading this organisation. I want to thank John for all the support he gave me during my first few months with Camara and for handing over the reins to such a solid organisation. The challenge this year for me personally has been to understand all the different programmes we are working on in Camara and to support the team to drive forward to deliver our objectives and goals set out in our 2017-2020 strategy.

In the six countries where we are working, we hit new records again during 2018 as we impacted 1,874 educational institutes and trained 8,291 educators. To do this we installed 15,572 computers kitted out with all the relevant software for the programmes are delivering and the result was that we impacted 544,212 students. What continues to be one of our key differentiators is our 'warmware' which is the training and support we give not just to the educators but to the school leadership teams and the ministry officials. All of these numbers in 2018 surpassed our achievements in the previous year, with the exception of the revenue generated which was €3m, a decline of 33% over the previous year, driven by us reaching the end of some funding mechanisms, and by the delay of some project funding into 2019. This year we putting substantially more effort into increasing the funding of the organisation.

In September we had our biennial Camara Education leadership conference in Ethiopia where we had our leadership team present from across our hubs, some of our board members and some external participants to support our activities. This conference focused on our Strategy, Leadership and Fundraising. It was really energising and productive to have our team together for a week and we all took home some key actions to keep us on our mission of transforming education through technology, empowering disadvantaged students.

Having made the decision to outsource our Dublin Refurbishment Centre we started to wind down our volunteer opportunities towards the end of the year. We have run our refurbishment activities predominantly using volunteers and have had people from many countries and many walks of life working with us there. From our Dublin workshop we have had over 180 shipments leave with product for schools in the countries we support and we have installed over 100,000 computers. We are so appreciative of our workshop volunteers and thank them so much for the impact they have made when volunteering with us. We are not turning off our need for product donations, computers are still key to the delivery of our education programmes and we need commercial organisations to continue to deliver technology to us.

With our focus on Sustainable Development Goal 4 - Quality Education, our ability to measure the impact of the content we are delivering through supporting and training the educators is key and our impact and learning team continue to progress more meaningful data in this area within our programmes. The impact of technology in the delivery of education is positive particularly when the content is relevant and aligned to the curriculum when the educators understand the technology and are trained to maximise the content and when the goals are clear.

What we have achieved this year is directly due to the Camara team and volunteers working creatively and collaboratively within the programmes and countries where we work to deliver results and impact learners, to the partners we are working with and the organisations that are supporting us. It absolutely amazes me how much we can achieve with our team and volunteers. I also have to call out the support of our board who have given me and the organisation so much time and support over the year through team mentoring, board activities, committees and specific work activity.

I am personally honoured and delighted to be heading into my second year with Camara Education and excited by what we can achieve together.

Yours sincerely,
Jean Cox-Kearns
CEO, Camara Education

Our mission is to transform education using technology to empower disadvantaged students.

Our vision is a world-class technology-enabled education accessible to all.

Camara has four values that we demonstrate every day through our behaviour and that are the essence of Camara. When you engage with Camara you will see these demonstrated:

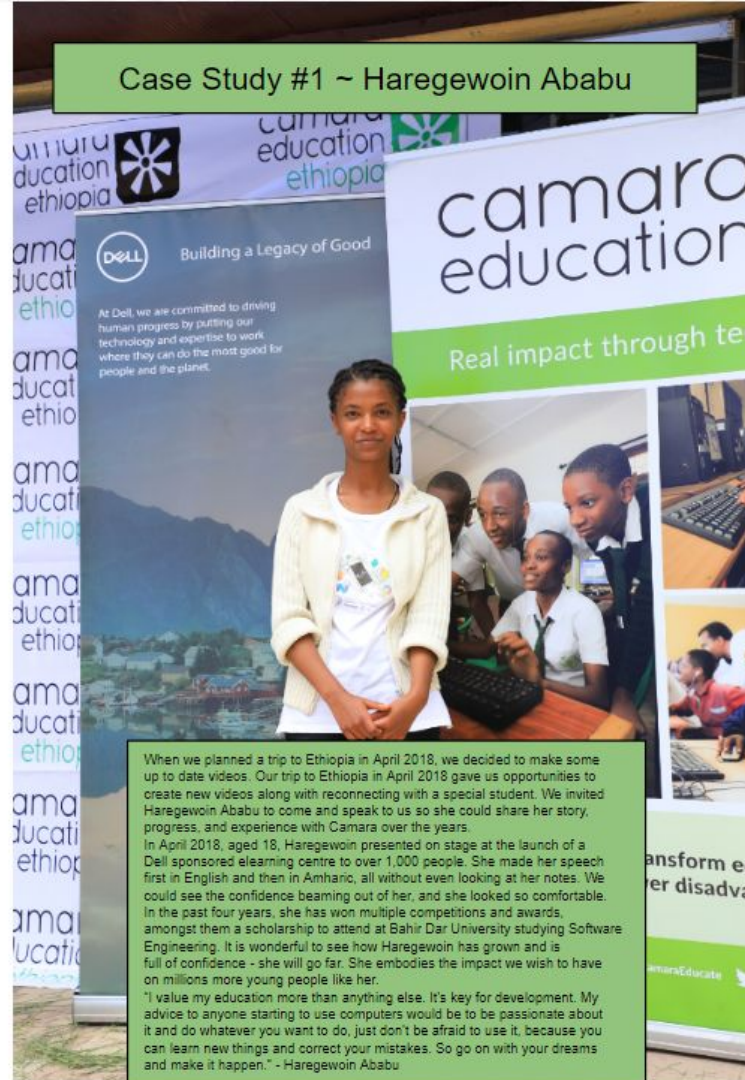
Committed: We deliver results

Caring: We care for our people and those we serve

Creative: We innovate to solve problems

Collaborative: We achieve more by working together

Case Study #1 ~ Haregewoin Ababu



When we planned a trip to Ethiopia in April 2018, we decided to make some up to date videos. Our trip to Ethiopia in April 2018 gave us opportunities to create new videos along with reconnecting with a special student. We invited Haregewoin Ababu to come and speak to us so she could share her story, progress, and experience with Camara over the years.

In April 2018, aged 18, Haregewoin presented on stage at the launch of a Dell sponsored elearning centre to over 1,000 people. She made her speech first in English and then in Amharic, all without even looking at her notes. We could see the confidence beaming out of her, and she looked so comfortable. In the past four years, she has won multiple competitions and awards, amongst them a scholarship to attend at Bahir Dar University studying Software Engineering. It is wonderful to see how Haregewoin has grown and is full of confidence - she will go far. She embodies the impact we wish to have on millions more young people like her.

"I value my education more than anything else. It's key for development. My advice to anyone starting to use computers would be to be passionate about it and do whatever you want to do, just don't be afraid to use it, because you can learn new things and correct your mistakes. So go on with your dreams and make it happen." - Haregewoin Ababu

Our Strategic Goals for 2017-2020



Students at Malleka Secondary School,
Addis Ababa, Ethiopia

Strategic Goal 1

Be the leading ICT education organisation in the countries we operate

Strategic Goal 2

Improve educational outcomes by designing and implementing all of our education programmes to meet needs of all they serve

Strategic Goal 3

Measure and act upon our educational impact

Strategic Goal 4

Have the best possible people working with us

Strategic Goal 5

Generate the resources required to deliver the strategy

Review of Achievements and Performance During 2018 Against Objectives in Our Strategic Plan 2018-2020

Key Achievements of 2018

As is mentioned in the Directors Report in 2018 we:

- Impacted 544,242 new learners through education programmes
- Reached 8,291 teachers and educators trained
- Delivered 15,572 devices to educational institutes across our network
- As part of the agreement with the Federal Ministry of Education of Ethiopia, Camara has provided 9,910 computers to public schools in Ethiopia, reaching 414 educational institutions

Another highlight of 2018 was the establishment of an Ethiopia-based Product Development Centre, which led to the development of a number of new products and systems - more details on this in the education section on page X.

The iMlango transition (GEC-T) project began in 245 schools in Kenya and Camara [Education/Kenya] began a number of sub-projects as part of the iMlango programme, such as the Education Development Trust project in 16 schools and the Discovery Learning Alliance project in 20 schools.

Camara Education's fully funded project, 'Impacting Learners' performance in Science, Technology and Mathematics Education (STEM) subjects', officially kicked off during a well-attended field visit in Silte Zone at the Worabe secondary school, in SNNPR, Ethiopia. The launch was attended by a number of officials from the FDRE Ministry of Education, i.e. the Planning and Resource Mobilisation Directorate Director, the School Improvement General Directorate Director, the Directorate Director of Center for Education ICT (CEICT), and the Sr. Expert of M&E and Resource Mobilization. Other attendees included an Education Councillor from the Finnish Embassy, the ICT Directorate Director from SNNPR Education Bureau, Silte Zone Education Office representatives, as well as school directors, parents, teachers and learners. The implementation of the project aims to improve learners' results in Science and Maths subjects, equip them in transitioning from Grade 10 to Grade 11 and assist learners in transitioning to science streams. However, the goals of this project do not stop with learners, but also focuses on their respective leaders, teachers, and the education system itself.

In January, Camara Education Ireland celebrated an exceptional milestone with the start of the 'NUI Certificate in Digital Creativity in Youth Settings', designed and delivered in partnership with the Department of Applied Social Studies at Maynooth University. Eleven youth workers and educators participated in the programme which was designed for those who wish to develop a specialism in the emerging field of digital creativity in youth settings. The certificate culminated in October with a student exhibition event where students showcased their projects to demonstrate their new specialism for designing and delivering innovative, digital creativity projects for young people. The programme is unique in Europe and utilises an innovative learning approach to develop digital creativity among young people in youth settings.

Camara Education was shortlisted in the Good Governance Awards and was the winner of Category 3 (organizations with an annual turnover of between £1 million - £5 million). Developed by the Carmichael Centre, this award recognises, supports and encourages adherence to good governance practice by community, voluntary and charitable organisations in Ireland. We were also finalists in the UK Social Enterprise Awards for two categories: International Impact and Environmental Social Enterprise.

Camara [Education/Ethiopia] launched a new eLearning centre in Shimelis Habte Secondary School in Addis Ababa in conjunction with our partner Dell who has provided a grant of €520,000 in cash and computers as part of a €9.7m project to support 1,250 schools in Ethiopia. While there, we met with quite a number of students who talked about the hugely positive impact a technology-enabled education was having on their lives.

Camara [Education/Kenya] successfully secured funding for and began the Milano Foundation project in St Martin, Kenya. The 2-year project will ...

Camara Education also initiated the Headley Trust project in Kenya, Tanzania and Zambia, and launched the Camara Education Training Quality Assurance Policy, which will standardise Camara Education's training.

In addition, Camara Education presented at two global conferences. At the Nethope Global Summit, we presented our overview for implementing advanced analytics in Camara, and at the UNESCO Mobile Learning Week, our presentation focused on supporting teacher professional development through an online sustainable platform, specifically Camara Learning Academy.

Camara Education Ireland completed the implementation of the STEM in Youth Work project in partnership with the National Youth Council of Ireland (NYCI). This project is supporting youth workers to inspire young people to create, invent and make with Science, Technology, Engineering and Maths (STEM). As well as receiving a day of hands-on Techspace Maker Training, youth workers will receive a grant for equipment that can be used to deliver technology-enhanced activities spanning electronics, robotics and coding to music, arts and crafts. Youth workers will also have access to follow-up support, resources, an online community of practice and much, much more. Young people will have the opportunity to showcase their work at regional and national events, including the amazing annual Creative Tech Fest. This project is delivered through the TechSpace Programme and funded by the Science Foundation of Ireland's Discover Programme with additional funding from ESB and Inver. Thanks to this project, we achieved the following:

- 318 Youth Workers participated in 39
- 4,871 young people had access to fun STEM learning outside of school
- 61 Inspiration Boxes
- 55 STEM Projects @ ESB Creative Tech Fest
- 13 STEM in Youth Work Award Winners
- Successfully secured additional Dell funding for Ethiopia

About Camara

Jean Cox-Kearns coming onboard as the new CEO was a major highlight given her experience in services and operations focusing on regulatory compliance. Prior to officially joining the Camara team Jean was on the Board of Camara Education Limited for two years and also worked with Camara during her previous role with Dell. Before Camara Jean ran a Global Environmental Compliance Solutions Division of the Reverse Logistics Group, (HQ Munich, Germany) supporting the development of regulatory compliance solutions for many of the major global IT companies and retailers. Jean also spent 17 years in the IT Industry working for Dell with responsibility for regulatory compliance programs. She has travelled extensively in Africa managing both regulatory, diversity and education programs for Dell in recycling and education areas. Jean also holds a number of Directorships in Ireland.

Key challenges:

- In 2018 a number of existing projects have wound down, or come to a natural conclusion. Having been focused heavily on implementation over the last number of years we did not focus enough on our pipeline of future projects. As a result we are in the middle of a more fallow period which has seen our overall revenue generation drop. However, a number of exciting proposals are on the horizon as we rebuild the fundraising team with the addition of a UK based team member and an Ethiopian based team member.
- 2018 was a challenging year for Camara Zambia in terms of sales under both social enterprise and within our Irish Aid funded ZamSTEM project. A cholera epidemic which heightened at the beginning of 2018 resulted in a national closure of schools and the subsequent inability to access school decision makers in a sales capacity. This is further outlined on page X.
- Camara Ireland received a €530,000 grant from google.org, the philanthropic arm of google, to deliver computer science training, equipment, and ongoing support to over 300 youth workers and 48 senior managers in 60 Foróige youth groups around the country.
- The inaugural TechFéile took place in at the Limerick School of Art & Design in April 2018. Over 200 students, from Gaeltacht Schools and Gaelscoileanna around Ireland took part in the event, to celebrate creativity through technology. Workshops took place on a variety of topics across media and technology and entertainment was provided by the bands KILA and TOGRA. Media workshops on the day included Weather Workshops with TG4, Sports Commentary with Nemeton, Acting with Fíabín, Re-voicing Animation with Telegael, and Mojo with Nuacht TG4. The STEM Workshops included, Circuit building with Moonfish, Programming with GráTek and how to create a Hologram. Students also had an opportunity to try VR and Oculus Rift, as well as 3D printing.

Refurbishment and Social Enterprise:

- In July Mark Johnson joined Camara Education as its Chief Commercial Officer with responsibility for Social Enterprise, Dublin and UK Refurbishment operations and Africa Education Hub operations. Mark joined after volunteering to assist Camara and after an extensive career in consulting with Accenture and Cognizant Technology Solutions where he was the Head of Strategic Business Development.

About Camara

Refurbishment:

- In the latter quarter of 2018 we developed a partnership and commercial arrangement with AMI, Ireland's leading secure IT recycling company. In early January of 2019 this came to fruition and we announced the outsourcing of our Dublin refurbishment operations to AMI.

Camara will continue to engage directly with donors, while the collection, processing, and refurbishment or reselling of IT equipment will be taken over by AMI which will refurbish and ship the Camara supplied second-hand IT hardware for disadvantaged school children in Ireland and Africa.

Equipment that is unsuitable for educational use will either be recycled or re-sold by AMI and the funds used to support Camara Education's activities. This arrangement also ensures that donor hardware is processed using the strictest GDPR-compliant data security standards. AMI operates to the highest international IT disposal standards and is the only Irish company to be certified to the ADISA IT Disposal Industry Standard.

Jean Cox-Kearns, CEO Camara Education, said: "The partnership will enable us to increase the number of computers we can get to classrooms in Africa and Ireland. This is so important for schools and youth centres, as they can offer not just a better education, but provide life-changing opportunities and skills to the millions of students for whom the advantages of technology are often out of reach."

- The Camara UK refurbishment hub met all of its targets, shipping XXXX computers to Kenya, Tanzania and Ethiopia. The hub continued to operate sustainably and independently from Camara Education Ltd and was in fact a net contributor.

Social Enterprise:

- Our social enterprise activities had a mixed year. Camara Education Ireland was highly successful and generated €252k from social enterprise activities. Tanzania started the year badly as a result of organisational changes but our new Country Manager (Mwasi Wilmore) re-organised the team and through the adoption of a professional approach to sales planning the team achieved 100% of its annual target. The majority of this being achieved in the second half of the year. This continued into 2019 and clearly demonstrates that the social enterprise model can work in the right environment.
- The "right environment" is a critical to achieving success and 2018 clearly showed this as it was, overall, a difficult year with social enterprise objectives missed in all countries except Tanzania and with the Macro environment playing a significant part:
 - In Zambia the previously mentioned cholera outbreak restricted travel and the ability to connect with schools and other institutions. Government funding of schools, which had seen significant year on year increases in education, dried up as successive international agencies withdrew support.
 - In Lesotho funding has generally been provided by non-government funded agencies such as the Lesotho Communications Authority and Vodacom. However, this is limited. Direct school funding is a challenge and at the time of writing the teachers are on a long term strike. Ironically, one of the teacher's issues is lack of textbooks. An issue the Camara approach and EdTech tools resolves!
 - Building effective sales teams in country has been a significant challenge for all countries. Kenya is one such example where we operated without an effective sales team as a result of this for the majority of the year. Zambia similarly. This was a consistent theme across all of our Africa hubs except Tanzania where we developed the existing technical team to operate effectively in sales.
 - Social Enterprise is not in operation in Ethiopia due to government restrictions.

Pages 11-14 - partners logos etc

Case Study #3 ~ Isaac

Isaac attends Arap Moi Primary School in Nairobi, Kenya. He expressed gratitude for the education that Camara has helped him and his classmates receive, especially in helping them learn English.

His favourite ways to learn on computers are by playing mathematics games, reading books, and learning about the history of other cultures. He wants to be a pilot and fly people all over the world to help them escape enemies. Camara has helped children like Isaac discover a world outside of Africa, giving them access to programs that allow them to see what the rest of the world is like for the first time. The same way that Camara has helped him, he wants to do the same and help others.

Isaac wants to be a pilot and fly people all over the world to help them escape enemies. Camara has helped children like Isaac discover a world outside of Africa, giving them access to programs that allow them to see what the rest of the world is like for the first time. The same way that Camara has helped him, he wants to do the same and help others. "I would like to say thanks for Camara. They've helped us to read many books and to know how to speak English." -Isaac



Education should be a right of all children and youth, no matter who they are or where they are from. That is why our initiatives focus on supporting educators and learners in disadvantaged communities and why our education officers live and work in the communities they support.

The year 2018 was one of significant progress for the Education Department towards achieving the 2017-2020 Strategic Plan. Early this year, we began our biggest innovation in education projects to date by creating the Education Software Development Centre in Ethiopia. Under the supervision of the Education Department, a team of talented Ethiopian youths, are thinking beyond traditional learning systems to develop new products and ideas. The centre enables Camara to enter the modern era with education software development services tailored for education in the contexts where we work. To date, we have developed the Camara Learning Academy (CLA), an online professional development training platform for teachers; the Camara Learning Studio (CLS), a custom platform-based learning management system for learners providing curated open educational resources and learning assessments in an offline or online low-resource environment; and the Camara Network Management System (Camara-NMS), an online system allowing us to monitor the health and usage of our eLearning Centres. The team also made improvements to Camara Education's long established product offering, Educational Builds, which are offline educational resources packaged into our uniquely branded Ubuntu package. Our CLS is installed on top of our builds and used as an access point by our learners and educators. Our educational resources offer end-to-end education process support, initial training, virtual or on the ground support, and multi-level analytics tools.

Throughout the year, Camara Education has delivered ICT-focused, needs-driven solutions to schools, providing learners with access to technology, training to educators and support to educational leaders.

In the course of the year, we have updated our Education Training Quality Assurance (QA) Policy and further developed the ICT-enhanced Teacher Development (ICTeTD) framework that enables Camara Education to provide world class trainings to educators and school principles principals. The Education Training QA Policy ensures that all the programmes developed are of high quality through a rigorous vetting process that beginnings with Training Needs Assessments (TNA) to ensure that all courses

created are relevant to the capacity needs of the institution and educators. Furthermore, the UNESCO ICTeTD framework entails that all Camara Education courses are developed to cater to the different levels of ICT skill and integration; from emerging, applying, infusing and transformation. The framework highlights and details indicators for Knowledge, Skills and Attitudes with regards to Technology, Content and Pedagogy (TCPK), from the current levels teachers could be, to a pathway they would need follow for them to successfully integrate ICT resources and transform education in their institutions.

We make sure that children of all genders, age, abilities and backgrounds have an equal chance to learn and thrive.

Removing barriers to girls' education is one of the key focuses of the 4-year iMlango DFID funded project in Kenya. The project aims to help girls to stay in primary school and support them to transition to higher levels of education by helping them improve their maths and literacy skills, and develop the life skills to navigate the next phase of life. In this project, both the CLA and the Camara-NMS have been successfully implemented.

In May 2018, the Education Department, in collaboration with Camara Education Ethiopia and the Ethiopian Federal Ministry of Education, implemented the Impact Project - Ethiopia: Impacting learners' performance in STEM (2018-2020) in Silte Zone. This project aims to improve the learning outcomes and life opportunities of Grade 9 & Grade 10 learners in Maths and Science subjects using the CLS in the target area of Silte Zone in Ethiopia. Following seven months of implementation, schools, educators and learners already engage frequently with our educational product.

We are confident that for the last 2 years of the strategic cycle, more schools in the countries where we work will benefit from our needs-based ICT in education solutions.



Lightwell Banda at Kaloko Primary School
Ndola, Zambia

Over 10,000 computers dispatched, contributing to make Camara Education Ethiopia one of the leading ICT education organisations in Ethiopia

Almost 2,600 educators trained, and 390 educational institutions supported, helping improve educational outcomes. Over 200,000 learners impacted as a result of all our operations including:

Launch of the pilot project titled "Impacting learners' performance in STEM 2018-2020", an impact focused project in Southern Region of Ethiopia, targeting 5,440 female and male Grade 9 & Grade 10 learners, and directly & indirectly impacting 250+ teachers and school leaders. 61 educators trained and 4,740 learners impacted in 2018; Completion of Africa Code Week 2018, providing training to 202 educators and impacting 64,064 learners; Learning Equality: Kolibri hardware grant programme providing training to 19 educators, supplying 22 laptops and impacting 1,171 learners.

	Goal	Actual
Learners impacted	354,034	218,504
Educators Trained	3,542	2,598
Educational Institutes supported	708	390
Devices Delivered	17,703	10,425



1. Key Achievements in 2018

Camara Kenya (CKE) was registered under the Federation of Kenya Employers in 2018, giving it a platform to discuss employer issues with other stakeholders on the ground.

CKE was registered by the Technical and Vocational Education and Training Authority (TVET) as a recognised training institution.

Successfully completed the Aga Khan Foundation Project - implemented in 63 schools in Kenya and Uganda.

CKE set up a Sales & Marketing table during the annual Kenya Primary School Headteachers Association (KEPSHA) meeting held in Mombasa in August. This is a meeting that is attended by 4,000 primary school headteachers across the country, which gave Camara Kenya the opportunity to display its product and interact with the schools' leadership.

	Goal	Actual
Learners impacted	105,782	107,874
Educators Trained	3,354	2,952
Educational Institutes supported	429	441
Devices Delivered	957	1,146

2. Key Challenges in 2018

Social Enterprise was suspended in September 2017 and resumed in May 2018. There was also difficulty permanently filling the Sales Manager role. As a result, CKE's product sales were negatively affected and the hub only reached 47% of its sales target.

Account audits for 2015, 2016 and 2017 were submitted but are yet to be closed by the auditors.

Enrollments in Camara Kenya's Cisco course were only a third of what was expected, which resulted in both trainers facilitating the course having their contracts ended and the course finishing in September.

3. Strategic focus for 2019

Increase client base to improve the hub's product sales. A new position, titled Business Development Officer (BDO), has been created to take up the challenge of improving sales and marketing of CKE's products.

Improve financial management and accountability.

Achieve hub compliance with all relevant national regulations and internal controls.

Provide staff training and internal support mechanisms to improve performance, team morale, and staff retention.



Students at CZM Dambwa, Zambia

1. Key Achievements in 2018

Our strategy, material and services complement the Ministry of Education and Training's newly introduced curriculum through our relevant educational content, including videos, e-books, PDF-books, wikipedia and subject specific application software we provide. Camara Lesotho's (CLE) strategy and services also support Lesotho's Vision 2020, the National Strategic Development Plan and Lesotho's Education Sector Strategic Plan 2016-2026.

CLE connected 16 schools to the internet under a project sponsored by Lesotho Communications Authority (LCA) and Vodacom Lesotho, with a provision of 30 Gigabyte data per month. Of the 411 teachers trained, 207 of them were sponsored by LCA under School-Connect Project and Chief Executive Officer's Corporate Social Initiative, which provides 24 laptops, 1 educational content server, 1 modem, 1 projector and a projector screen to three Secondary Schools per year. CLE provides delivery of hardware, software installation, teacher training workshops, network configurations, monitoring and evaluation of these projects.

CLE, in collaboration with StanLib, Action Ireland Trust, Denmark Lesotho Network, UNICEF Lesotho, Ramela Associates, South African High Commission and Thaka-Khoali initiated, implemented and completed E-learning Center Project for 15 Secondary schools, 1 College and 4 Primary Schools by the year 2018. A total of 479 devices were delivered to schools, 248 devices were sponsored by the aforementioned organisations in support of ICT deployment in the education sector.

The new project from Lesotho Communications Authority, the Digital Literacy Training for Teachers, was introduced.

	Goal	Actual
Learners impacted	8,000	31,933
Educators Trained	394	411
Educational Institutes supported	46	139
Devices Delivered	271	479

2. Key Challenges in 2018

Payment delay from one of our major sponsors hindered our operations.

The absence of an organisational vehicle made it difficult to operate.

Issues accessing Monitoring & Evaluation server after the submission of information by ONA (<https://ona.io/home/>) application caused difficulties.

Due to a teacher strike our data collected from schools was limited.

Management of inventory in TASbooks system and physically was a big challenge.

The management of non-current assets, recording of cost of sales and the method of charging depreciation were not easy to be recorded in TASbooks.

VAT dilemma with LRA (Lesotho Revenue Authority) for LEO 15 containers from London.

3. Strategic focus for 2019

The LCA Project (Digital Literacy), which requires CLE to train 400 school teachers across 40 schools per year. This is going to increase the number of impacted students in schools, training sales and high use of ICT.

Building relationships with stakeholders to enhance the use of ICT in schools.

Implementing new marketing strategies to increase product sales, which will focus on market penetration, market development and product development to increase sales and support organisational operations.

Offering the RACHEL program to every school that works with us to equip them with more materials and make learning much easier for students and for teachers to demonstrate.

Initiate, sign and implement collaborative Memorandum of Understandings with strategic partners, especially where such relationships are only verbal agreements.

Diversify CLE's revenue streams to avoid falling short of our goals if one major product is affected by unforeseen issues.

1. Key Achievements in 2018

Camara Tanzania (CTZ) reached out to more schools in 2018, attending more than 15 National school events with representatives from more than 3000 schools and visited half of the country's regions reaching out to additional schools.

CTZ sponsored the Quran competition, providing a platform to reach 40,000 stakeholders within the education sector, and received a vote of gratitude from the Prime Minister, Kassim Majaliwa.

CTZ appeared in five newspaper publications, two blog articles and one press release from the Prime Minister's office, which was circulated in all media across Tanzania.

We expanded our network of CSR partners in various industries, including telecom, energy and banking, and worked with Access Bank to sponsor ICT labs in schools. We are also in discussion with four other major banks and two telecom companies with the goal of partnering with them.

CTZ attained an MoU with the Christian Social Service Commission (CSCC), an umbrella for more than 500 church owned education institutions in Tanzania, to provide financing to the schools with CSCC as the financial guarantor. The program will launch in Q1 2019 and is expected to have a significant impact on revenue.

Phase One of the Kolibri Hardware grant was completed and funds for Phase Two have been secured. Phase Two is expected to be completed in August 2019. Tsh 32 Mil was generated from this project.

	Goal	Actual
Learners impacted	13,800	12,829
Educators Trained	402	298
Educational Institutes supported	46	57
Devices Delivered	1452	1091

2. Key Challenges in 2018

Delays in obtaining equipment had financial, operational and reputational ramifications. The cessation of the iKnowledge project was a challenge, as it was a key component of project revenue. Changes in the tax structure resulted in unforecasted expenditures and an increase in product pricing.

3. Strategic focus for 2019

Increase the number and type of project and partnerships.
 Increase our sales and marketing efforts to maximise our impact and increase our income.
 Lookout for more local partners to work with and share experience. Partnerships have proved to be very valuable and beneficial in long term.
 Sales and marketing efforts will be particularly focused on working with local companies and providing them with CSR opportunities to become involved in CTZ activities, whether it be in the form of financial donations, equipment donations, time and volunteering, or skills and services in kind.
 Increase operational efficiency to reduce equipment faults, reduce time to market and e-waste.
 Invest in staff training to equip Camara Tanzania staff with new skills and knowledge needed for them to exceed in their roles.

1. Key Achievements in 2018

Educational Content and assessments aligned to the Zambian Junior Secondary Maths and Computer Studies Curriculum was prepared and integrated with the Camara Learning Studio.
 Financial audits for 2013-2017 were completed by external auditors and recommendations were acted upon.
 73% of schools which Camara supported in 2018 were those which had purchased Camara educational packages in previous years and returned requesting additional ICT hardware or capacity building. This highlights customer satisfaction and that schools are happy with Camara's educational products
 2018 saw Camara Education Zambia's first all-school network installation which allows campus-wide access by teachers to educational content provided by Camara

	Goal	Actual
Learners impacted	23,500	6,458
Educators Trained	635	317
Educational Institutes supported	195	98
Devices Delivered	3,365	618

2. Key Challenges in 2018

2018 was a challenging year for Camara Zambia in terms of sales under both social enterprise and within our Irish Aid funded ZamSTEM project.

A cholera epidemic which heightened at the beginning of 2018 resulted in a national closure of schools and the subsequent inability to access school decision makers in a sales capacity. The epidemic also resulted in government direction to schools to improve water and sanitation facilities. This placed additional financial strain on schools as these infrastructural upgrades were not budgeted for but mandated by the Ministry of General Education (MoGE) in the absence of supporting funding.
 Recruitment of personnel to the sales & marketing department was a significant challenge given organisational resources and candidates' expectations.
 Due to financial challenges within schools and across the MoGE, many schools which had planned on purchasing Camara educational packages or who highlighted a need for ICT hardware, did not have the resources to do this. This impacted upon both social enterprise sales and reaching targets set out under the Irish Aid-funded ZamSTEM Project.
 Match funding required to purchase hardware required for ZamSTEM Maths Pilot project was not secured, therefore ICT hardware was unable to be purchased as planned.

3. Strategic focus for 2019

Reach ZamSTEM Year 1 revised targets under period of no-cost extension by September 2019
 Build relationships with corporations and donors within Zambia to increase support to schools under Corporate Social Responsibility.
 Develop opportunities for partnership with organisations which have previously been competitors to Camara Zambia by offering Camara Services and Products to the schools they are supporting which would increase impact such as Capacity Building or Camara Learning Studio.
 Negotiate contract and project scope for Year 2 ZamSTEM funding with Irish Aid which would see expansion of project into additional Provinces within Zambia
 Increase number of funding applications being submitted to ensure match funding for ZamSTEM Project and provide some financial support to schools requiring Camara Educational Packages.

1. Key Achievements in 2018

During 2018, Camara Ireland's team expanded with new funded partnership projects that allowed us to widen our reach. To support a collective vision for so many new staff, we held a strategic review in June that set our direction for the next three years. During this process, we gained real insight into the range of skills, knowledge and experience of the team, which spanned education, technology and the creative arts.

In 2018 we had a number of key moments that highlight the impact of our work:

- The first TechFelle - a celebration event in Irish for young people who are part of Clar TechSpace an innovative programme funded by the Dept of Culture Heritage and the Gaeltacht
- Launched Computer Science education programme funded by Google and led by Camara Ireland in partnership with Foróige a National Youth Development Organisation
- Launched MathWhizz online numeracy project funded by Linesight in partnership with the Irish Youth Foundation
- Developed online courses and Community of Practice for youth workers funded by the Dept of Children and Youth Affairs
- Secured ESB (national electricity supply board) sponsorship for Creative TechFest as part of their Energy for Generations initiative

The above achievements signify the recognition of our work by statutory and corporate representatives who are attracted to the quality of our outputs and our progress towards better outcomes for all young people.

	Goal	Actual
Learners impacted	35,369	30,987
Educators Trained	2286	1,373
Educational Institutes supported	485	472
Devices Delivered	2333	1602

2. Key Challenges in 2018

One of our key challenges in 2018 was managing growth and ensuring that the quality of our work was not compromised as we scale. We placed a strong emphasis on getting key hires right even if at times it meant pushing project start times forward. This involved regular communication with key stakeholders and by the end of 2018 we were seeing the benefit with a dynamic team in place with complementary skill sets. With a strong focus on project deliverables at times our social enterprise activities were not prioritised.

3. Strategic focus for 2019

A strategic focus for 2019 is developing and refining our social enterprise products and services to create an organisational balance for sustainability.

Our training, service and hardware will create the environment where:

- Youth education settings are resourced to access training
- Educators are actively engaged in tech-based professional development and using technology in their day to day practice
- Youth education settings collaborate in delivery of learning outcomes

The Outcomes:

- Educators are champions for the impact and experts in the delivery of technology based programmes
- Learning outcomes in a range of settings are recognised as valid and contribute to education progression.

We want our goals to relate not only to service delivery but also to raising our profile as an influencer in technology based educational and youth development practice and policy. We will be actively publishing reports and presenting our findings and seeking opportunities to disseminate the impact of our work.



Students at Firhouse Educate Together National School
Dublin, Ireland

Impact and Learning

Camara Education has designed a monitoring & evaluation system that is aimed at capturing good practices, identifying areas that need strengthening and measure our impact. Results from our continuous monitoring and evaluation exercises were vital in helping us design more relevant projects and improve the services we provide for schools and other end users. In early 2019, Camara Education conducted a survey on a sample of 110 schools that received Camara computers and training in 2018. Data on access and use of Camara provided computers are collected and perception of learners and educators on the impact of Camara's work in education is also examined. In Camara Education, we believe that the provision of ICT in schools should be supplemented by the use of relevant curriculum materials that focus on specific curriculum and need to be supported by continuous teacher development and pedagogy. This report focuses on impact at the short term level and further studies need to be conducted to understand the changes at the outcome level and the long term impact of Camara's activities.

A sample of 110 schools were selected for the survey but only 90 schools were visited due to financial constraints. A total of 90 School principals, 270 educators and 1271 learners were interviewed. Highlights of main findings from the survey are presented in this report. Key indicators presented in this report include:



Bwalya Mwaba at Chibansa Primary School
Kitwe, Zambia

Computer share and use among learners

This section presents how computers are shared among learners and how and for how long are the computers being used by the learners. Learners were asked how many students share a single computer and for how long they have accessed the computers in a week. Access of computers is considered from Formal access and Informal access

Formal Access: Refers to timetabled access to computers by learners. Learners report on the frequency of access per week and for how long the access lasted

Informal Access: Refers to the access of computers by learners outside class hours. Learners report on the frequency and length of their access to computers

Learners attitude towards learning

Learners were asked on how they are using computers and how the educational content has impacted their attitude towards learning

ICT use by Camara trained educators

How educators use the Camara provided computers at basic level and advanced level is explored in this section

Impact of Camara Education on educators

Camara Education provided ICT equipment and training are aimed at developing educators ICT skills and improving their mastery of content and attitude towards teaching. The educators were presented with statements related to ICT equipment, software, and training and asked if they Strongly agree, Agree, Agree nor Disagree, Disagree or Strongly Disagree with the statements

- Timely resolution of problems you have had
- Attitude of Camara staff
- Value for money

The score for the ten performance areas is then aggregated to generate an overall performance score that will indicate how the hub performed against the expectation of the school leaders.

Hub Performance

Perception of school principals on the performance of Camara Education. This is measured through the use of a Performance Scorecard whereby school leaders rate ten performance areas of the Camara Education hub in their respective country. The ten performance areas are Understanding your needs

- Provision of relevant training
- Provision of reliable hardware
- Provision of relevant software
- Provision of quality support
- Ease of communicating with Camara
- Meeting agreed on deadlines



Ethiopia Trip April 2018

Computer share among learners

According to our data, 22% of the surveyed learners reported using a Camara provided computer by themselves without having to share it with another learner. Compared to 2017, this figure has increased by 6%. The percentage of learners that reported sharing computers with one other learner also increased from 35% in 2017 to 39% in 2018. The results also indicate that the percentage of learners sharing a computer with two or more students decreased from 2017.

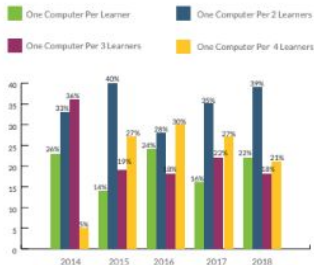


Chart 1: Computer share among learners in Ethiopia

Computer access by learners

In 2018, the timetabled access of computers by learners in Ethiopia was 78 minutes per week per student. This is a five minute decrease from what was reported in 2017. Informal access to Camara provided computers by learners also showed a decrease from 160 minutes per week per learner to 99 minutes per week. This decrease in access time can be attributed to a number of factors that need to be researched further.

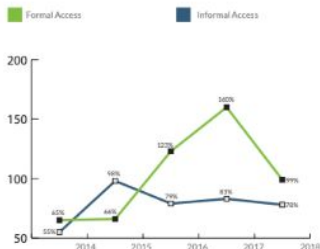


Chart 2: Average weekly computer access length among learners in Ethiopia

Changes in attitude

Use of computers in school continues to have a positive effect on learning in Ethiopia, with the percentage of students reporting that it makes learning more enjoyable remaining quite steady at 86% in 2018. Nearly three-quarters of surveyed students said that using a computer in school made it easier to learn Maths and English, a significant increase over positive responses in previous years. Camara provided computers are having an increasingly positive impact on the learning experience of students in Ethiopia, making it easier and more enjoyable for students to learn through the use of technology.

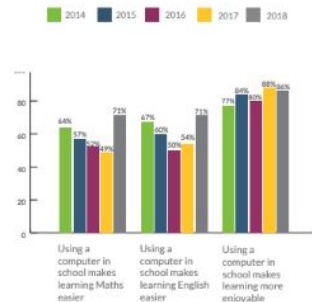


Chart 3: Learners perception on the use of computers for learning

ICT use by educators

The results from our survey indicate that Camara provided training has helped educators use ICT for teaching. 74% of the Camara trained educators reported that they are using ICT for teaching while it is only half of the not Camara trained teachers that reported using ICT for teaching. Over the past five years, there is a clear indication that more Camara trained educators utilized ICT for teaching than educators that did not attend the training.

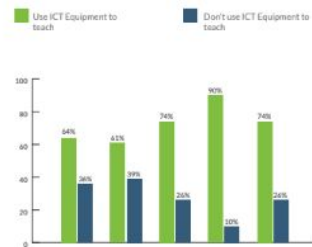


Chart 4: Camara trained educator's ICT use

Ethiopia - Impact and Learning

Impact and Learning - Ethiopia

How are the ICT equipment used in teaching?

Educators were also asked about how they used the computers provided by Camara. At the basic level, computer use is limited to either for teaching basic computer skills, to deliver presentations to learners or to help demonstrate lessons. The most common response (72% of surveyed educators) is the use of computers to help demonstrate lessons, which increased by 35% from the previous year. Additionally, 39% of educators used the computers to teach basic computer skills for their learners and 12% reported the use of computers to deliver presentations for students. In general, reported use of computers shows inconsistency over the last 4 years especially on delivering presentations for learners and to help demonstrate lessons.

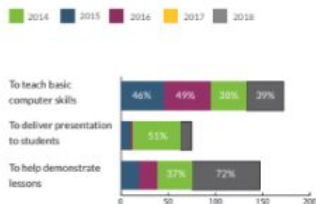


Chart 5: Basic level computer use by educators

Perceptions about Camara training

The Camara Education training has helped to ...

The perception of educators on Camara Education training is very positive. About 75% of surveyed educators reported that the Camara Education provided training has helped them plan their lessons using ICT. For 86% of the educators, the training helped them integrate ICT into their classroom and alter the way they approach teaching. There is a general increase in the percentage of educators expressing the benefits of the training in integrating ICT into their teaching system experience of students in Ethiopia, making it easier and more enjoyable for students to learn through the use of technology and more enjoyable for students to learn through the use of technology.



Chart 7 - Educators perception on Camara training

The advanced level of computer use in classrooms include learners use of computers to Research on different issues/topics Solve problems e.g Maths related quizzes Develop their own digital content e.g prepare essays or presentations As our data shows, 28% of educators reported the use of computers by learners to solve problems. Over the last 3 years, this particular use of computers to solve problems has been increasing continuously. Furthermore, 9% of the educators reported learners use of computers for research and to develop their own digital content. These results indicate that ICT use in the surveyed schools is still at its infant stage and basic use of computers is the most common type of use.

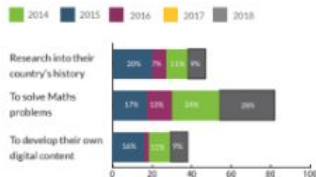


Chart 6: Advance level computer use



Chart 8 - Ethiopian hub performance score

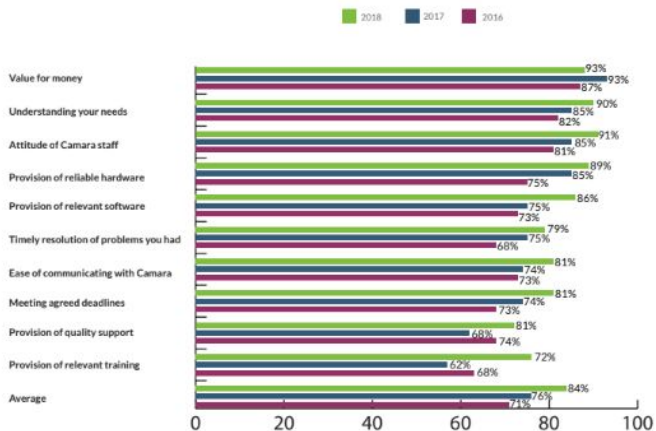
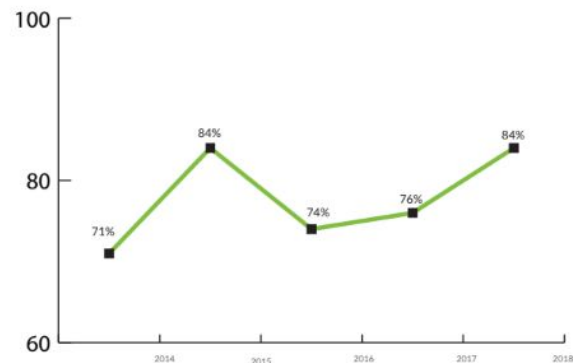


Chart 9 - Ethiopian hub performance score



Hub performance

The overall performance of Camara Education Ethiopia in 2018 is 84% which is an 8% improvement from 2017 and 10% improvement from 2016. The highest scoring performance area for three consecutive years is Value for money which indicates that schools are happy with the service they are getting from Camara Education for the money they paid. 'Attitude of Camara staff' and 'Understanding the schools needs' are the other two performance areas that scored highly. On the other side, 'Provision of quality support' scored 72% which is the lowest score from the ten performance areas but it showed an improvement of 10% from 2017. 'Provision of relevant training' showed a 19% improvement from 2017, which indicates that Camara Education Ethiopia hub greatly

improved the quality of training being provided to schools. Encouragingly, 9 of the 10 performance areas showed improvement from 2017 and the team in Ethiopia should be applauded for the great achievement they accomplished.

Over the last four years, school leaders perception on Camara Education Ethiopia's overall performance has continuously been improving. Since the start of our use of Performance scorecards in 2014, there has been a 13% improvement in the overall performance of the hub.

In 2018, more than half of the surveyed learners reported that they are using a computer by themselves without having to share it with another learner. This has increased by 6% from what was reported in 2017. The percentage of learners who reported using a computer with one other learner increased by just 1%, from 45% in 2017 to 46% in 2018. Only 3% of learners reported sharing a computer with 2 other learners. Over the past three years, the number of learners sharing a computer with other students is decreasing and more learners are using a computer by themselves in Zambia.

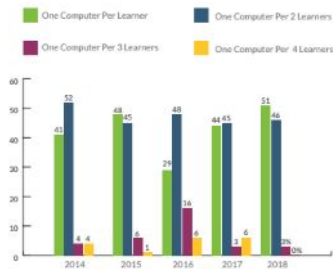


Chart 10 - Computer share among learners in Zambia

How are the ICT equipment used in teaching?

Basic level of computer use for teaching has increased in 2018. 93% of the surveyed educators reported using the computers to teach basic computer skills to their learners and this has been continuously increasing over the past 4 years. However, only 29% of educators reported using computers to deliver presentations to learners and this has decreased by 17% from 2017. The number of educators using computers to demonstrate lessons has also been increasing over the last four years and reached 88% in 2018.



Chart 11 - Average weekly computer access length among learners in Zambia

Changes in attitude

The attitude of learners regarding the impact Camara computers have on their learning was strongly positive in 2018. The percentage of respondents agreeing that using a computer in school makes learning Maths easier recovered to the 2015 peak level of 88% following two years of decline. The students reporting computer use making English easier to learn remained at 97%. Similarly, the rate at which students report using a computer made learning more enjoyable was 99% in 2018 as in 2017, the remaining 1% reporting that it made learning just a little less enjoyable. Overall the attitude of learners towards the use of computers in school was the most positive yet recorded for Zambia.

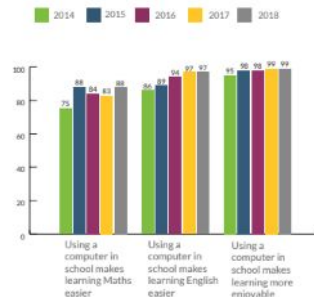


Chart 12 - Learners perception on the use of computers for learning

ICT use by educators

The use of ICT equipment in teaching by Camara trained educators has been in decline since 2016 and in 2018 was down to 76%, the lowest level of ICT use since 2014. Use of ICT by Camara trained educators was still above that of untrained educators as only 24% of not Camara trained educators reported using computers in their teaching. The decrease in ICT use between 2017 and 2018 coincides with a 20% increase in educators reporting that the Camara training was not long enough and 96% of educators in 2018 saying they needed more training from Camara to improve their ICT skills and knowledge.

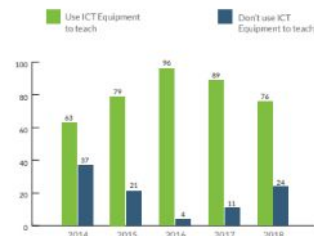


Chart 13 - Camara trained educator's ICT use in Zambia

Zambia - Impact and Learning

In 2018, more than half of the surveyed learners reported that they are using a computer by themselves without having to share it with another learner. This has increased by 6% from what was reported in 2017. The percentage of learners who reported using a computer with one other learner increased by just 1% from 45% in 2017 to 46% in 2018. Only 3% of learners reported sharing a computer with 2 other learners. Over the past three years, the number of learners sharing a computer with other students is decreasing and more learners are using a computer by themselves in Zambia.

How are the ICT equipment used in teaching?

Basic level of computer use for teaching has increased in 2018. 93% of the surveyed educators reported using the computers to teach basic computer skills to their learners and this has been continuously increasing over the past 4 years. However, only 29% of educators reported using computers to deliver presentations to learners and this has decreased by 17% from 2017. The number of educators using computers to demonstrate lessons has also been increasing over the last four years and reached 88% in 2018.



Chart 14 - Basic level computer use by educators

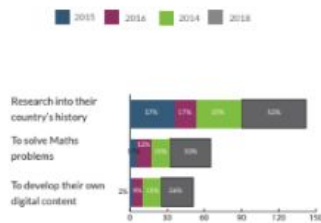


Chart 15: Advance level computer use

Impact and Learning - Zambia

Advanced level of ICT use among teachers and students increased in the last four years in Zambia. A little more than half of the surveyed educators reported their learners used computers to research issues or specific areas. Compared to 2015, 15% more educators reported the use of computers for research by their learners. Furthermore, more educators are reporting the use of computers by learners for solving problems (from 5% in 2015 to 33% in 2018) and for development of their own content including researching essays and presentations (from 2% in 2015 to 26% in 2018).

...plan lessons using ICT
 ...Integrate ICT into the classroom when delivering lessons
 ...alter the way I approach teaching

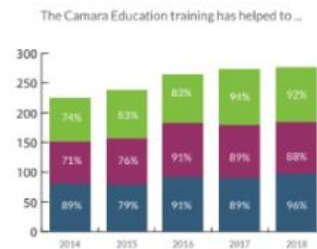
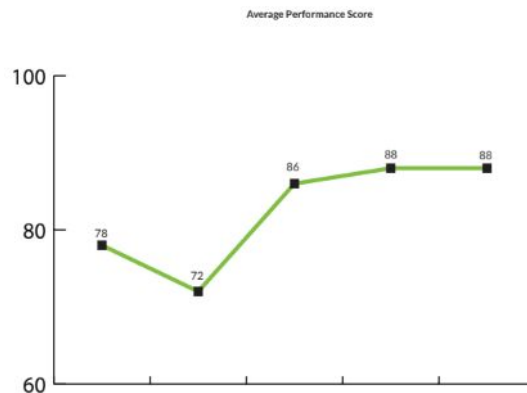
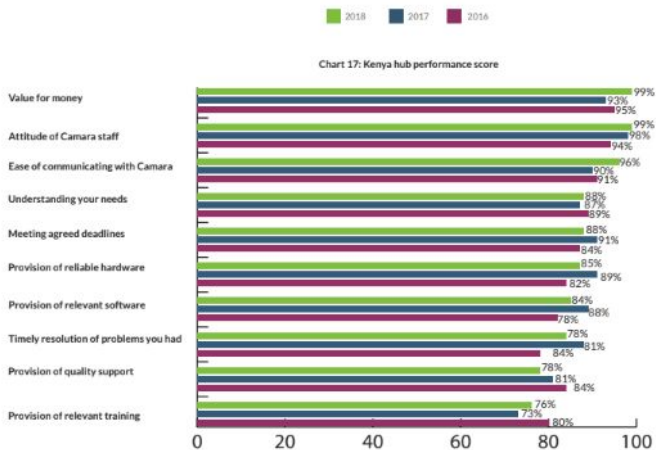


Chart 16: Educators perception on Camara training

Perceptions about Camara training

The surveyed educators in Zambia responded positively to questions about the impact of Camara Education provided training. 92% of the educators reported that the training has helped them plan lessons using the computers provided to their school. A further 88% reported the training was instrumental in helping them integrate ICT into their classroom when delivering lessons and another 96% reported that they alter the way they approach teaching as a result of the training they received. These results are a good indication that Camara trainings are vital in helping educators transition from a basic level of ICT use to a more advanced level in their teaching process.





Hub Performance

Out of the ten performance areas, 'Value for money' and 'Attitude of Camara staff' scored the highest with 99%. This indicates that schools are satisfied with the service they get from Camara for the money they paid. 'Ease of communicating with Camara' scored 96% which is a 6% improvement from 2017. On the other side, 'Provision of quality support' and 'Provision of relevant training' are the two lowest scoring areas with 78% and 76% consecutively. Even Though the score for 'Provision of relevant training' improved by 3% from the previous year, it has constantly been one of the lowest scoring performance areas over the years and needs to be improved. Compared to 2017, five of the ten performance areas showed improvement including 'Value for money,'

'Attitude of Camara staff,' 'Ease of communicating with Camara,' 'Understanding the school's needs' and 'Provision of relevant training.'

The overall performance of Camara Education Zambia's hub for 2018 was 88% as it was in 2017 but improved by 2% from 2016 and by 16% from 2015.

Kenya - Impact and Learning

The number of students that are reporting to have access a computer by themselves has decreased from 17% in 2017 to 13% in 2018 and has continuously decreased over the last 4 years. In Kenya, the most common computer share scenario is for two learners to share one computer accounting for 72% of reported computer sharing scenarios and nearly one and a half times the percentage seen in 2017. With the notable increase in sharing one computer between two students came a decrease in those sharing a computer between 3 or more students. 9% of responses indicated that there would be one computer between three students, 7% that there were four students per machine.

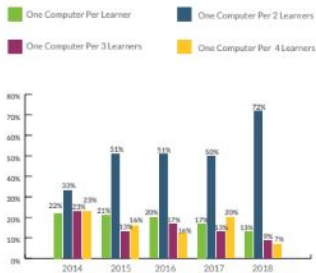


Chart 19: Computer share among learners in Kenya

According to the surveyed learners, a learner accessed the Camara provided computers for 78 minutes per week on average. This is a 36 minutes decrease from what was reported in 2017 and the lowest access reported in the last four years. Access of computers outside class hours remained the same as it was in 2017, 73 minutes per week. A closer look at the availability of computers for access may give a clue about the decrease in reported formal access time by learners. The survey results show that compared to the previous year, 13% more learners reported their access to computers was limited because the computers were often not working (55% in 2017 and 68% in 2018). An additional 63% of learners also reported that access to computers was further limited because there were not enough computers available.



Chart 20: Average weekly computer access length among learners in Kenya

Changes in Attitude

Despite the observed decrease in access time, surveyed learners in Kenya have a very positive attitude towards the impact of using computers in their schools. Almost all surveyed learners reported that using a computer in school makes learning enjoyable. In addition, a further 96% reported using a computer in school makes learning English easier and 95% reported learning Maths was easier as a result of the computers. A major improvement in attitude towards the use of computers in schools is observed in the surveyed Kenyan schools.

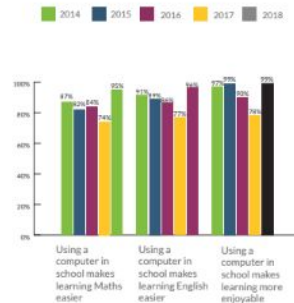


Chart 21: Learners perception on the use of computers for learning

ICT use by educators

89% of Camara-Trained educators in Kenya used ICT to teach in 2018, up by 13% from 2017. The percentage of not Camara trained educators not using ICT to teach is double that of the trained educators at 22%, showing the real impact Camara training has on the use of ICT resources for teaching purposes. The reported computer usage by educators in 2018 is the second in the last 5 years.

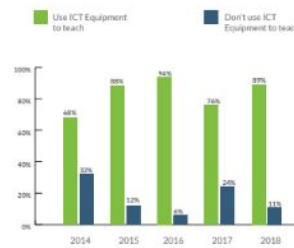


Chart 22: Trained Educators ICT use in teaching

Impact and Learning - Kenya

Kenya - Impact and Learning

How are the ICT equipment used in teaching?

Basic level of computer use by educators has improved from the previous years. The percentage of educators reporting the use of Camara provided computers to teach basic computer skills has increased from 39% in 2017 to 78% in 2018. The use of computers to deliver presentations to learners has also increased from 25% in 2017 to 44% in 2018. 33% of the educators also used computers to help them demonstrate lessons, which is a 6% decrease from the previous year. In contrast to what has been observed on the basic level use of computers in Kenyan schools, only parts of advanced level of use showed an improvement from previous years. According to educators, learners use of computers to research issues/areas has more than doubled from 2017. But, the use of computers by learners to solve problems and develop their own content has decreased by 5% and 10% respectively from 2017.

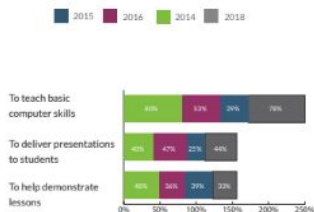


Chart 23: CT use by Camara trained educators

Perceptions about Camara training

The perceptions of educators on the impact of Camara provided training in their teaching continued to be positive. About 3/4th of the surveyed educators reported that the training helped them plan lessons using ICT resources while 89% acknowledged that the training was helpful in the integration of ICT into their classroom. Educators indicating that the training altered the way they approach teaching was down to 79% from 89% the previous year.

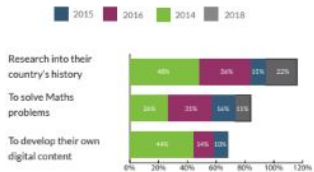


Chart 24: CT use by Camara trained educators

Impact and Learning - Kenya

Educators

Hub Performance

The top three high scoring performance areas for the Kenyan hub in 2018 are 'Attitude of Camara staff' (97%), 'Ease of communicating with Camara' (87%) and 'Meeting agreed deadlines' (85%). These three performance areas also showed improvement from 2017. The biggest improvement was observed on 'Provision of reliable hardware' and 'Provision of relevant software'. On the other side, the least scoring performance areas are 'Provision of relevant training' (75%), 'Provision of quality support' (75%) and 'Understanding of the school's needs' (76%). All these three areas also showed a decrease from 2017. The surveyed school leaders gave Camara Education Kenya an overall performance score of 82% which is a 2% improvement from 2017. The overall performance score of the hub has been improving since 2014, increasing from 68% to 82%.

The Camara Education training has helped to ...

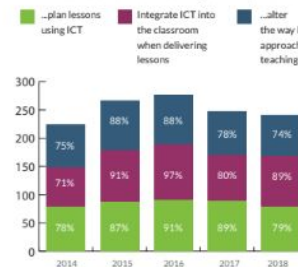


Chart 25

Kenya - Impact and Learning

Impact and Learning - Kenya

2018 2017 2016

Chart 26

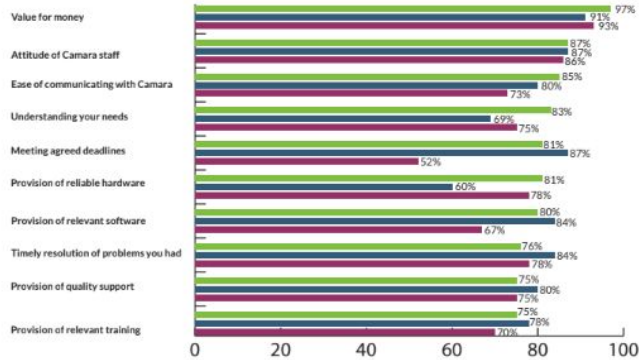
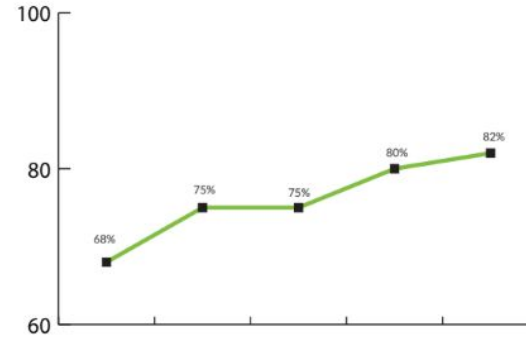


Chart 27



The surveyed school leaders gave Camara Education Kenya an overall performance score of 82% which is a 2% improvement from 2017. The overall performance score of the hub has been improving since 2014, increasing from 68% to 82%.



Computer share among learners

In 2018, the percentage of learners having to share a computer with at least 3 other students more than doubled to 43%, a figure which 2 years ago represented the learners that did not have to share the computers. The number of students with access to a computer they did not need to share continued to decrease in 2018, down to just 14% - its lowest recorded level. Responses indicating that there would be one computer per 2 and per 3 learners matched their 2016 levels at 29% and 14% respectively, both lower than they were in 2017. The drastic increase in responses indicating computers were being shared between 4 or more learners and the corresponding decreases in all other responses meant access to computers was significantly worse for Lesotho learners in 2018 compared to previous years.

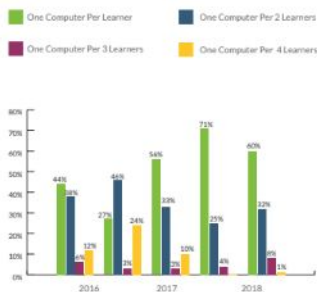


Chart 28: CT use by Camara trained educators

In order to understand the increase in computer share between more learners, we looked at responses from learners regarding their perception on the access they have to computers in their schools. About 57% of learners feel that access to the computers is limited because they are often not working which is a 38% increase from 2017. Another 57% of learners also reported their access to computers is limited because of shortage of computers in their schools, an increase of 13% of the previous year. These results show that more learners are facing challenges in accessing the computers in Lesotho.

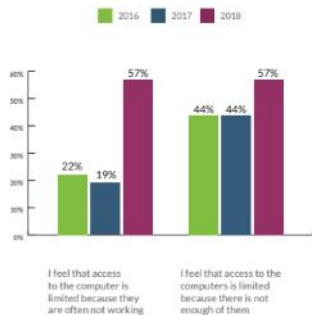


Chart 29

Changes in attitude

For the third year running, all surveyed learners with access to Camara computers agreed that using a computer in school made learning more enjoyable. This indicates that even though the learners are facing challenges in accessing the computers, they enjoy the limited access they have to the computers. Due to the small number of survey responses, a decrease in the percentage of students agreeing that using a computer made learning Maths and English easier was down to a single student reporting that the computers made no difference in that regard. Overall, the responses were strongly positive on the impact Camara computers have on the learning experience of students in Lesotho.

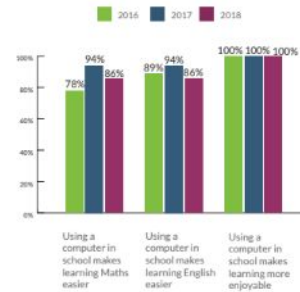


Chart 30

ICT use by educators

Camara trained educators in Lesotho were asked whether they used ICT equipment to teach, and if so for which specific teaching purposes. 83% of the educators reported that they used the computer lab and ICT resources to teach. This is a significant percentage even though it has decreased by 9% from the 2017 figure.

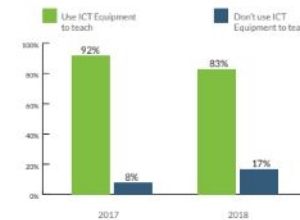
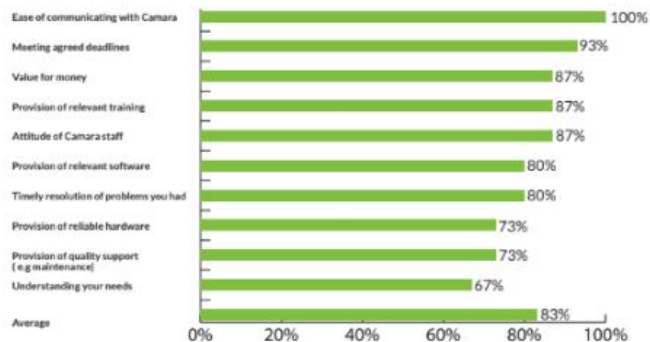


Chart 31

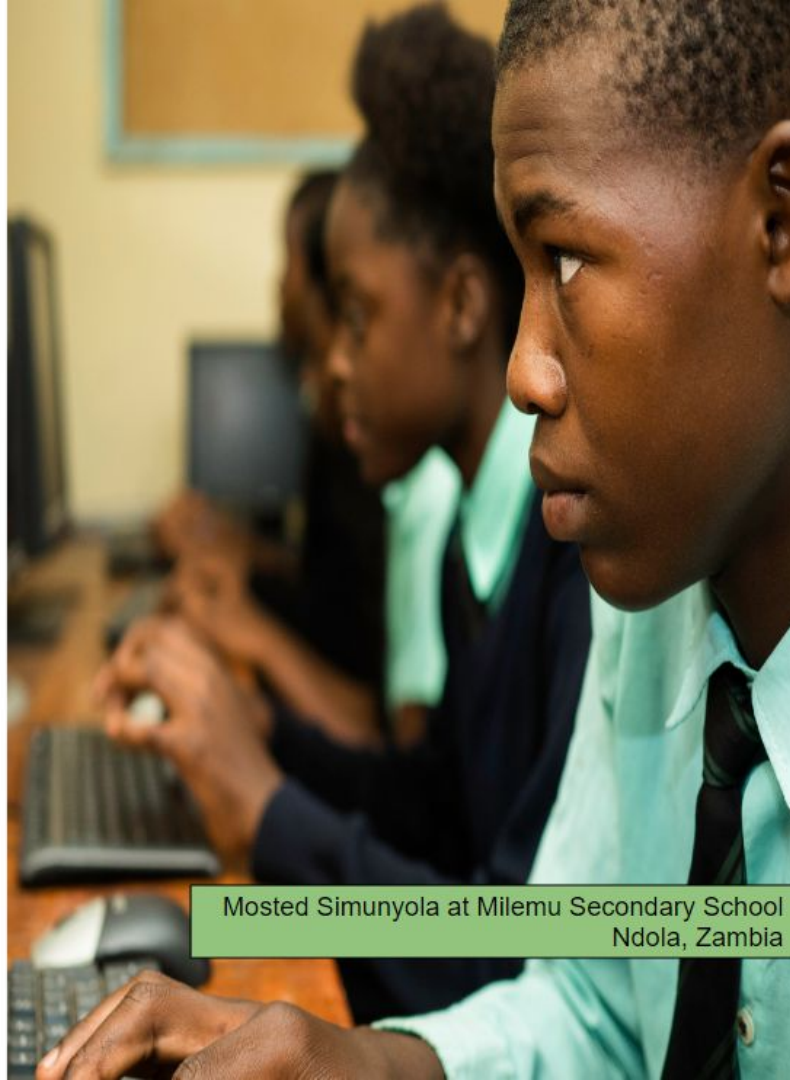
Kenya- Impact and Learning

Chart 32



Hub performance

This is the first time we used the Performance scorecard to measure the performance of Lesotho hub. The hub received an average overall score of 83% from school leaders. The performance area that scored the highest is 'Ease of communicating with Camara' with 100%. 'Meeting agreed deadlines', (93%), and 'Value for money', (87%) are the other two high scoring performance areas. The three low scoring performance areas are 'Understanding the schools needs' (67%), 'Provision of quality support' (73%), and 'Provision of reliable hardware' (73%).



Mosted Simunyola at Milemu Secondary School
Ndola, Zambia

Computer share among learners

The percentage of learners in Tanzania reporting getting access to a computer without sharing dropped to 60% in 2018 from 71% the previous year. Responses indicating computers were shared between 2, 3, or more students all increased in 2018 with the most significant being a 7% rise in 2 learners sharing a computer. Encouragingly the survey still showed that fewer than 10% of students were having to share a computer with more than 1 other learner.

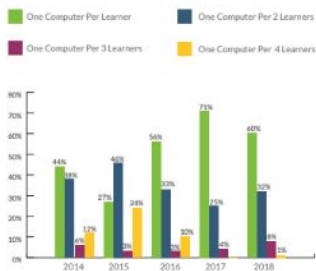


Chart 33

Computer access by learners

Timetabled access to computers decreased from 144 minutes per week per learner in 2017 to 104 minutes in 2018, showing a 40 minutes decrease. But informal access outside class hours continued to increase steadily over the last three years, increasing from 126 the previous year to 135 minutes in 2018. In total for 2018 including access during and outside of class the average time a student spent using the computers for was 239 minutes per week; 31 fewer than in 2017 but hugely improved compared to earlier levels.

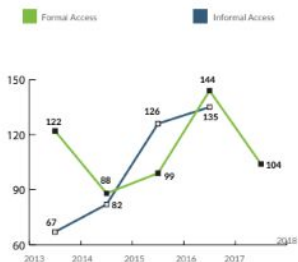


Chart 34

In line with reports of increased computer sharing and reduced in-class access, 2018 saw a 3% increase in students agreeing that their access is limited by the insufficient number of computers available. This figure has been climbing inconsistently since 2015 while the percentage of students reporting access issues caused by malfunctioning computers has hovered around 24% during that time. The survey results across multiple categories suggest that the number of computers available is not enough to meet the needs of the students and that the situation worsened notably in 2018.

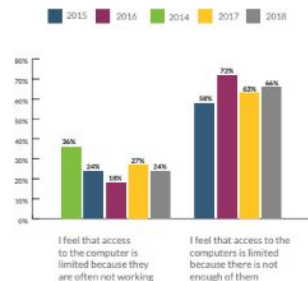


Chart 35

Changes in attitude

Almost all surveyed learners reported that using a computer in school makes learning more enjoyable, indicating the continued positive attitude towards the use of computers in schools. Agreement among learners that using computers in school made learning easier in Maths and English decreased by 3% to 92% and 95% respectively. These results show an overall very strongly positive attitude of learners towards ICT use in school. The reported reduction in formal in-class access time could be negatively affecting the chances the computers could have a positive impact on learning.

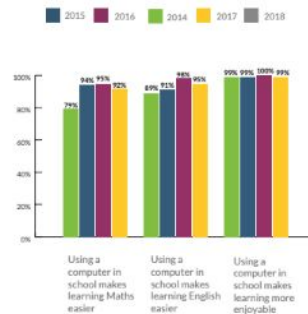


Chart 36

ICT use by educators

79% of surveyed educators in Tanzania had received Camara ICT training, of those educators 76% were using ICT to teach in 2018. By comparison, only 56% of surveyed educators that had not attended Camara training reported using ICT in their teaching, showing the impact Camara ICT training makes on use of ICT in education. The use of ICT to teach among trained educators has improved from the previous two years.

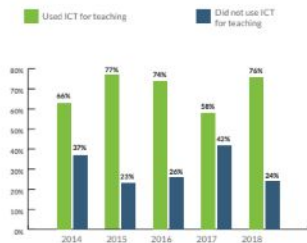


Chart 37

How are the ICT equipment used in teaching?

About 56% of the surveyed educators reported that they used the ICT equipment in the schools to demonstrate lessons. This has increased by 26% from 2017 and by 21% from 2016. A further 51% of the educators used the ICT equipment to teach basic computer skills, a decrease of 6% from the previous year. The use of ICT to deliver presentation to students has continuously been increasing over the last four years and reached 44% in 2018.

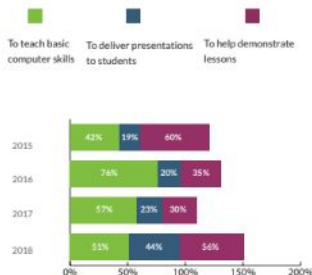


Chart 38

On an advanced level, the most dominant use of ICT in Tanzanian schools was for students to solve problems in their practices and exercises (22%), which shows a great deal of improvement from 2017. Furthermore, 19% of learners used ICT to research on different issues and 12% used ICT to develop their own digital content. The overall advanced level ICT use in Tanzanian schools increased over the last three years.

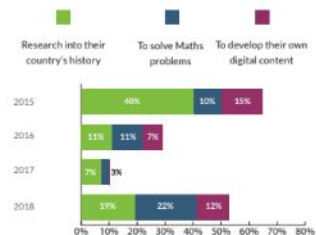


Chart 39

Perceptions about Camara training

The general perception of educators on the impact of Camara Education provided training is very positive. 88% of the educators reported that the training helped them alter the way they approached teaching and also to help them integrate ICT into the classroom when delivering lessons. The use of ICT to plan lessons also has improved from 52% in 2017 to 69% in 2018. All the three advanced level of ICT use in Tanzanian schools have increased from the previous year.

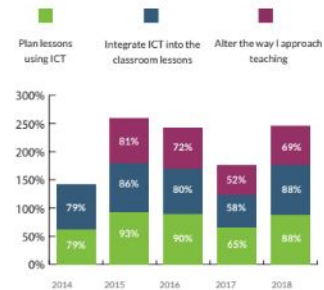
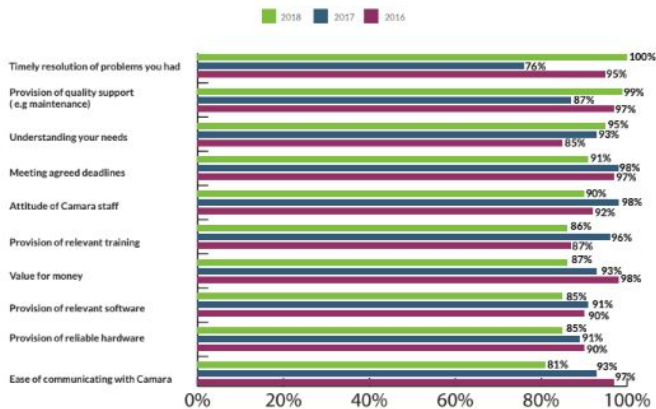


Chart 40

Chart 41



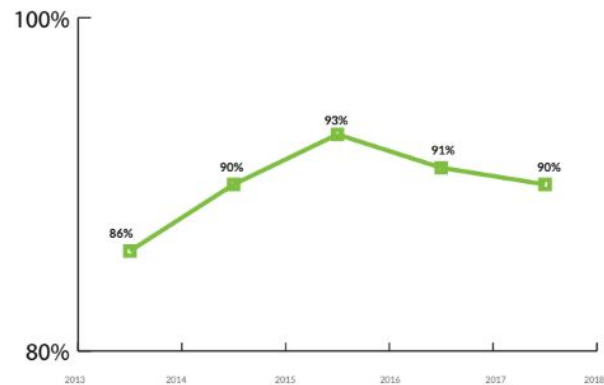
Hub performance

The overall performance of Camara Tanzania hub was 90% and decreased by 1% from 2017. 'Timely resolution of problems the schools had' was the highest scoring performance area with 100%. It also showed the highest improvement from 2017 with 24%. 'Provision of quality support' scored the second highest with 99% and improved 12% from 2017. 'Understanding the schools needs' and 'Meeting agreed deadlines' are also in the top four high scoring performance areas even though the later one decreased by 7% from 2017. The three lowest scoring performance areas are 'Ease of communicating with Camara', 'provision of reliable hardware' and 'provision of reliable software'. These three performance areas also showed a decrease from

the previous years. In general, only the top three scoring performance areas show an improvement from the previous year while the remaining seven showing a decline.

Average Performance Score

Chart 42





Case Study

Case Study #1 ~ Alicia O'Sullivan

The 2018 winner of Camara Ireland's TechSpace programme was Alicia O'Sullivan who was awarded the 'TechSpacer of the Year.'

Alicia has come a long way in just 12 months. In 2018 the 17-year-old from Skibbereen in West Cork fostered a new interest in digital media, travelled to Romania as part of an international partnership, and was crowned the ESB TechSpacer of the Year.

Working with TechSpace and YMCA West Cork opened her eyes to how digital creativity can be used to highlight social issues and tell important social stories. Alicia was tasked with creating a video on cyber safety for young people, which required her to learn media editing, camera skills and PhotoShop. "I had never thought about digital creativity before I was given the opportunity to use the cameras and software. I have learned so many skills over the last year, skills that have helped me to win the ESB TechSpacer of the Year award."

It's not been a bad year, all things considered! The modest student believes that her success shows what can happen when young people are given the right support, environment and opportunity to embrace new challenges.

"There are many young people who have the same passion and interests in social issues as I do, and want to make a difference and do things to raise these issues," explains Alicia. "I was very lucky that I have had the support from others and the chance to do this."

Chart 43



TechSpace programme

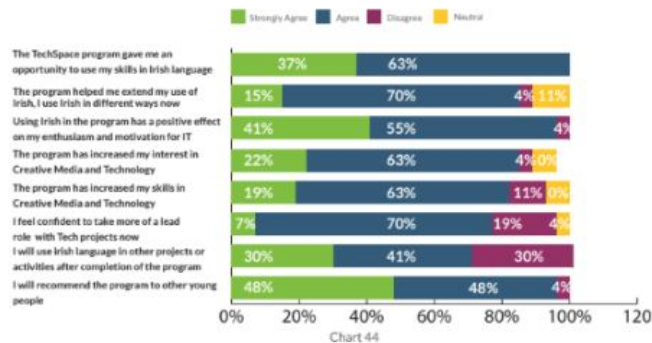
Clár TechSpace is one of the projects run by Camara Education Ireland. Under the project, educators are trained and supported to take part in the nationwide TechSpace programme using Irish language in schools and youth organisations. In order to capture the impact of the programme on young people enrolled in the project, we have asked randomly selected 25 participants to reflect their views on what they benefited from the programme. Young people enrolled in the project were asked to score the following three factors out of ten before and after they joined the Clár TechSpace project.

- Confidence level in using Irish language in project settings
- Ability in using Irish language in project settings
- Skill level in Creative Media and technology

The results obtained show that the average confidence score in using Irish language among young people

increased from 7.5 (before joining the programme) to 8.43 (at the end of the programme) showing an improvement of 12.4%. The score on the ability of using the Irish language in project setting also increased by 18.7%, from 6.86 to 8.14. These results are a good indication that the project helps young people improve their confidence and ability in using Irish language in a work setting. In addition, the skill level in Creative Media and Technology has also improved by 18% among young people.

Participants perception on Clár TechSpace Program

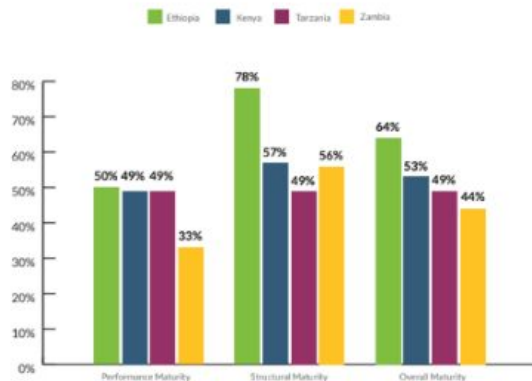


We also asked the young people about their perception on the impact of the programme. In general, the responses are very positive and encouraging. The detailed results of the survey are presented in chart.... below. The noticeable results from the survey are,

- All the surveyed young people agree/strongly agree that the TechSpace programme gave them an opportunity to use their skills in Irish language
- 96% reported that using Irish language in the programme has a positive effect on their enthusiasm and motivation for IT
- About 71% reported that they will use Irish language in other projects or activities after completion of the programme
- 96% of the surveyed young people also reported that they will recommend the programme to other people



Chart 45



Hub Maturity Audit

Camara Education conducts a bi-annual hub maturity audit to assess the maturity level of our hubs. A total of 64 indicators over 7 functional areas are used in the audit. The indicators are further divided in to 23 Performance maturity indicators and 41 Structural maturity indicators.

Performance maturity refers to the ability of hubs in achieving targeted performance indicators. Performance targets for each education hub are set at the beginning of each year so progress can be benchmarked. Some examples of performance indicators include percentage of increase in revenue, percentage of monitoring visits achieved, percentage of learners impacted among others.

Structural maturity refers to the structures and processes necessary for a fully functioning education hub. These include tools and processes such as a hub strategic plan, finance policy and hub staffing protocols

and others.

To quantify the results of the audit, each indicator is assigned a priority ranking (low, medium or high) and scores are weighted accordingly. This means, high priority indicators are given more weight than low priority ones. This also allows for areas that require more immediate attention to be identified.

Audit findings

For the first half of 2018, the audit was conducted on Ethiopia, Kenya, Tanzania and Zambia hubs. As it was the case in the previous years, Ethiopia hub scored the highest overall maturity score with 64% followed by Kenya (53%), Tanzania (49%) and Zambia (44%). The Ethiopian hub was also the most mature hub in terms of Performance and Structural maturity.

Overall Maturity

Function	Ethiopia	Kenya	Tanzania	Zambia	Average
Communication	80%	20%	0%	0%	25%
Finance	84%	61%	87%	69%	75%
Fundraising	0%	0%	0%	0%	0%
Governance	66%	73%	68%	60%	67%
Human Resources	80%	83%	58%	48%	67%
Operations	63%	64%	59%	56%	60%
Programme Management	78%	74%	72%	78%	75%
Average	64%	53%	49%	44%	

Tables 1- 3 show the overall, Performance and Structural maturity scores for each functional area. On average, the highest scoring function is Finance indicating that most hubs have a relatively stronger finance system compared to the other function areas. On the other hand, Fundraising is the lowest scoring function area across all hubs which means that hubs should focus on developing their fundraising systems, processes and build their capacity for better fundraising. The results also show that compared to other hubs, Zambia hub scored relatively low across the majority of Performance maturity functions.



Performance Maturity

Function	Ethiopia	Kenya	Tanzania	Zambia	Average
Communication	60%	40%	0%	0%	25%
Finance	67%	50%	90%	50%	64%
Fundraising	0%	0%	0%	0%	0%
Governance	40%	70%	80%	50%	60%
Human Resources	60%	80%	50%	30%	55%
Operations	53%	55%	50%	44%	51%
Programme Management	73%	50%	70%	55%	62%
Average	50%	49%	49%	33%	

Structural Maturity

Function	Ethiopia	Kenya	Tanzania	Zambia	Average
Communication	100%	0%	0%	0%	25%
Finance	100%	72%	84%	88%	86%
Fundraising	0%	0%	0%	0%	0%
Governance	91%	76%	56%	69%	73%
Human Resources	100%	85%	65%	65%	79%
Operations	73%	72%	67%	67%	70%
Programme Management	83%	97%	73%	100%	88%
Average	78%	57%	49%	56%	





Dinah Banda at Chibansa Primary School
Kitwe, Zambia

“Education
is the
passport to
the future,
for
tomorrow
belongs to
those who
prepare for
it today”-
Malcolm X.



Computers In	20522
Computers Out	12176
Self Generated Income	€248,621 (€217k Refurb & €31.6k Site Clearance)

Computers In	6229
Computers Out	5764
Self Generated Income	€359,225
Volunteers	TBC

Results

2018 was another improvement operationally at Camara Dublin. We sourced 20,522 computers, and we shipped 12,176 computers (desktop and laptop) across the year, which was more than 2017 a record year for the organisation. Self-generated revenue decreased in 2018 to €248.6k made up of 217k Refurb and 31.6k Site Clearance down from the 2017 figure of €252k. Whilst this was a reduction in revenue it needs to be seen in the context of a changing operations model and a more difficult donations environment.

Plans for 2019

Refurbishment is an increasingly difficult process for us in Dublin, first the facility in which we are located is in receivership requiring a major renovation to upgrade the building appropriately. The labour market in Dublin has seen a major fall-off in volunteering activity which is the basis of our business model for refurbishment. The market for computer sourcing continued to present major challenges in 2018 and finally with the adoption of GDPR from May 2018 the donors are seeking different solutions. Whilst the remarketing model was explored in 2018 it is felt that we should move towards an outsourced option in 2019. Working on a contract with a potential outsource partner during final quarter of 2018 with the objective of signing early in 2019.

Volunteering - Steph will complete later

Volunteers and work placement

Results

Our goals for 2018 were to increase tech donations and shipments to Africa as well as increase self generated funds to continue to be self- sustainable and support a premises relocation. We shipped 91% more computers to Africa in 2018 vs 2017. We relocated premises in the first quarter of 2018 to a 5000 sq ft facility in South London, enabling us to handle larger volumes of donated equipment and support larger groups of work experience students, volunteers and corporate teams.

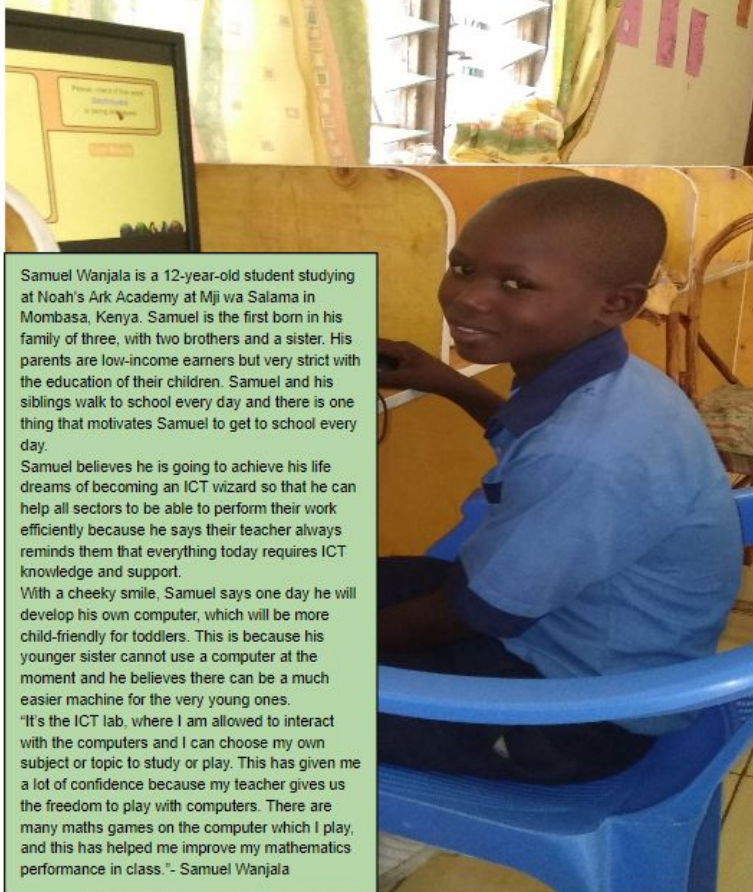
Plans for 2019

We intend to build upon the successes of 2018 by continuing to increase computer donations and shipments to Africa, increase funds to support investment in Camara projects and continue to strengthen existing corporate partnerships as well as foster new.

Volunteering

We have links to a number of organisations that enable us to run a youth programme providing one month work placements for local 16-19 year olds as well as Erasmus students from countries across Europe. We continue to attract volunteers from across London who are able to contribute to our charitable activities, learn new skills and benefit from skill sharing. We have also run corporate volunteering and team bonding days, which provide us with a valuable source of help to refurbish IT and expedite shipments.

Case Study #4 ~ Samuel Wanjala



Samuel Wanjala is a 12-year-old student studying at Noah's Ark Academy at Mji wa Salama in Mombasa, Kenya. Samuel is the first born in his family of three, with two brothers and a sister. His parents are low-income earners but very strict with the education of their children. Samuel and his siblings walk to school every day and there is one thing that motivates Samuel to get to school every day.

Samuel believes he is going to achieve his life dreams of becoming an ICT wizard so that he can help all sectors to be able to perform their work efficiently because he says their teacher always reminds them that everything today requires ICT knowledge and support.

With a cheeky smile, Samuel says one day he will develop his own computer, which will be more child-friendly for toddlers. This is because his younger sister cannot use a computer at the moment and he believes there can be a much easier machine for the very young ones.

"It's the ICT lab, where I am allowed to interact with the computers and I can choose my own subject or topic to study or play. This has given me a lot of confidence because my teacher gives us the freedom to play with computers. There are many maths games on the computer which I play, and this has helped me improve my mathematics performance in class." - Samuel Wanjala

Case Study #5 ~ Mr Zinabu Hagos

Mr Zinabu Hagos is a principal at Shimelis Habte Secondary School, a government school located in Addis Ababa, Ethiopia. There are 1,171 students at the school, 697 of them (~60%) being girls. Mr Zinabu has worked at the school for 32 years, starting as a teacher, and taking on different roles over the years.

In 2018, an eLearning centre was established at Shimelis Habte Secondary School. The eLearning centre contained 25 computers fully loaded with Camara Education Ethiopia's educational resources and content. As part of the intervention, all math and science teachers at the school received training on how to best use these tools and resources to effectively improve educational outcomes.

Prior to this intervention, the school did not use any computers for teaching purposes. Mr Zinabu himself received training from Camara Education Ethiopia and is very much pleased with the impact it has had on not only the teachers but also on the students.

"What differentiates Camara Education from others in their work, is that they work on capacity building and provision of curriculum-aligned educational contents. For example, there are mathematics applications and science simulations on the computers which the learners are using as supplementary learning/reading resource to get more knowledgeable on the subjects. To tell you the truth compared to last year and the year before, there is a big improvement in my students."-Mr Zinabu Hagos



To be Continued...