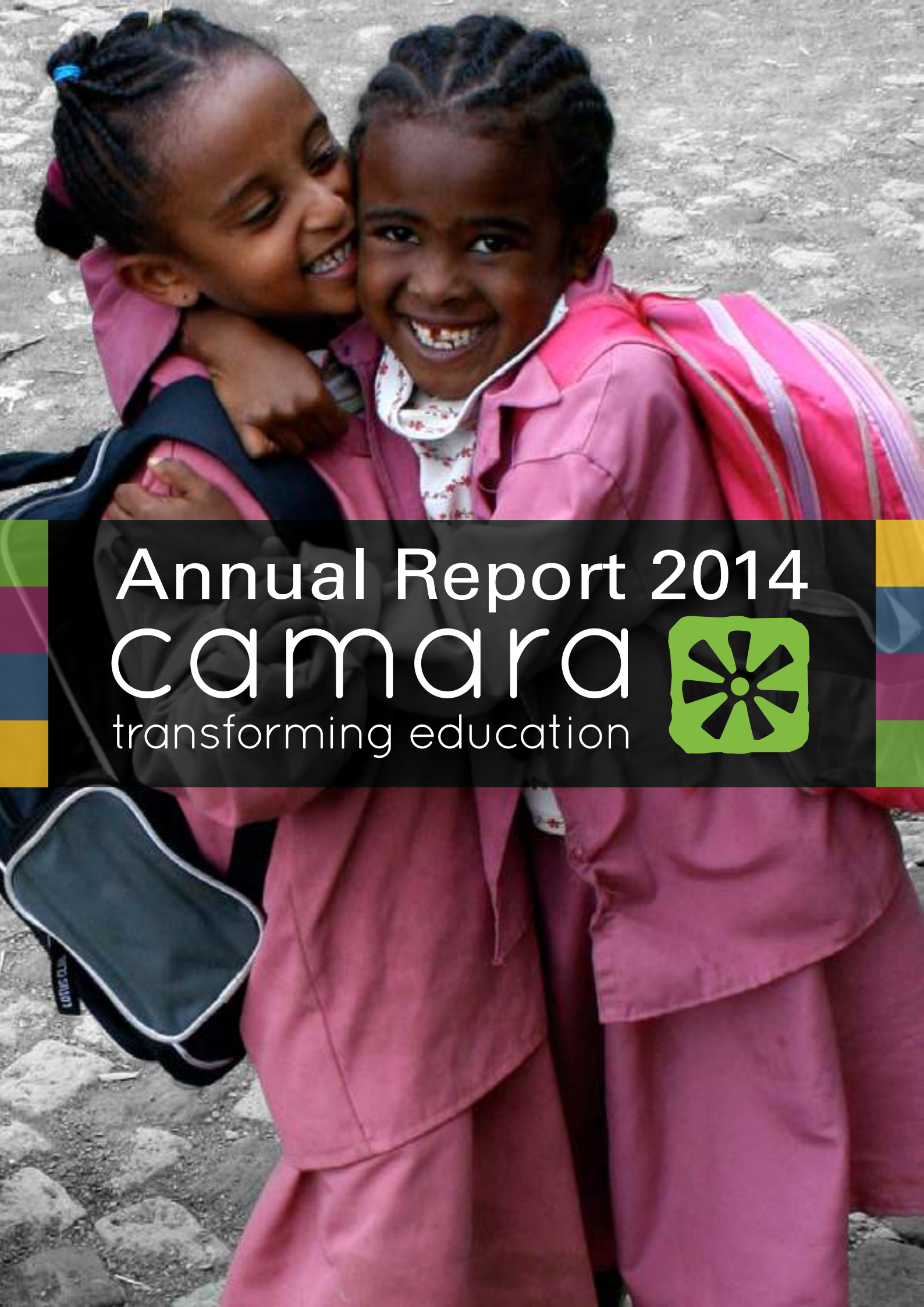

Annual Report 2014

camara

transforming education

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Chairperson's Report

Maria Mahon
Chairperson of Camara Education

2014 was a hugely successful year for Camara. The growth and progress over the past few years has been great to see. To think that by the end of 2014 we had delivered Digital Literacy to nearly one million children is truly phenomenal.

2014 was also the first year of our three year strategy. The focus on monitoring and evaluation is something I am very keen to see delivered upon and it was great to see the progress on this last year. With meaningful, robust data available, ICT in Education will rightly take its place at the top table of international development. We require 21st century solutions for 21st century challenges.

It was also great to see some new partnerships established last year like the three commercial partners we are working with on iMlango. When we are working with leaders in their fields, we will only offer a better solution to those we serve.

I would like to thank everyone that helped in making 2014 a record year for Camara Education. Everyone has something to give to Camara and a huge thanks to those that volunteered their time. In Dublin alone, over 36,000 volunteer hours were logged, a truly staggering 4,500 days of work. I would especially like to thank my colleagues on the Dublin board and all of those that gave their time on the many Camara boards globally.

Finally I had the pleasure to travel to Ethiopia recently and witness what digital literacy means to children there. I cannot think of a greater, more impactful gift to give. On behalf of almost one million students now receiving a quality education, thank you for your continued support of Camara.

Photo by, Francis Curran

Holy Tree Academy ECDE & Primary School, Mombasa, Kenya.

Treasurer's Report

Robina Walshe
Treasurer of Camara Education

The focus for 2014, and into the coming year, is around meeting the growing demands for both income and reporting requirements. Camara is reviewing and making changes in systems and personnel to address these changes.

Camara recorded a net surplus of €199,738 in 2014, compared to €72,394 in 2013. Incoming resources in 2014 increased by 67% overall to €2,988,930. There was a substantial increase in Project related income of 135%, with the main increase being our involvement in the DFID funded iMlango project, which contributed to 56% of this income.

Income from Recycling, Sale of Computers to our Hubs and Sale of Computers to Irish Schools have all increased by 33%, 41% and 7% respectively.

Resources expended by Camara in 2014 increased by 63% to €2,789,192. The main reason behind the increase in total resources is the associated costs of delivering projects, with the iMlango project accounting for 53%. Delivering projects is the biggest expenditure of the organisation, followed by the wages and salaries, the cost of refurbishment of computers and support to our Hubs.

Camara's cash position increased significantly to €836,909, compared to €387,205 in the previous year. The financial reserves at 31 December 2014 were greater than one quarter of operating costs, in line with the reserves policy adopted by the Board.

Costs associated directly with our Charitable Activities in 2014 represented 93% of our total resources expended, which is 4% higher than previous years, due mainly to the expansion of the hub network. The balance of our costs in 2014 consisted of Governance Costs (3% of the total) and Costs of Generating Voluntary Income (4% of the total).

Camara generated €20 from every €1 spent on fundraising.

Summary of our major financial results is presented below:

	2014(€)	2013 (€)
Total Incoming resources	2,988,930	1,787,812
Total Resources Expended	2,789,192	1,715,418
Net Income Resources	199,738	72,394
Cash at Bank (year end)	836,909	387,205
Staff Costs	989,434	745,515
Costs of Generating Voluntary Income	102,126	89,461
Governance Costs	92,969	94,167
Charitable Activities	2,594,097	1,531,7900

Chief Executive Officer's Report

John Fitzsimons
CEO of Camara Education

2014 was a breakthrough year for Camara Education. The 'Camara Community' has never been bigger, validating the collective beliefs that poverty is unacceptable, education is the key to its eradication and technology has the ability to improve the quality of education. We had more engagement with everyone associated with Camara; volunteers, financial and technical donors, schools and Ministries than any year previous. In 2014, we trained 26% more teachers, shipped and installed 36% and 33% more computers respectively than in 2013. Significantly our income increased 67% from the previous year to nearly €3m excluding the income to our hubs across the network.

A key event from 2014 was the launch of our three year strategy. In it we are focused on 'proving' our impact, 'improving' how we operate and what we offer and 'scaling' to reach more schools and students. From the growth above, you can see the scale strategy is being met with over 400 more schools now having technology as part of teaching. An example of the quality of our offering can be seen from projects like iMlango in Kenya where 195 schools are getting a really rich solution, including dedicated numeracy software as well as attendance monitoring and internet access. Most importantly, Monitoring and Evaluation is now integral to all our work as well as the report later in this publication which I am sure you will enjoy.

Aside from the strategy, the growth is as a result of the increasing relevance of ICT in Education in development, our culture of learning fast from our mistakes and the hard work and dedication of our team of staff and volunteers across the world. 2015 is a seminal year for development. Not only is it European year for Development, it is the year the Millennium Development Goals will be replaced by the Sustainable Development Goals. The shift in education will be from quantity; achieving universal primary school access, to reversing the unintended dilution of quality. As a social enterprise focused on improving quality, the coming years will be even more exciting.

All of the above resulted in us achieving a record impact in 2014. No one can better articulate this impact than teachers like Veronica Onjoro from Kokowani Primary school, Mombasa, Kenya:
"I believe that teaching has been made more interesting. The students can express themselves better through using the Camara PCs. I believe that grades have improved across the board since the PCs were introduced. The improvement in students who I would expect to perform poorly have particularly surprised and delighted me."
On behalf of Veronica and her students and all the other teachers and students to benefit from Camara, thank you for acting and helping children better achieve their potential. Please keep with us as we continue this quest, we need you.

Ganjoni Primary School, Mombasa, Kenya.

Photo: Aseidas Blauvelt

Jerusalem Primary School, Addis, Ethiopia.

About Camara

Camara is an international charity, operating as a social enterprise, that uses technology to deliver 21st century skills and as such improve education in disadvantaged communities around the world.

In 2014, we delivered training to 4,299 educators and reached over 600 educational institutions in ten countries.

Vision

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

Mission

Camara's mission is to transform education using technology to empower disadvantaged students.

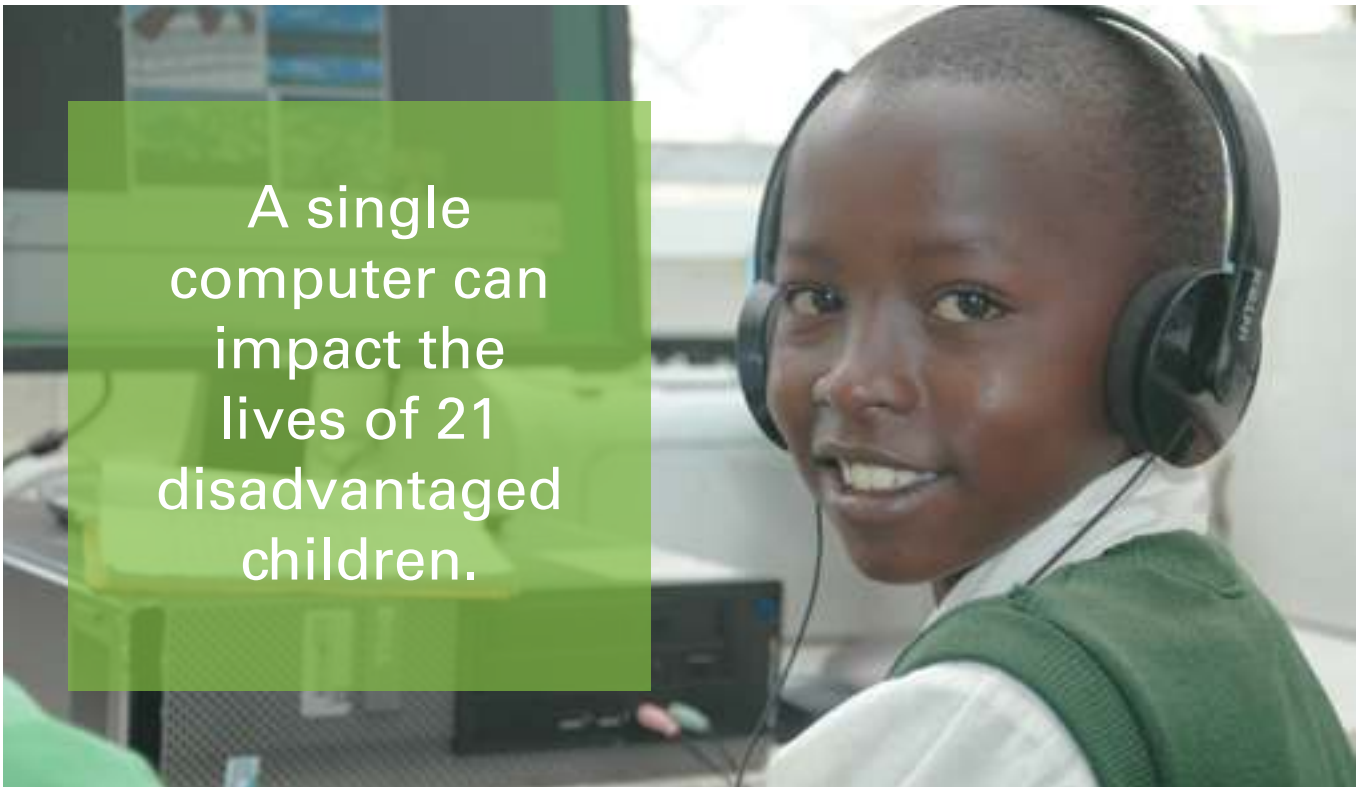
Values

- We are focused solely on social change.
- We are customer-focused to meet local needs.
- We deliver value to our donors.
- We want to measure our impact.
- We want to effect a change on a large scale.
- We are honest and transparent in our work.
- We adapt, respond, learn and innovate.
- We value our loyal team of staff and volunteers.

Camara has been a signatory to the Dochas Code of Conduct on Images and Messages since 2009. By signing the Code, we commit to a set of principles, ensuring that we will avoid stereotypical or sensational images. The adoption of the Code means that Camara will choose images and messages that represent the full complexity of the situations in which we work, and that we will seek the permission of the people portrayed in the photos we use.

The Governance Code is a Code of Practice for Good Governance of Community, Voluntary and Charitable Organisations in Ireland. In February 2014 Camara started its adoption journey of the Code with its aim being for full compliance by early 2015.

Camara is a registered charity in Ireland (CHY 16922), the UK (1135540), the USA (EIN: 38-3804011), Ethiopia (1923), Tanzania (00NGO/00006076) and Lesotho (Schoolnet, Reg No. 2008/221).

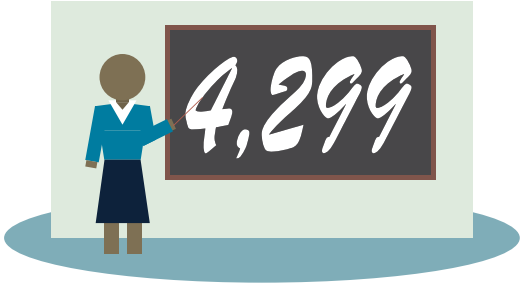


Student at Tom Mboya Primary School, Kenya.

Our Year In Numbers

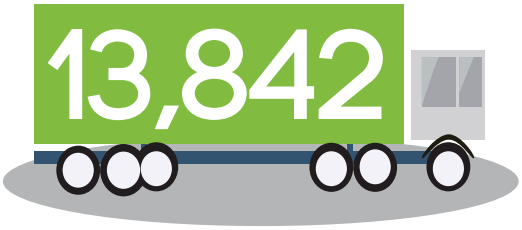
In 2014...

243,411
students became digitally literate



teachers were trained to use ICT in education

11,591
PCs were distributed to educational institutions



Computers were shipped to our educational hubs

€2,200,000
was fundraised

2014 In Stories

March

Camara Ireland launch online training

Camara Ireland launched their first online course – "Using Freeware in the Classroom." This is an excellent resource for educators around the world to integrate technology into teaching. It will show teachers how to source, download and use freeware for use in the classroom.

March

50,000th computer shipped…on to the next challenge!

A landmark shipment from Dublin to Zambia marked the 50,000th computer shipped by Camara. With this latest achievement we are well on our way to delivering 21st century skills to an additional 1.3 million students over the next three years.

April

Camara USA awarded 501 status

Camara's San Jose hub was awarded 501(c)(3) non-profit status in the United States. The certification will allow Camara to issue tax-deductible receipts for all donations of equipment and financial contributions, which will greatly improve our fundraising ability in the USA.

April

Camara launches three year strategy

Camara launched their three year strategy. Since 2005, Camara has delivered digital literacy to an estimated 700,000 students. Dispatching over 50,000 computers to 2,500 schools and youth groups and crucially, training 12,000 educators in the use of ICT in education. The three year strategy's key focus is to prove the impact that Camara's ICT in Education model is having and to grow the current 700,000 students with digital literacy skills to 2,000,000 students.

May

New software piloted in eLearning centres throughout Tanzania

Camara Tanzania dispatched 25 computers to ten different schools in Moshi, Tanzania and piloted a potentially highly-impactful classroom learning tool: Epoptes. Epoptes is an open-source classroom management and learning tool which allows teachers maximum ability to both monitor and teach their students. In 2014, we are building on our success to deliver 21st century skills to more students by doubling the number of computers we send to Tanzanian schools.

July

Camara, DFID and UK tech companies to deliver eLearning to marginalised Kenyan girls

Camara announced its strategic partnership with the UK Department for International Development (DFID) and corporate partners Avanti, sQuid and Whizz Education, in an innovative new project called iMlango. This project will improve learning and educational outcomes for 150,000 marginalised girls, across 195 primary schools in Kenya. This ground-breaking partnership between public and private sectors will deliver eLearning programmes to thousands of marginalised girls in Kenya under Project iMlango, a first of its kind eLearning partnership. The integrated programme uniquely addresses the cultural and financial issues that can lead to reduced school attendance and drop outs, with electronic attendance monitoring and conditional payments to families. At the programme's core sits an internet learning platform accessed via high-speed satellite broadband connectivity, where partners provide students with interactive, individualised learning tools.

May

Camara Haiti two year agreement with Digicel

Camara Haiti has proudly announced a new partnership agreement with Fondation Digicel to provide access to ICT in education in disadvantaged communities across Haiti, through the delivery of fourteen eLearning Centres per year over two years.

June

Puma Energy Foundation partner with Camara to scale eLearning in Zambia

Camara Zambia has partnered with Puma Energy Foundation to improve and scale Camara's impact in Lusaka. This project will provide up to 21,000 disadvantaged students across Zambia with the crucial 21st century digital literacy skills.

Sept

Camara London's first computer shipment bound for Tanzania

Camara's London hub celebrated a landmark occasion – its very first shipment of computers to Africa. A 20-foot shipping container packed with 500 computers left Camara's London HQ bound for Dar es Saalam, with the equipment to be distributed to schools across Tanzania.

Fundraising

Camara Education operates as a social enterprise and thus generates a significant proportion of its own revenue. Schools are charged for Camara services at a heavily subsidised price, in order to make them more affordable for those in the most disadvantaged areas. Income from the sale of computers, recycling and provision of services only partly covers our costs. Camara still relies on external funding to make up the deficit and most importantly to enable us to reach our three strategic goals 'prove, improve and scale.'

Partnerships are at the core of Camara's fundraising strategy. In 2014, our fundraising strategy saw a move away from mass-marketing and public events, focusing instead on key partnerships and building our awareness and relationships with funding organisations and individuals who align themselves with our core principles. We also know from experience that partnerships with companies offer far more than just financial benefits, businesses that have supported us have also been able to offer their expertise in areas such as; human resources, data management systems and business capabilities. A look at our partners and supporters page, will show the breadth and variety of donors investing in Camara's work across all the counties we work in and we give a huge vote of thanks to all of our supporters whether individuals, companies, foundations or government organisations.

Our eLearning centre sponsorship programme continues to attract generous support across our network, our thanks go out to all our supporters as well as those who continue to sponsor eLearning centres in the countries we work in.

Our aim for the future is to continue to build a diverse and sustainable set of income streams that will enable us to support our social enterprise models in each education hub and allow us to drive new projects that will prove, improve and scale our work in-line with our three year strategy.

Funders

salesforce

LK SHIELDS
YOUR LEGAL COUNSEL

Abbey Capital

ENTERPRISE IRELAND
where innovation means business

clicksco

AIB

CDYSB

Irish Aid
Rialtas na hÉireann
Government of Ireland

Digicel FOUNDATION

Michael & Susan Dell FOUNDATION

Adobe Foundation

EMC²

Symantec

RTÉ Staff - One World Fund

UKaid
from the British people

CSTWF

PUMA ENERGY FOUNDATION

UNESCO

ESB ELECTRIC AID IRELAND

Roinn Cumarsáide, Fuinnimh agus Acmhainní Nádúrtha
Department of Communications, Energy and Natural Resources

The David and Claudia Harding Foundation

thewaterloofoundation

Partners


Adobe Foundation
DANU
inver
ESB
Energy for generations
CDYSB
DELL
salesforce
whizz EDUCATION
avanti
sQuid
now you're loaded
siliconrepublic
UNESCO
Irish Aid
Rialtas na hÉireann
Government of Ireland
AGA KHAN FOUNDATION
e-learning for kids
intel
workday.
COUNTY OF SAN MATEO CALIFORNIA
PALO ALTO UNIVERSITY
Engaging Minds. Improving Lives
EMC²
EQUINIX
SWICN
Digicel group
haven
NUI MAYNOOTH
foróige
ymca ireland
YRD
iadt
DUN LAOGHAIRE
nyci
REGISTERED CHARITY NO. CHY15856
UCD VOLUNTEERS OVERSEAS
www.ucdvo.org
cross care

Technology Donors

EWaste

Camara Education is reducing the carbon footprints of organisations every day. Daily, it receives hundreds of pre-owned computers that would have been put beyond reuse and recycled and instead extends the life of these computers through a refurbishment process.

With the evolution of technology as a readily available resource to those in nearly all parts of the world, the recycling and safe disposal of eWaste has increasingly become a major problem.

Camara Education is committed to creating a closed loop system for all eWaste generated through our initiatives worldwide. We take this commitment very seriously and will ensure we accomplish this through the implementation of the most current and up to date processes and practices in the areas of eWaste disposal and asset tracking.

Camara strives to become an innovative leader in eWaste management.

Camara education hubs have made a commitment to take back IT equipment when it reaches the end of its usable life. To incentivise schools, Camara offers upgrades to schools at a discounted price in return for their used or non-working units.

End of life equipment is then either transported to a Camara recycling partner or stored in an area designated by Camara as appropriate for eWaste storage and aggregation. The eWaste will be stored in a locked container or other approved structure until an appropriate and cost-effective downstream partnership has been established in the operating country.

Every reasonable effort is made to control all electronic wastes and prevent it from entering landfills or incinerators.

Key Achievements 2014

- Camara Kenya established a relationship with East African Compliant Recycling where we collect eWaste at the hub in Mombasa . This eWaste is collected by EACR and Camara is paid a rebate for all eWaste collected.
- Camara Lesotho established a relationship with a local aggregation facility. They have already collected all Camara eWaste and will continue to do so.
- In Tanzania, a partnership has been established with Worldloop, partnering with Chilambo Limited to hand over all eWaste.
- All eWaste in Uganda has been collected and is being stored in a secure facility, awaiting transportation to a certified recycling centre.

Challenges

A lack of certified facilitators throughout Africa has led to challenges in safely disposing of eWaste. The distance between hubs and recyclers makes most shipments extremely expensive. There have also been difficulties securing funds as well as the necessary documentation and permits for transboundary shipments.

To meet these challenges Camara Africa has recently formed new partnerships with local aggregators who are partnered with Worldloop, a Belgian NGO committed to creating local partnerships in the developing world to deal with eWaste stores. These partnerships give Camara a long term sustainable downstream eWaste solution for most of our African hubs. In addition, Camara Education has begun offering a rebate to educational hubs for every computer recycled. This incentivises the hubs to deal with their eWaste proactively as well as gives them the financial resources to deal with the transport and logistical issues involved in shipping eWaste.

Education

The Camara Model

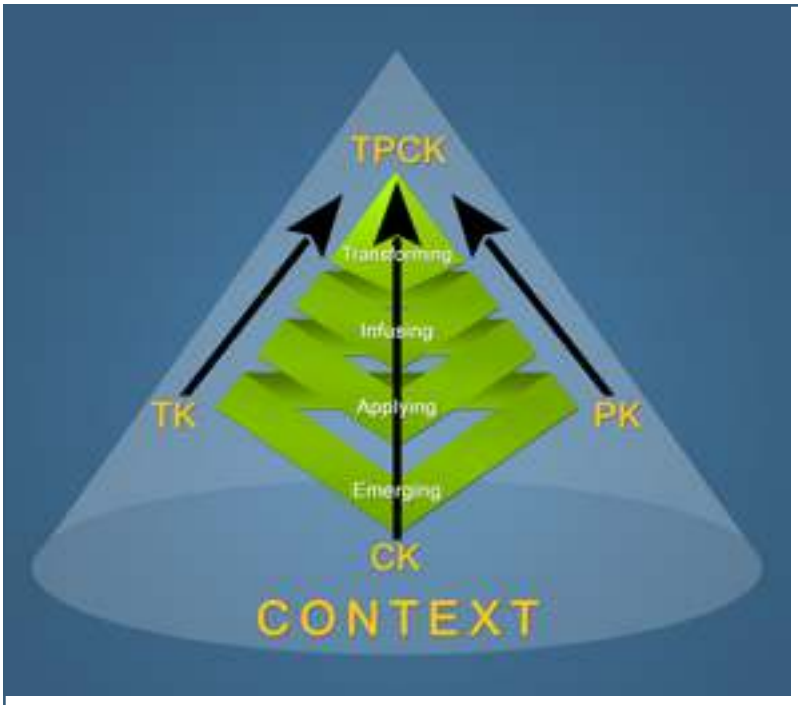
Successful adoption of ICT into teaching and learning practices can be measured by improved educational and learning outcomes, such as 21st Century skills. Guided by the current strategy of 'Prove, Improve and Scale', each Camara education hub has taken measures to implement the strategic focus in each of these areas. This has seen the hubs focus on solutions to improve learning outcomes, in the areas of student numeracy, literacy and computer studies, improve educational outcomes, such as improve quality of teaching, student attendance and transition. This approach is backed by monitoring and evaluation systems to report on results achieved in these areas.

How We Do This

Infusing ICT into education systems and teaching and learning practices, to achieve measured results, is a challenging process and changing to new demands and requirements takes time, support and a clear direction. Progress needs to be marked by demonstrated results and evidence of positive change.

In light of this, Camara believes that the introduction of ICT should take place in a deliberate staged fashion and that the focus for each stage should be the desired educational/skill outcome to be achieved, in addition to what is needed to deliver this. Core to this strategy is the 'School Progression' which details the stages that schools should progress through, in line with a holistic approach. This puts the emphasis on education outcomes supported by key enablers which Camara have identified as the areas of technology, training, leadership and policy, administration and continuous support.

Abinet Fekade, Headmaster at Diell Betigill School, Addis Ababa, Ethiopa.



UNESCO-IICBA ICT Enhanced Teacher Development Model

Emerging Stage: *The teacher development focus is discovering ICT tools and their general functions and uses, and the emphasis is usually on basic ICT literacy and skills. At the emerging stage, classroom practice is still very much teacher-centered.*

Applying Stage: *The focus is on the development of digital literacy and how to use ICT for professional improvement in different disciplines. Teachers use ICT for professional purposes, focusing on improving their subject teaching in order to enrich how they teach with a range of ICT applications.*

Infusing Stage: *The teacher development focus is on the use of ICT to guide students through complex problems and manage dynamic learning environments. Teachers are developing the ability to recognise situations where ICT will be helpful, choosing the most appropriate tools for a particular task and using these tools in combination to solve real problems.*

Transforming stage: *Teachers are themselves master learners and knowledge producers who are constantly engaged in educational experimentation and innovation to produce new knowledge about learning and teaching practice.*

Teacher Training and Continuous Professional Development

Camara follows the ICTeTD model as a framework to identify competency levels and to provide a progressive learning path for teachers to deal with individual competence gaps. This allows Camara to build a continuous professional development (CPD) path for teachers. Camara's commitment to each school is to bring teachers to a level where they have the capacity to transform their educational environment through ICT.

Educational Resources

Camara provides schools with educational suites that teachers and educators can utilise to transform their educational delivery. Each computer that is distributed to schools is loaded with resources to suit the educational environment, such as the Edubuntu package that is distributed to our schools across Africa and Haiti. This package contains quality software for primary, secondary and tertiary level institutes.

Schools who face challenges in accessing internet resources are supported by providing offline eLearning resources such as an offline version of Wikipedia built for schools. Where possible, schools are provided with comprehensive repositories of curriculum focused eLearning content provided by RACHEL and Khan Academy. Through this provision, eLearning is still possible without internet access.

Camara Training Courses

The ICTeTD model provides Camara with a framework to develop a competence development path based on appropriate training that assists teachers in moving between each of the levels. Although each professional development path for teachers will be unique, it will be made up of one or many training courses offered by Camara.

Camara currently offers courses which are delivered through instructor led courses, eLearning courses or a blended approach.

Camara Courses

Teacher Focused Courses: ICT Skillbuilder for Teachers, Intel Teach Getting Started for Teachers, Intel Teach Elements, Using Moodle to Connect Students for Teachers, Google Apps for Education suite, Using Freeware in the Classroom, Internet Resources for Classrooms, Scratch programming in the Classroom.

Principals and Schools Leaders: Educational Leadership in the 21st Century.

School Technicians: Cisco IT Essentials for School Technicians, Cisco CCNA Discovery for School Technicians, Camara Systems Administration for School Technicians.

Camara 'Prove' Strategy

In 2013, Camara began a strategic review to take stock of where it was as an organisation and plot a way forward. The outcome was a three year strategy that can be summed up in the phrase 'Prove, Improve and Scale.' The two aspects of the strategy are (1) to prove the impact that Camara's ICT in education model is having and (2) to grow the number of students impacted from 700,000 to 2,000,000. This will be achieved both in the provision of technology and the increased utilisation of that technology; through training, educational content and support. These goals are to be met by the end of 2016. The realisation of the second aspect of the strategy will not be possible without the first. While we believe that Camara is having a lasting positive impact on the lives of many students, it will not be possible to attract more donors and supporters without quantifying what this positive impact actually is. To this end, the Prove aspect of the strategy has the following three goals:

- Prove in quantitative terms the impact of the Camara model.
- Measure the impact of Camara's activities on educational outcomes, e.g. digital literacy, 21st century skills, literacy and numeracy, grade improvements.
- Build a comprehensive Monitoring & Evaluation system.

While these three goals are presented as being separate, the achievement of the first two is dependent on the successful construction of a comprehensive Monitoring & Evaluation system. In the past, Monitoring & Evaluation has been conducted by Camara on an annual basis, usually as part of a specific project or for the collation of our annual report. However, as can be seen in the goals above, this is not a sustainable approach for an organisation that emphasises the importance of education over just providing technology solutions. This section provides some detail on how we are constructing a comprehensive Monitoring & Evaluation System and, thus, addressing the other two goals.

A full time Monitoring & Evaluation Officer is employed to oversee the development of the Monitoring & Evaluation system. This system sets out; what data needs to be collected to track our results, how this data is collected, analysed and reported, and how it is disseminated, so that we learn from what went right, as well as what went wrong. This is incredibly important if we are to become a more data driven organisation, basing our decisions on evidence.

In 2015, this system will be piloted as part of an

Students from Scoil Mhuire, Dublin, Ireland.

Irish Aid funded project in Zambia. The project aims to impact schools across three provinces, targeting those that offer Junior Secondary education. Computer Studies has become a compulsory and examinable subject for students at this level, which means more and more schools are in need of Camara's support. Irish Aid have provided help and support in setting up the Camara Zambia hub to adopt a results based approach.

Based on the experience in Zambia, the system can then be expanded and adapted to the other hubs and across the entire organisation. As part of this will be the creation of a programmatic approach for each hub whereby a 3-4 year strategic plan is adopted which sets out the strategic goal and educational and learning outcomes that we will aim towards. The Monitoring & Evaluation system will be shaped around these aims, while also achieving the two goals noted above. However, perhaps most important to the successful adoption of a Monitoring & Evaluation system is the realisation across our entire network of the potential contribution such a system can make to improving our support to schools.

As a social enterprise that values the contribution ICT can make to the lives of young people, we also value the contribution ICT can make to Monitoring & Evaluation. One of the key innovations introduced is the use of Android tablets for data collection in the field. This allows us to deploy surveys in a more efficient way compared to the traditional paper based method. Time spent entering mountains of data into spreadsheets and the resultant errors that can occur is now eliminated. Data can be gathered in the field via the tablets and uploaded directly to our online repository. From there it can be downloaded, analysed and reported.

However, this system works best with quantitative data. At Camara we believe that reporting numbers and statistics is not enough. We subscribe to the maxim 'No numbers without stories, no stories without numbers.' This is why we are deploying the use of qualitative methods such as focus groups, interviews, and student essay writing amongst others to provide narrative depth to the data we collect.

To facilitate the easy flow of data and stories across the Camara network we will develop an integrated Information Management and Monitoring System. This will be a centralised, online system that facilitates the secure storage, access, dissemination, and reporting of information. This will help to ensure that data and information is supply driven rather than demand driven and that continuous learning and improvement is a key part of Camara operations.

Education Hubs

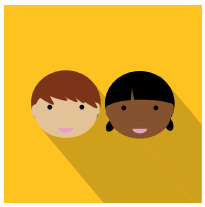
Mji Wa Salama Children's Home, Mombasa.

KENYA

Country Approach

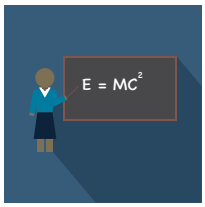
Camara Kenya is a social enterprise which provides affordable and high quality donated ICT equipment- loaded with educational software and materials - to schools and educational institutions. Camara Kenya also offers training to teachers, young adults and members of the public.

> **"I believe that grades have improved across the board since the PCs were introduced."**
>
> ***Veronica Onjoro, Teacher, Kikowani Boy's Primary School, Kenya.***

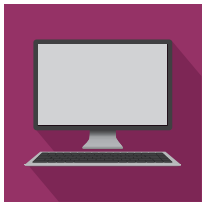


Digitally literate students **52,290**

Schools reached **170**



Teachers trained **947**



PCs delivered **2,490**

Special Focus

In early 2014, Camara Kenya became one of four partners on the groundbreaking iMlango project. iMlango, derived from the Swahili word for door or portal, is a learning programme developed for African schools. It delivers digital access, smart card-based attendance monitoring and online learning tools to primary schools. The first phase is delivering improved education outcomes to 150,000 children - including 52,000 marginalised girls - in 195 schools across Kenya.

iMlango is supported by the Kenyan Ministry of Education, Science and Technology and delivered by three companies and one social enterprise, working in partnership with the UK's Department for International Development (DFID): Global satellite operator Avanti Communications; sQuid, the smartcard and digital payments system provider; online maths tutoring provider, Whizz Education; and education NGO, Camara Education.

Preparing the schools for the computer's arrival was a challenging task for Camara Kenya. A team of 35 volunteers and 14 staff embarked on the project by visiting all the 195 schools for vetting. This was later followed by fixing the computer labs in 130 schools, including setting up computer tables, electrical fittings, metal grills on windows and doors to enhance security as well as networking the lab.

The first of four containers earmarked for the iMlango project arrived in Kenya in mid-July 2014. Once the Kenya team checked all the equipment, the hard work of dispatching the computers to the schools began. With 195 schools being serviced, the task of distributing the equipment was a demanding one, but one which everybody in the hub is well used to. As well as supplying the schools with computers, training is provided to teachers who will ultimately be responsible for imparting that knowledge to their students.

The second container arrived in mid-August and work has been ongoing to distribute the equipment from that shipment to schools all over Kenya, a country of 580,367 square kilometres – a land mass six times the size of the island of Ireland.

"The introduction of iMlango has come at the right time especially during this time of technology in the 21st century. By integrating ICT in schools, it will help learning to be real and enjoyable, reducing truancy in schools. Teachers will also get the opportunity to get more information from the internet, thus giving pupils the content they need."
Monicah Robi Mokenye, Kenyan teacher

This unique programme is capturing the attention of children, teachers, government and aid agencies as it pioneers the creating of a digital education profile for children. For the children in Kenya, iMlango is the doorway to a better education.

Case Study

Veronica is from Mombasa and has over 30 years experience of teaching, with 5 of those years in Kokowani Boy's Primary School. She recently completed a master's degree in Education & Management at Moi University in Mombasa. She is currently developing a PhD proposal to attend Mount Kenya University. She wants to research on investment in career education and its effects on career development in Kenyan universities. She is also a keen opinion writer for a local newspaper.

Veronica Onjoro

"The Camara computers have made it easier for me to express myself in class, especially through using presentations. I am better able to provide examples that aid in the teaching of my lessons through the applications present on the computers. Administration has been made easier as I can put marks together on a spreadsheet or type exams using a word processor. I believe that teaching has been made more interesting.

The students can express themselves better through using the Camara PCs. This has been made especially easier through the range of information available to them. I believe that grades have improved across the board since the PCs were introduced. The improvement in students who I would expect to perform poorly have particularly surprised and delighted me.

I have seen a greater eagerness amongst the students to come to school and learn. They now get more enjoyment from the school day. But the major impact has been their improved ability to learn and work independently, facilitated by the Camara PCs."

Jerusalem Primary School, Addis, Ethiopia.

ETHIOPIA

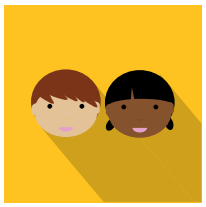
Country Approach

Camara Ethiopia is a registered foreign NGO operating in direct partnership with the Federal Ministry of Education to deliver the Camara package to around 900 schools across all regions of Ethiopia. The agreement comprises the delivery of 17,500 computers and training of a minimum of 1,750 teachers over five years.

In order to achieve this, Camara Ethiopia works in strategic partnership with each Regional Education Bureau. As of the end of 2014, Camara is operating in six regions, including Addis Ababa, Afar, Amhara, Benishangul-Gumuz, Gambella, and Oromia.

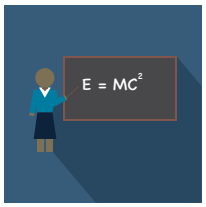
Camara Ethiopia continues to refine its approach and service delivery strategy continuously to meet the needs of schools. In 2014, these included:

- Educational Leadership training for school directors and local government officials.
- Strategic alliances with local organizations with a common objective.
- A cost sharing model with regional and Zonal Educational Bureaus to conduct capacity building, technical support and monitoring & evaluations.



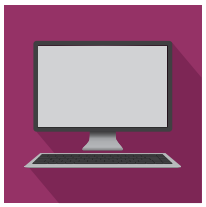
Digitally literate students **86,646**

Schools reached **147**



Teachers trained **1,426**

School leaders trained **421**



PCs delivered **4,126**

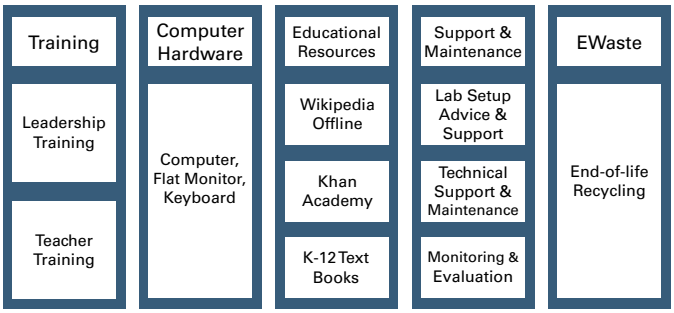
Special Focus

2014 has been a significant year for Camara Ethiopia. Now in it's fourth year of agreement with the Ministry of Ethiopia, the partnership is working to close not only the huge gap in ICT access in remote areas, but also provide the much needed capacity building and teacher training.

Camara Ethiopia also has an agreement with the Ministry of Education to work with the Regional Education Bureaus to reach schools in remote areas, such as those with limited infrastructure.
A large majority of the Ethiopian population lives in rural areas and in fairly dispersed communities. Therefore, spreading education and ensuring equitable access to education presents specific challenges in such geographic context.

The Camara Package

The Camara Ethiopia model provides an end-user focused solution - taking into consideration the Ethiopian context. The model involves five broad components:



- Training (ongoing training in ICT technology and pedagogy of ICT, preventative and maintenance training).
- Hardware (affordable, high-quality and reliable computers and laptops).
- Educational Resources (Educational Games and Software, VLEs, offline repositories with localised and curriculum specific content).
- Support and Maintenance (lab preparation and set up, ongoing technical support).
- EWaste (collection and end of life recycling).

From our experience in the last four years, creating such an eLearning culture within schools requires time and effort. In light of these challenges, Camara Ethiopia has been able to provide over 8,000 Computers to over 400 primary and secondary schools, dispersed across six regions (Addis Ababa, Afar, Amhara, Benishangul-Gumuz, Gambella, and Oromia) and includes leadership and ICT skills training to over 1,000 teachers and school principles. This has allowed 86,646 children to have access to eLearning environments.

This has all been achieved with the close collaboration of the Ministry of Education (MoE) and a number of key stakeholders, such as the Regional Educational Bureaus and non-governmental organizations.

Case Study

Chali has spent 3 years as the head teacher in the Addis Amba Primary School and during this time, he has witnessed a massive transformation in the curriculum thanks to the introduction of technology in the classroom.

Chali Bekele, Head Teacher, Addis Amba Primary School.

"Camara provides much more support beyond that of the computers they supply the school, they provide training and encouragement to the teachers, so they can utilise this platform properly as well as regularly monitoring the childrens' progress with the Camara software.

The children have increased their knowledge through using these computers and prefer the teaching material from the Camara software. Learning is made easier through technology and the content available on the internet makes it easier for them to source reading material for their studies.

By using the computers, it also helps the teachers provide a more interactive learning experience for the children. By using the computer, they can write their own exams, develop the teaching curriculum and refer to different research by using the internet, this in turn can aid them in their professional development."

Nahumba Basic School, Choma, Southern Province, Zambia.

ZAMBIA

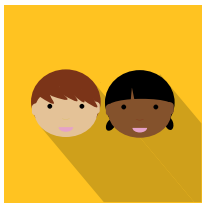
Country Approach

In 2014, Camara Zambia finalised the hub's five year strategic plan for the period 2015 - 2019. The focus of the local strategy is in line with the focus at global level which is 'Prove, Improve and Scale.' The hub will implement this strategy by maintaining the Camara global beliefs, which are:

- Poverty is unacceptable in the 21st century in Zambia.
- Education is the key to alleviating poverty in Zambia.
- Technology has the ability to radically improve Zambian education.

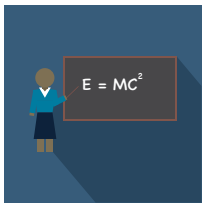
The vision of Camara Zambia is; 'A prosperous world class educated Zambian society' and the mission is 'The transformation of education using technology to empower Zambians to contribute to a prosperous society.'

To achieve its mission, Camara Zambia in 2014 focused on supporting primary and secondary schools in three out of the ten provinces of Zambia. The provinces are Copperbelt, Southern and Lusaka.



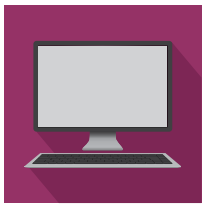
Digitally literate students **28,077**

Schools reached **59**



Teachers trained **272**

School leaders trained **69**



PCs delivered **1,337**

Special Focus

Camara Zambia operates a programme informed by a social enterprise ethos. This model enables Camara Zambia to fund the 'scale' of the operations, however there is still a need for additional funding to cover the costs of our 'prove' and 'improve' goals. Irish Aid funding was secured to support the hub in its operations. The Irish Aid project was designed to strengthen the capacity of the Camara Zambia team to develop and implement its programme. The deliverables under this project were grouped into four sets:

- Corporate Governance
- Operations Management Tools
- Intervention Logic and Results Framework
- Hub Monitoring and Evaluation

Through the support of Irish Aid, the efforts of Camara Zambia and Camara Education Limited staff, as well as external Zambian consultants, the deliverables were successfully achieved. Two key examples of this were the implementation of a contextual analysis and the design of a robust M&E system.

The contextual analysis was carried out in early 2014 by Dr Stella Kaabwe, an educational expert with wide experience of education projects across Africa. A major outcome of the analysis was the validation of Camara's social enterprise approach to the Zambian context as schools become more and more decentralised. Furthermore, it allowed Camara Zambia to identify key focus areas within Zambia's education sector where its products and services can be targeted through its social enterprise approach. The development of a project that focuses on Junior Secondary grades where Computer Studies has become compulsory is an example of this.

Critical to Camara's objective of proving its impact, a robust M&E system has been put in place. The M&E system sets what information is to be collected, how it is to be collected, and how it is to be analysed and reported. This allows Camara Zambia to learn from activities and report on progress and successes to partners and donors within the education sector. As Camara Zambia's relationship progresses with the Ministry of Education, reporting will be key to building the relationship and demonstrating Camara's commitment to the transformation of education in line with the Ministries objectives, as set out in their National Implementation Framework.

While the Irish Aid support focused on the strengthening of Camara Zambia's capacity to deliver education programmes, the beneficiaries also benefit from Camara's social enterprise approach to supporting ICT integration into schools. Comprehensive support has been built into the programme delivery for schools that enrol onto Camara's programme. This comes in the form of capacity development of staff through teacher development programmes and training programmes for school leaders. Additionally, support is provided through ongoing engagement with schools.

All of the above elements will contribute to the sustainability of the programme upon the conclusion of funding from Irish Aid and allow all beneficiaries to benefit in the longer term.

Case Study

Choolwe Mukuni, Choma Secondary School.

Choolwe Mukuni is 14 years old. He is studying at Choma Secondary School in Choma, Southern Province, Zambia

"I live in Kalomo. I have one brother and one sister. My dad is a businessman in Choma town and my mum is a school teacher. My Grandfather is Chief Mukuni.

I am a boarder at my school. My hostel is next to the school so it only takes a few minutes to walk. I am in Grade 8.

The eLearning centre has made learning a very important skill a lot easier. I like learning computers at a younger age because it is a lifetime skill. For my future education, because I am learning the basics, it will make using computers easier. It will also make adapting to my future career easy. Because I know how to use computers, it will be easy to get a job as it is a necessity to be computer literate. Using the computers I have learned how to type properly using the word processor. We recently learned how to type a letter.

When I finish school I want to be a doctor because I want to be able to help people. I believe that the teaching has been made more interesting."

Kipawa Libermann Pre & Primary School, Dar es Salaam.

TANZANIA

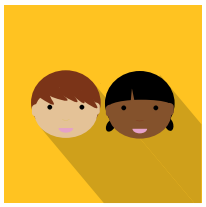
Country Approach

Camara Education Tanzania has worked to integrate ICT into teaching and learning in more than 100 government and privately owned schools across the country.

The Dar es Salaam hub expanded in August 2014 to include two training rooms and office space, in addition to the storage and workshop areas. This allows Camara Education to bring its training programmes to the Tanzanian public, as well as school teachers.

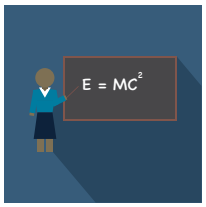
With the arrival of Camara Tanzania's tenth container of equipment in the Autumn of 2014, September was the year's most successful month of hardware deployment - seeing 330 computers installed and 68 teachers subsequently trained in October.

> **"Technology is important in my education because it helps me to become an innovator."**
>
> ***Sheila, student (15), Jangwani Secondary School, Dar es Salaam, Tanzania***

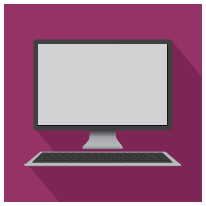


Digitally literate students **23,037**

Schools reached **41**



Teachers trained **497**



PCs delivered **1097**

Special Focus

UCD Volunteers Overseas in Tanzania.

Camara's multi-year partnership with University College Dublin's Volunteers Overseas (UCDVO) continued with 90 computers installed in the Morogoro and Mikumi regions of Tanzania – bringing the total installed by the project since 2009 to 550. Agreement has been reached to continue this partnership in 2015.

A major donor-funded project was completed in 2014 where the organisation constructed labs, installed computers and trained teachers at twenty schools in four regions of Tanzania.

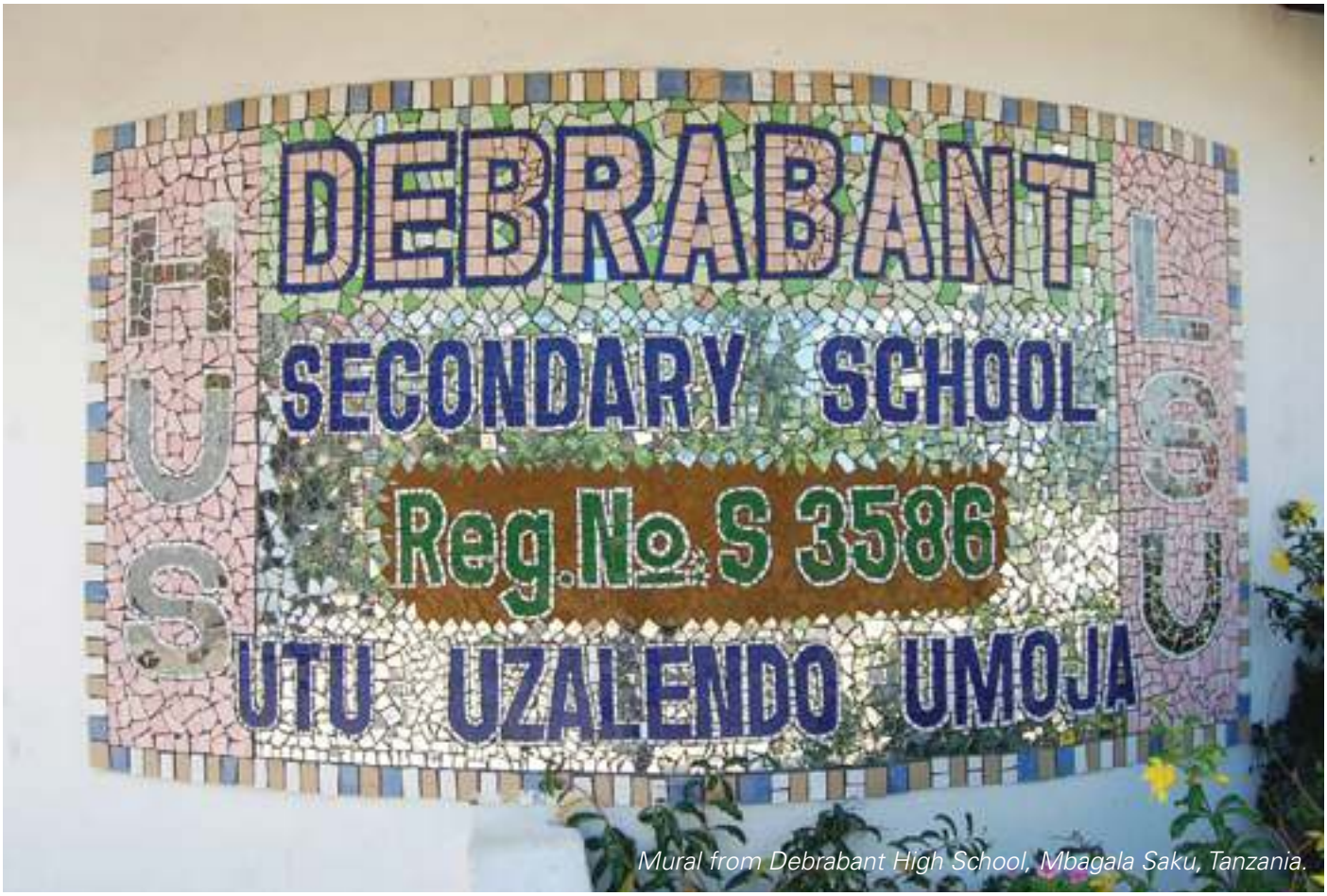
"The eLearning centre has raised the standard of learning."

Case Study

Laurencia Isak at Debrabant High School.

Laurencia Isack is a 17 year old secondary school student at Debrabant high school in Mbagala Saku. She lives in Kijichi and takes the bus to school every day. This is what she has to say about the schools new eLearning centre.

"The eLearning centre has raised the standard of learning through getting extra information using Wikipedia and other programs. I'm learning geography, history and literature through the use of Wikipedia and use it for doing different assignments given by teachers, I am also planning to use it for the coming project next year. Material loaded in the Camara computers can help me pass my exams and I have acquired ICT skills which could help me get employment in the future. I hope to continue studying and have a good career in the future."



Mural from Debrabant High School, Mbagala Saku, Tanzania.

St. Agnes High School, Teyateyaneng, Lesotho.

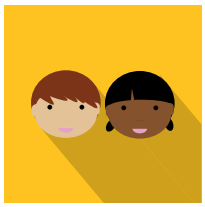
LESOTHO

Country Approach

Camara's operations remain a challenge in Lesotho where national food security issues and political instability continue to pressure government's resources and delivery; restrictions on schools' purchase of ICT equipment presents additional challenges. Establishment of an education hub in Maseru has improved the organisation's profile and visibility and has led to independent engagement with a larger number of schools than in 2013.

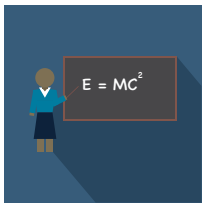
In mid-2014, Camara Lesotho led the network's certified recycling of eWaste. Additionally, the hub successfully delivered its final eLearning centre for the Waterloo Foundation and received donations of used ICT equipment from a number of UN agencies.

> **"They really haven't had this chance to have any contact with IT or computers up until this point but they immediately take to it, they take to the sounds, to the colours, to the games and we see huge benefits from this"**
>
> ***Philip McAllister, Camara Africa Operations Manager***

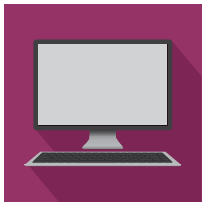


Digitally literate students **4,515**

Schools reached **12**



Teachers trained **132**



PCs delivered **215**

Jamaica Primary School, Northwest Manchester, Jamaica.

JAMAICA

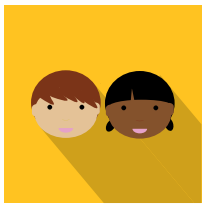
Country Approach

In late 2014 due to an increasingly challenging operational environment, Camara made the difficult decision to cease hub operations in Jamaica. The hub at Penwood High School in Kingston was cleared out and all the non-functioning computers which had been collected from the schools were re-imported to Ireland for recycling. Whilst this was an expensive option, it was the environmentally and socially responsible action to take.

We will continue to support the computers that are in warranty, and provide end of life recycling options for the more than 3,000 computers that have been sent to schools since Camara Jamaica Foundation opened its doors in 2011.

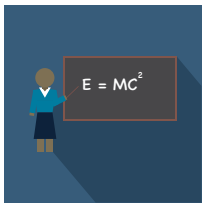
The strategic decision to cease operations, while difficult, allows Camara to refocus investment on Haiti and the other countries where the Camara model has proven to be sustainable and effective in transforming education.

> **"Computers help the teachers provide a more interactive learning experience."**
>
> ***Chali Bekele, Head Teacher, Addis Amba Primary School, Ethiopia***

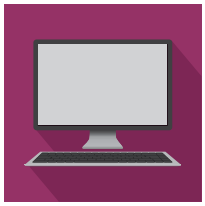


Digitally literate students **13,083**

Schools reached **124**



Teachers trained **102**



PCs delivered **623**

Primary School, Acadien, Jean Rabel, Haiti.

HAITI

Country Approach

Camara Haiti is dedicated to empowering Haitians to empower each other. Specifically we aim to achieve this through the provision of IT equipment to schools. Installing computer labs into schools, which typically would have limited access to books, there is a strong emphasis on how computers can be used to improve literacy and numeracy skills. We are also focused on providing accessibility tools on our computers for special needs students.

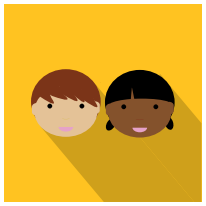
School teachers are trained in basic IT skills, to ensure that they are given the opportunity to learn and to develop their repertoire of teaching skills and have greater opportunities to access more literacy and reading materials in French and Mathematics in particular. Teachers are all trained in how to integrate IT into all of their subjects with cross-curricular exercises.

Camara Haiti trains local volunteers in basic computer maintenance and in particular we target single mothers and at risk youths.

Special Focus

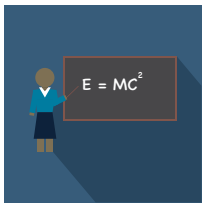
In 2014, Camara Haiti signed a new partnership agreement with Fondation Digicel to provide access to ICT in Education in disadvantaged communities across Haiti, through the delivery of fourteen eLearning Centres per year, over two years. The new agreement is an extension of the partnership which forms part of a greater initiative, 'The Platform for Action of Women to Rebuild Haiti,' which is supported by more than 400 women's organisations from all over the country.

Under the agreement Camara Haiti manages a range of projects that encompass Camara's traditional eLearning centre model, as well as addresses some of the unique challenges experienced in Haiti, such as the high cost and limited availability of electricity in rural communities. We have sourced and coordinated the installation of solar powered systems for both UCDVO and Digicel, using local Haitian owned and run companies. In total, five solar laboratories were installed in 2014.



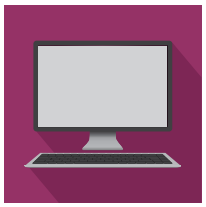
Digitally literate students **5,796**

Schools reached **27**



Teachers trained **275**

School leaders trained **20**



PCs delivered **276**

Photo: Wikimedia

Northern Uganda

UGANDA

Country Update

The ban on the importation of refurbished computers in Uganda continued to severely limit Camara's activities there for 2014. However, in May 2015, Camara will start work with the Aga Khan Foundation on a project funded by Dubai Cares, 'Transforming Students Learning and Teacher Professional Development through ICT.' The project will take place in both Kenya and Uganda and will run from 2015 to 2018. Through this project, Camara will provide training to both teachers and trainers and will continue to improve the educational outcomes of children across Uganda.

Photo: Wikimedia

Public Primary School

SOUTH AFRICA

Country Update

In 2014, Camara embarked on a pilot operation to determine whether there would be a market for Camara's educational services, as well as if there would be a strong pipeline from which to source computers. During the pilot 68 PCs were distributed to Mabedlana Primary School and 31 teachers received Camara training.

The pilot was positive in its findings and Camara is now seeking funding to set up a new entity in South Africa.

Techspace, Foróige Computer Clubhouse Blanchardstown, Ireland.

IRELAND

Country Approach

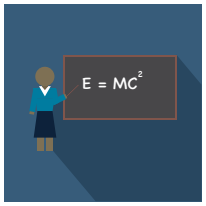
Camara Ireland's mission is to train and support all educators, working with low income communities, to use technology to inspire young people to master 21st century learning skills. With our training and technology, educators in both schools and youth services are supported to create better learning environments. In these environments, young people can gain the 21st Century skills to be creative, collaborative, problem solving critical thinkers and to become digital creators with technology rather than passive users of technology. These skills help them to overcome the social barriers in their communities that limit their potential.

In the formal education system (schools), we deliver teacher training, both in person and online, this ranges from teachers taking the first steps of technology use in the classroom, right up to using powerful communication and collaboration tools across the whole school.

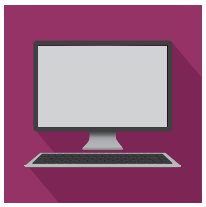
In the informal education sector (youth centres), Camara Ireland hosts the TechSpace program which trains and supports educators to provide young people with access to creative technology and STEM programs. This enables these educators to open TechSpaces in their youth centre.

At a TechSpace, young people are inspired to create, produce and have fun with digital technology. Typical activities include; film making, graphic design, coding, mobile app development and robotics. In undertaking these activities they engage in a learning process that involves creating, collaborating, communicating, and problem solving, key 21st Century skills.

TechSpace is now a national educational *movement* that includes all of the major youth service organisations (such as Foroige, YMCA, CDYSB, the National Youth Council of Ireland) and many third level institutes such as DCU, IADT and NUIM.



Teachers trained **601**



PCs delivered **1,359**

Case Studies

Aodh Ó Máirtín & Nicole Mullen at Gaelsoil Bharra Training.

Aodh's Story

Camara Ireland has worked closely with Gaelscoil Bharra in Cabra in Dublin, supplying both computers and training to the primary school. Aodh Ó Máirtín has introduced many new initiatives both in his classroom and across the school, using the new technology to great effect.

"We have found it really useful for literacy and numeracy. For example with Maths, I can make it fresher by sending my class the link to a Maths game that we timetable to play for 20 minutes. They can then spend some time writing up what they thought of the game and what they learned. This hits both literacy and numeracy in one exercise."

"We take it for granted that kids have laptops but there are always those kids that don't have access, Camara has given access to what should be available readily."

"Using Google Docs has allowed us to share information more readily, and allows the students to submit their homework to us online. They can start their work in class, then I can access it later and put in edits as corrections that they see when they look at the document at home."

"They get to learn the fundamentals of research and how to figure out what information online is actually relevant to them and what isn't."

"We've also used the laptops with history projects. One of the students discovered the free 3D modelling program, Sketch Up. He became a kind of mentor for it and introduced it to the rest of the class. The class decided it was useful and fun, so we used it to build 3D models of different types of Celtic and Norman homes through the ages, and compared their similarities and differences."

Katie's Story

Kate is a participant in the TechSpace program, which is hosted by Camara Ireland and delivered in partnership with a consortium of national and regional youth bodies, like YMCA. Through TechSpace young people are supported and inspired to become digital creators, inventors, and makers.

In 2014, through the TechSpace program, Kate applied to the Adobe Youth Voices Scholarship and she was chosen as one of the 25 international awardees, winning support to help her achieve her third level education goals.

In Kate's own words, "The scholarship has made an incredible difference to my life. It was a huge boost to my confidence in my creative ability and in my ability to see projects through to the end. The skills I learned during TechSpace has allowed me to strive forward in my course. I really appreciate all the help I've gotten over the past few months from everyone at YMCA, TechSpace, Camara Ireland, and Adobe. You have all been life changing to me on my new journey in college."

Kate Sexton (right) & Dr. Joseph Roche at Creative TechFest.

Hub Accounts

Photo by, Francis Curran

Holy Tree Academy ECDE & Primary School, Mombasa, Kenya.

Since 2011, Camara has a standardised financial system for the whole network. As such, all entities produce monthly accounts. The table below includes all accounts for 2014.

- Accounts have been converted into € using the respective FX rates of 31st Dec 2014.
- Camara Ireland and Haiti are part of Camara Education and therefore do not produce separate accounts.
- Northern Ireland has a year end of 31st May 2014.
- Not all accounts are externally audited, this is either due to size or the audit is in progress.

	Income(€)	Expenditure(€)	Surplus/Deficit(€)
Jamaica	98,430.00	59,469.00	38,961.00
London	107,295.00	119,277.00	-11,982.00
Belfast	112,412.00	102,881.00	9,531.00
Zambia	64,399.00	52,298.00	12,101.00
Ethiopia	123,450.00	99,430.00	19,953.80
Kenya	393,033.00	394,451.00	-1,418.00
Tanzania	72,585.00	73,714.00	-1,129.00
Uganda	3,483.00	3,483.00	0.00
UK	112,787.00	131,977.00	-19,190.00
US	100,411.00	70,327.00	30,084.00
Lesotho	12,518.00	12,186.00	332.00

Resource and Refurbishment

Jackson Ong, Volunteer Workshop Technician at Dublin Workshop, Ireland.

Dublin, Ireland

Summary of Activities

Dublin continued to produce the majority of computers shipped to educational hubs in 2014, with a total of twelve containers sent out over the year. Our approach is to focus on sourcing reusable equipment from business to business (B2B) within Ireland. Within B2B we prioritise large multinationals, original equipment manufacturers, government bodies and high volume channels such as IT equipment installers. Whilst we do receive a significant amount of IT equipment from individuals, we do not directly focus on this approach. Camara Dublin also receives donations of non reusable equipment which generates recycling revenue.

Volunteering

Volunteers are a central part of the workforce across Camara Education, they contribute enormously to the work that is carried out in Dublin, both in the workshop and with our operations in the office. Over the years Camara has built up excellent relations with local IT colleges, offering students structured work placements which compliment their studies and giving them the opportunity to get some hands on experience. We work with many of the Education and Training Boards, providing the practical component which is needed at the end of the course for students to graduate.

Camara Dublin also offers placements to those who are unemployed, working with government initiatives such as Tús, helping people to get back into the workforce. Our office is a hive of activity with volunteers supporting Camara in everything from administration and communications to fundraising and marketing. The dedication and commitment of so many volunteers brings with it a vibrancy and diversity to the organisation.

DUBLIN

Computers in

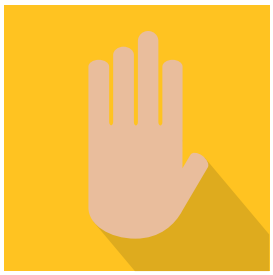
23,087

Computers out

9,777

Self generated revenue

€148,103



No of Volunteers

223

Belfast, Northern Ireland

BELFAST

Summary of Activities

2014 was a great year for Belfast. The plan at the start of the year was to take the final step in refurbishing computers and begin supplying container ready boxed computers. In the earlier part of the year this was done through shared containers departing from the Dublin refurbishment centre. In October, the first container was sent direct to the Camara Hub in Haiti.

Shipment of 276 computers sent to Camara Haiti.

Volunteering

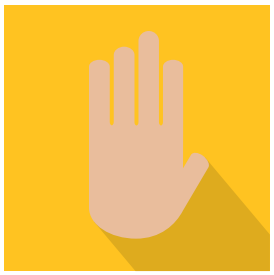
In 2014, we have been supporting a number of local training establishments to offer placements to people on their various courses. Working with Ulster Supported Employment and Learning, Action Mental Health and FIT NI we placed 25 mostly young unemployed adults teaching the refurbishment skills and improving their employment prospects. We also placed two young people from Larne Enterprise Development Company (LEDCOM) for six months who were completing the Enterprise Development Programme funded by Lloyds Bank Foundation NI. As a result of the success of the programme, one of the participants is now an employee of Camara.

Computers in

3,078

Computers out

2,122



No of Volunteers

27

London, England

Summary of Activities

Camara London opened as a fully operational computer refurbishment hub in March 2014. The focus has been to raise awareness of Camara, develop partnerships to recruit volunteers both individual and corporate, and attract computer donors and to be able to send out our first shipment, which shipped in September 2014.

First computer shipment - sent to Camara Tanzania.

Volunteering

Volunteer support is an integral component to the operations at Camara London. Volunteers provide much needed support in all areas, from computer refurbishment to media and communications to marketing and admin support. During 2014 there were a total of 26 volunteers, who joined us from the Southbank University, East London Advanced Technology Training (ELATT), CEI - Centre d'Echanges Internationaux and Absolute Internship. Providing structured placements, which offer volunteers a chance to develop new skills and training in their interest area, is key to successful placements. Corporate volunteer days have also brought in groups of skilled and enthusiastic volunteers, from companies such as Salesforce and we hope to build on this support for 2015.

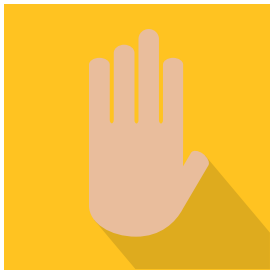
LONDON

Computers in

1,847

Computers out

500



No of Volunteers

26

San Jose, USA

SAN JOSE

Summary of Activities

Camara USA had a very strong year in 2014. 1,400 computers were sent out to 116 schools - both internationally as well as to low income schools in the San Francisco Bay Area. In total, this contributed to over 50,000 kids becoming digitally literate. Computers were sourced from a wide variety of companies, including Salesforce, Workday, Pivotal, Equinix and QuinnStreet, providing hundreds of high quality laptops each. We also worked with a number of educational institutions - Palo Alto University and James Lick High School - to refurbish their computers for schools less fortunate.

Camara USA also received 330 new smart phones and tablets from Intel and these were supplied to Camara Kenya for use in the Women's project there. In addition to shipments to Jamaica, Haiti, Ireland and South Africa we also started working with the County of San Mateo to provide eLearning opportunities in afterschool programs in South San Francisco. Despite San Mateo being at the heart of the technology world, there still remains significant pockets of inequality in access to digital opportunities, and it is these gaps that Camara USA is hoping to fill.

Volunteering

Attracting long-term volunteers to Camara USA continued to prove challenging given the nature of the jobs market in the area. A program was initiated with six students from San Jose Conservation Corp, a local vocational high school that helps young adults gain their High School Equivalent Diploma. This proved very successful both for Camara and the students. Volunteers continue to be a driving force in the centre and their contributions are highly valued.

Computers in

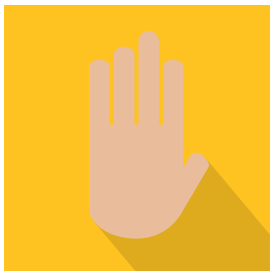
1,400

Computers out

1,443

Self generated revenue

$59,000



No of Volunteers

20

Audited Accounts

Photo: Tim Mansel

Inspire Academy, Lusaka, Zambia.

Directors' Report

REVIEW OF ACTIVITIES

Camara is a registered business name of CAMARA EDUCATION LIMITED.

OBJECTIVES AND ACTIVITIES

A) Camara is an international charity that operates as a social enterprise that uses technology to deliver 21st century skills, and as such improve education in disadvantaged communities around the world.

B) It is a company limited by guarantee, without having share capital. It is governed by a Board.

C) The Board met 4 times in 2014.

D) The business offices of Camara are in Chapelizod Industrial Estate, Dublin 20.

E) The Camara network consists of Education Hubs, which are independent local entities responsible for the front-line delivery of the Camara model to educational institutes within their respective countries. There are currently eight Education Hubs in Africa (located in Kenya, Lesotho, Tanzania, Uganda, Zambia, Rwanda, Ethiopia and South Africa), two Education Hubs in the Caribbean (located in Jamaica and Haiti) and one Education Hub in Ireland. In addition, there are Resource Centres in Dublin, Belfast, London, San Jose, and Johannesburg. The ultimate governance and decision making authority of the Hubs are the local boards. The Chair of these boards in developing hubs is a direct employee of Camara Education Ltd. The balance of the Board is made up of other Camara and local appointees.

F) Due to the prohibitive cost of technology in most cases, Camara collects redundant computers from organisations and individuals for refurbishment and reuse. These computers are refurbished and loaded with educational software before being shipped out to our Education Hubs in Africa, the Caribbean, and Ireland from where they are typically set up in 'eLearning Centres' in schools, colleges and community centres. Any equipment that cannot be reused in this fashion is recycled according to the EU WEEE Directive. Between 2005 and 2014, 121,914 redundant computers were collected within the Camara network. Of these, 61,634 have been reused as educational tools and the remainder recycled. Reused computers are shipped in bulk in 20 or 40 foot containers to our partner Hubs where further processing takes place. A 40 foot container typically holds 1,000 machines.

G) Education Delivery is carried out by our Education Hubs. These Hubs carry out additional quality control tests on the machines. These machines are typically installed in eLearning Centres in schools and community centres to provide educational tools to some of the most disadvantaged communities in the world. In addition to supplying computers to schools, our Hubs also provide other key services:

- Maintenance Support - Each school signs a maintenance contract with their Education Hub which ensures that the eLearning Centers are kept operational should any technical issues arise.
- Educator Training - In the majority of schools where Camara has installed computers, educators have little or no knowledge of how to use them. Therefore as part of our contract with them, Camara organises a variety of training programs, aimed at educators and principals, which training consists of:
    - Basic digital literacy skills.
    - The Pedagogy of ICT. Essentially how to integrate Information and Communications Technologies (ICT) into teaching and learning practices.
    - Technical Support. For selected educators this would include: basic computer maintenance; networking; administration of the eLearning Centre.
    - Recycling - At the end of a computer's life, schools are contracted to return the machine to the Hub where it will be recycled according to strict Camara guidelines.

H) Activities in 2014

During the year ended 31 December 2014, Camara:

1. Refurbished and sent out 13,842 fully working computers to the Education Hubs.

2. Supported our hub network training 4,299 educators and dispatching 11,591 computers from hubs to schools, both significantly up on the previous year.

3. Following a successful due diligence exercise, operations in Camara South Africa were suspended while sufficient funding to commence full operations is sought.

4. A more comprehensive eWaste program has been developed in Africa to enhance the environmental impact of Camara with downstream solutions now identified in all operational countries.

5. Partnerships were strengthened with Digicel and Dell.

6. An Organisational Quality department was established to improve the quality of training and educational content provided and ultimately to conduct in-depth monitoring and evaluation activities.

7. The significant iMlango project was commenced with 195 schools now kitted out with an eLearning Centre as well as internet access, dedicated educational software and attendance monitoring.

8. The first solar lab was installed in Haiti and Camara began offering the Edubuntu platform to schools in French and Creole in addition to English.

9. Due to an increasingly challenging operating environment, the difficult decision was made to cease hub operations in Jamaica at the end of the year. Warranty and end of life recycling services remain in place for all computers delivered since the hub began operations in 2011. This strategic decision to cease operations allows Camara to refocus investment to countries where the Camara model has proven to be sustainable.

I) Monitoring & Evaluation (M&E)

The findings of all Camara's monitoring & evaluation reports can be accessed at;
http://camara.org/about-us/monitoring-and-evaluation/

J) Financial Review

Camara operates as a social enterprise and is financed by a variety of sources: certain revenue generating activities such as computer reuse and the sale of computers to Hubs; grants from institutional donors; private donations; and own fund raising activities. As a social enterprise, Camara places great emphasis on transparency and robust financial stewardship.

Camara recorded a net surplus of €199,738 in 2014, compared to €72,394 in 2013. Incoming resources in 2014 increased by 67% overall to €2,988,930. There was a substantial increase in Project related income of 135% , the Imlango project contributed to 56% of this. Income from Recycling, Sale of Computers to our Hubs and Sale of Computers to Irish Schools have all increased by 33%, 41% and 7% respectively. Resources expended by Camara in 2014 increased by 63% to €2,789,192. The main reason behind the increase in total resources expended in 2014 is the associated costs of delivering projects with the iMlango project accounting for 53%. Delivering projects is the biggest expenditure of the organisation, followed by the wages and salaries, the cost of refurbishment of computers and support to our Hubs. Camara's cash position increased significantly to €836,909, compared to €387,205 in the previous year. The financial reserves at 31 December 2014 were greater than one quarter of operating costs, in line with the reserves policy adopted by the Board.

Costs associated directly with our Charitable Activities in 2014 represented 93% of our total resources expended, which is 4% higher than previous years, due mainly to the expansion of the hub network. The balance of our costs in 2014 consisted of Governance Costs (3% of the total) and Costs of Generating Voluntary Income (4% of the total).

Camara generated €20 from every one euro spent on fundraising.

GOVERNANCE

The Board places great importance on appropriate governance at Camara and proper engagement with management and stakeholders. The Board meets on a regular basis throughout the year, usually every 2 to 3 months. Board members examine and approve all strategic plans, annual budgets, operational plans, and statutory audit outcomes. Camara has sub-committees for Remuneration, Finance and Audit, and Fundraising. Board members such as the Chairperson, Treasurer and Secretary are in regular contact with management in relation to the stewardship of the organization between Board meetings. The Board maintains strong oversight of management and the overall direction of Camara. Management presents a comprehensive report at each Board meeting covering operational and financial targets, as well as ongoing activities, future plans, and other issues that would ensure good governance.

There are currently 9 members on the Board. Members are drawn from diverse backgrounds such as business, legal, accounting, the education sector, information technology, marketing, and the not-for-profit sector. Board members are sourced based on the strength of their existing experience of other reputable Boards, and also on the quality of the contribution they can make to the governance of Camara. The Chairperson inducts new members at the beginning of their term. The present Board has strong professional experience across a range of fields to ensure the highest level of governance.

In early 2014 Camara committed to starting the process of adopting and ultimately complying with The Governance Code: a Code of Practice for Good Governance of Community, Voluntary and Charitable Organisations in Ireland, which has since been achieved. The adoption of this Code can provide reassurance to donors that their money is being managed by a well-run organization, increase transparency, avoid bad risks, achieve goals faster, and reduce costs.

RISKS

Financial
It is the policy of Camara to hold between 3 months and 6 months operating costs as reserves to safeguard the continuity of its operations. No more than one quarter of such reserves should be held in non-euro currencies in order to manage foreign exchange rate movement risks. The proportion of restricted reserves to unrestricted reserves held is also monitored closely. The use of unrestricted reserves is governed by the annual budget that has been approved by the Board. The credit rating of financial institutions where money is held is monitored also on an ongoing basis. The liquidity risk is currently managed by ensuring that sufficient cash and deposits are held on short notice. The directors believe that Camara has adequate resources to continue in operational existence for the foreseeable future.

The financial policies, procedures and controls used by Camara across the network were comprehensively updated in 2014. Camara has developed detailed financial management and reporting systems to mitigate financial risks, which continue to be reviewed on an ongoing basis.

Organisational and Operational
Management undertakes ongoing monitoring of the level of organisational and operational risks. Camara implements appropriate procedures to manage organisational and operational risks to provide reasonable assurance to the Board.

These risks include the impact of potential economic instability on income levels, staff safety and well-being across the global network, organisational cohesion where global standards are maintained but that also allow an appropriate degree of local contextualisation, the achievement and demonstration of impact by Camara's activities, stock leakage, sourcing sufficient quantities of stock to meet demand,and data-wiping integrity.

Overall, the Board is satisfied that systems are in place to monitor, manage, and mitigate Camara's exposure to major risks.

CURRENT BOARD

Maria Mahon
John Brown
Joe Carthy
Jonathan Kelly
Cormac Lynch
Deirdre McCooey (resigned 22/01/2015)
Julian Davis (resigned 25/5/2015)
Fiona O'Carroll
Robina Walshe (appointed 22/01/2015)
Justin Kilcullen (appointed 26/03/2015)
Jean Cox Kearns (appointed 25/05/2015)

LEGAL STATUS

The Company is incorporated under the Companies Act 1963 is limited by guarantee and does not have a share capital.

RESULTS AND DIVIDENDS

The surplus for the financial year was: €199,738.

IMPORTANT EVENTS SINCE THE PERIOD END AND PLANS FOR 2015

1. Camara is partnering with one of our iMlango partners, Avanti Communications, to rollout out a project to 250 schools in Tanzania funded by the UK Space Agency. The project is educator centric, giving computers, internet access and training to enable the teachers to be the best they can be.

2. In the first half of 2015 a decision was made to close operations in our refurbishment hub in San Jose which had not quite made it to the point of sustainability. The legal registration and our charitably status will be retained.

3. Camara Ireland will become an independent entity from Camara Education, and its Techspace program will continue to be developed and expand.

4. Education Hubs will continue to be supplied with refurbished computers from our refurbishment hubs, however additional hardware options including new technology will be provided to our education hubs.

5. The Haitian Hub will be formally established this year.

6. In June 2015, we formally announced the one millionth child to gain digital literacy from the work of Camara.

7. Camara Ethiopia will host the second ever global hub conference in September 2015 where approximately 30 staff, directors and supporters will gather for a week in Addis Ababa. There will be knowledge sharing sessions, training and strategic discussions including a mid-strategy review and early discussions on the next strategy.

STATEMENT OF THE DIRECTORS' RESPONSIBILITIES

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable Irish law and Generally Accepted Accounting Practice in Ireland including the accounting standards issued by the Financial Reporting Council and published by The Institute of Chartered Accountants in Ireland. Irish company law requires the directors to prepare financial statements for each financial year which give a true and fair view of the assets, liabilities and financial position of the company and of the surplus or deficit of the company for that year.

In preparing those financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors confirm that they have complied with the above requirements in preparing the financial statements.

The directors are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements are prepared in accordance with accounting standards generally accepted in Ireland and comply with the Companies Act, 2014. The directors are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

ACCOUNTING RECORDS

The directors believe that they have complied with the requirements of Sections 281 to 285 of the Companies Act, 2014 with regard to the keeping of accounting records by employing persons with appropriate expertise and by providing adequate resources to the financial function. The accounting records are held at the company's business address at Chapelizod Industrial Estate, Dublin 20.

AUDITORS

The auditor, Grant Thornton, who were appointed during the year, will continue in office in accordance with section 383(2) of the Companies Act 2014.

On Behalf of the Directors

Maria Mahon - Chairperson **Cormac Lynch -** Secretary **Dated:** 31/07/2015

Auditor's Report

We have audited the financial statements of Camara Education Limited for the year ended 31st December 2014 which comprise the Statement of Financial Activities, the Balance Sheet, the Cash Flow Statement and the related notes. The financial reporting framework that has been applied in their preparation is Irish law and accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland).

RESPECTIVE RESPONSIBILITIES OF DIRECTORS AND AUDITOR

As explained more fully in the Directors' Responsibilities Statement set out on page 43 the directors are responsible for the preparation of the financial statements giving a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with Irish law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report is made solely to the company's members, as a body, in accordance with Section 336 of the Companies Act, 2014. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

SCOPE OF THE AUDIT OF THE FINANCIAL STATEMENTS

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the Directors' report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

OPINION ON FINANCIAL STATEMENTS

In our opinion the financial statements:

- give a true and fair view in accordance with Generally Accepted Accounting Practice in Ireland of the assets, liabilities and financial position of the company as at 31st December 2014 and of its surplus for the year then ended; and
- have been properly prepared in accordance with the requirements of the Companies Acts 2014.

MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY THE COMPANIES ACTS 2014

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion the accounting records of the company were sufficient to permit the financial statements to be readily and properly audited.
- The company's balance sheet and income and expenditure account are in agreement with the accounting records and returns..
- In our opinion the information given in the directors' report is consistent with the statutory financial statements.

MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

We have nothing to report in respect of the provisions in the Companies Acts 2014 which require us to report to you if, in our opinion the disclosures of directors' remuneration and transactions specified by law are not made.

24 - 26 City Quay
Dublin 2
Ireland

For and on behalf of
GRANT THORNTON
Chartered Accountants
& Registered Auditor

Statement of Financial Activities

YEAR ENDED 31ST DECEMBER 2014

INCOMING RESOURCES	Note	Unrestricted Funds (€)	Restricted Funds (€)	Total 2014 (€)	Total 2013 (€)
Income resources from generated funds					
-Voluntary income					
- Iris O'Brien Foundation		200,000	-	200,000	250,000
- Anonymous		-	-	-	185,000
- Puma Energy Foundation		-	99,320	99,320	93,600
- Other donations		63,896	-	63,896	82,547
-The King Boudouin Foundation US		-	131,982	131,982	62,173
- Digicel Foundation		-	212,838	212,838	54,376
- EMC Information Systems		-	19,188	19,188	51,951
- eLearning Centres Grant Events		-	47,253	47,253	45,331
-TechSpace Programme Grants		-	56,951	56,951	41,450
-The Haven Community Foundation		-	-	-	15,355
-The Costa Foundation		-	-	-	13,598
-The Ireland Fund		-	-	-	12,000
- Civil Services Charities Fund		-	-	-	10,531
- Paul Griffin Fund		-	-	-	10,420
- Dell Foundation		-	19,641	19,641	6,000
- Enterprise Ireland		-	11,206	11,206	-
- Benefit IIII Project		-	11,778	11,778	-
-Waterloo		-	12,687	12,687	-
- UNESCO		-	13,099	13,099	-
- Civil Society Third World Fund		-	-	-	5,850
- Donations in Kind		-	232,460	232,460	198,620
Activities for generating funds					
- Sale of computers (Africa & Caribbean)		97,040	219,144	316,184	224,816
- Sale of computers (Irish Schools)		191,900	-	191,900	179,459
- Recycling		141,254	-	141,254	106,073
- Shared services		47,500	-	47,500	32,500
Income resources from charitable activities					
- DFID iMlango Project		-	1,029,105	1,029,105	-
- Irish Aid			117,383	117,383	95,406
- FAS		13,229	-	13,229	9,095
OTHER INCOME					
Investment income		76	-	76	1,535
Foreign exchange		-	-	-	126
		---	---	---	---
Total incoming resources		754,895	2,234,035	2,988,930	1,787,812
		---	---	---	---
RESOURCES EXPENDED					
COST OF GENERATING INCOME	**4**	102,126	-	102,126	89,461
CHARITABLE ACTIVITIES	**5**	438,768	2,155,329	2,594,097	1,531,790
GOVERNANCE COSTS	**6**	92,969	-	92,969	94,167
		---	---	---	---
Total resources expended		633,863	2,155,329	2,789,192	1,715,418
		---	---	---	---
Net income resources		121,032	78,706	199,738	72,394
Transfers between funds		(409,613)	409,613	-	-
Total funds at beginning of year		659,024	-	659,024	586,630
		---	---	---	---
Total funds at end of year		370,443	488,319	858,762	659,024
		=======	=======	=======	=======

All of the activities of the company are classed as continuing.
The company has no recognised gains or losses other than the results for the period as set out above.
These financial statements were approved by the directors on the _____ and are signed on their behalf by:

Maria Mahon - Chairperson **Cormac Lynch -** Secretary

Balance Sheet

AS AT 31ST DECEMBER 2014

	Note	2014 (€)	2013 (€)
FIXED ASSETS			
Tangible assets	**7**	2,792	4,705
CURRENT ASSETS			
Debtors	**8**	185,288	333,818
Cash at bank		836,909	387,205
		1,022,197	721,023
CREDITORS: Amounts falling due within one year	**9**	(166,227)	(66,704)
NET CURRENT ASSETS		855,970	654,319
TOTAL ASSETS LESS CURRENT LIABILITIE		858,762	659,024
FUNDS			
Restricted funds		488,319	-
Unrestricted funds		370,443	659,024
TOTAL FUNDS		858,762	659,024

These financial statements were approved by the directors on the 31/07/2015 and are signed on their behalf by:

Maria Mahon - Chairperson **Cormac Lynch** - Secretary

Cash Flow Statement

YEAR ENDED 31ST DECEMBER 2014

	Note	2014 (€)	2013 (€)
Net cash (outflow)/inflow from operating activities	**11**	449,704	(779)
Capital expenditure and financial investment		-	(2,153)
(Decrease)/increase in cash for the year		449,704	(2,932)
RECONCILIATION OF NET CASH FLOW TO MOVEMENT IN NET DEBT			
(Decrease)/increase in cash for the year		449,704	(2,932)
Net opening cash		387,205	390,137
Net closing cash		836,909	387,205

Accounting Policies

YEAR ENDED 31ST DECEMBER 2014

PRINCIPLES OF PREPARATION

The financial statements have been prepared in accordance with generally accepted accounting principles under the historic cost convention and comply with the financial reporting standards of the Financial Reporting Council, as promulgated by the Institute of Chartered Accountants in Ireland. The financial statements have also been prepared with reference to "Accounting and Reporting by Charities" (Charities SORP) the revised statement of recommended practice issued by the Accounting Standards Board in 2000 and the Accounting Standards Board "Statement on Update Bulletin 1 of the Charities SORP" issued in December 2002, updated in 2005.

FIXED ASSETS

All fixed assets are initially recorded at cost.

DEPRECIATION

Depreciation is calculated so as to write off the cost of an asset, less its estimated residual value, over the useful economic life of that asset as follows:

Fixtures & Fittings - Straight line over 5 years
Motor Vehicles - Straight line over 5 years

INCOMING RESOURCES

Incoming resources have been included in the financial statements only when realised or when the ultimate cash realisation of which can be assessed with reasonable certainty.

RESTRICTED FUNDS

Restricted funds consist of funds received which can only be used for the purpose for which they are specified by the donors. These purposes are the aim of the charity.

UNRESTRICTED FUNDS

Unrestricted funds consist of funds received which the charity can spend based on its own discretion to enable it to achieve its overall aim and objectives.

RESERVES

The directors consider it appropriate to retain equivalent to one quarter of operating costs in reserves. The current financial reserves at 31 December 2014 are greater than the one quarter of current operating costs. The directors also consider it appropriate that no more than one quarter of reserves should at any stage be denominated in currencies other than euro.

DONATIONS IN KIND

Donations in kind are recognised at the point when computers have been used for charitable purposes. They are recognised at the market value of such donations.

Notes to the Financial Statements

YEAR ENDED 31ST DECEMBER 2014

1. OPERATING (DEFICIT)/SURPLUS

Operating (deficit)/surplus is stated after:

	2014 (€)	2013 (€)
Directors' remuneration	-	-
Depreciation	1,913	1,913
Auditors' remuneration	8,303	7,380
	======	======

2. EMPLOYEES AND REMUNERATION

The average number of staff employed by the company during the year was 26 (2013:22).

Staff costs were as follows:

	2014 (€)	2013 (€)
Wages and salaries	896,242	687,668
Social welfare costs	93,192	57,847
	_____	_____
	989,434	745,515
	======	======

The basic and performance related payments for the CEO was €80,000 in 2014 (€80,000 in 2013). No other member of staff earned €70,000 or over in 2014. There were no pension contributions made to any staff members during 2014.

3. TAXATION

The company does not engage in a taxable activity and has been granted charitable tax exemption under reference CHY 16922.

4. COSTS OF GENERATING VOLUNTARY INCOME

	Unrestricted 2014 (€)	Restricted 2014 (€)	Total 2014 (€)	Total 2013 (€)
Rent	3,169	-	3,169	2,302
Wages and salaries	74,477	-	74,477	79,068
Fund raising	8,938	-	8,938	4,452
Insurance	1,158	-	1,158	-
Repairs & maintenance	463		463	-
Printing, postage and stationary	1,659	-	1,659	-
General expenses	8,342	-	8,342	3,639
Bank charges	272	-	272	-
Training	450	-	450	-
Telephone	1,141	-	1,141	-
Marketing	1,016	-	1,016	-
Workshop expenses	591	-	591	-
	_____	_____	_____	_____
	102,126	-	102,126	89,461
	======	======	======	======

5. CHARITABLE ACTIVITIES

	Unrestricted 2014 (€)	Restricted 2014 (€)	Total 2014 (€)	Total 2013 (€)
Rent	29,674	-	29,674	35,821
Wages & salaries	188,100	647,702	835,802	606,806
Shipping & packaging	51,532	-	51,532	54,705
Insurance	10,421	-	10,421	6,885
Repairs & maintenance	4,165	-	4,165	5,023
Depreciation	1,913	-	1,913	1,760
Motor & travel	36,704	36,704	73,408	67,789
Printing, postage and stationery	2,341	1,411	3,752	4,856
General expenses	19,416	-	19,416	31,523
Bank charges	1,539	-	1,539	911
Training	2,551	-	2,551	2,069
Telephone	6,463	-	6,463	6,015
Marketing	2,372	-	2,372	3,788
Workshop expenses	72,898	-	72,898	72,108
Multimedia expenses	-	1,154	1,154	-
African Hubs	-	949,273	949,273	270,064
Caribbean Hubs	-	140,245	140,245	50,735
Irish Hubs	-	57,564	57,564	70,914
International Refurbishment Hubs	-	-	-	361
Africa Service Centre	-	29,912	29,912	35,360
Cost of computers donated	-	232,460	232,460	198,620
Bad debt provision	-	58,904	58,904	-
Foreign exchange	8,679	-	8,679	5,077
	438,768	2,155,329	2,594,097	1,531,790

6. GOVERNANCE COSTS

	Unrestricted 2014 (€)	Restricted 2014 (€)	Total 2014 (€)	Total 2013 (€)
Rent	2,895	-	2,895	3,315
Auditors fees & payroll services	8,506	-	8,506	10,421
Wages & salaries	79,155	-	79,155	59,641
General expenses	2,413	-	2,413	20,790
	92,969	-	92,969	94,167

7. TANGIBLE FIXED ASSETS

	Brought forward 1st Jan 14 (€)	For the year Additions (€)	As at 31st Dec 14 (€)
COST			
Fixtures & fittings	26,541	-	26,541
Motor vehicles	4,050	-	4,050
	30,591	-	30,591

	Brought forward Accumulated 1st Jan 2014 (€)	For the year Charges (€)	Accumulated 31st Dec 2014 (€)
DEPRECIATION			
Fixtures & fittings	21,836	1,913	23,749
Motor vehicles	4,050	-	4,050
	25,886	1,913	27,799

	2014 (€)	2013 (€)
NET BOOK VALUE		
Fixtures & fittings	2,792	4,705
Motor vehicles	-	-
	2,792	4,705

8. DEBTORS

	2014 (€)	2013 (€)
Trade debtors	202,559	341,363
Provision for bad debts	(68,904)	(10,000)
Prepayments and accrued income	9,945	2,455
Other Debtors	41,688	-
	185,288	333,318

All amounts are receivable within one year

9. CREDITORS: Amounts falling due within one year

	2014 (€)	2013 (€)
Taxation and social security	21,812	13,006
Trade Creditors	85,154	45,649
Accruals and deferred income	20,481	8,049
Other Creditors	38,780	-
	166,227	66,704

10. COMMITMENTS UNDER OPERATING LEASES

At 31st December 2014 the company had annual commitments under non-cancellable operating leases as set out below.

Land and Buildings	2014 (€)	2013 (€)
Operation leases which expire:		
Within 2 to 5 years	41,438	41,438

11. RECONCILIATION OF OPERATING CASH FLOW

	2014 (€)	2013 (€)
Surplus for the year	199,738	72,394
Increase in creditors	99,523	1,185
Decrease in debtors	148,030	(76,271)
Depreciation	1,913	1,913
	_____	_____
Net cash (outflow)/inflow from operating activities	449,204	(779)
	======	======

12. MOVEMENT IN FUNDS

	Opening Balance (€)	Income (€)	Expenditure (€)	Transfers (€)	Closing Balance (€)
Restricted funds	-	2,234,035	(2,155,329)	409,613	488,319
Unrestricted funds	659,024	754,895	(633,863)	(409,613)	370,443
	_____	_____	_____	_____	_____
	659,024	2,988,930	2,789,192	-	858,762
	======	======	======	======	======

13. RESTRICTED FUNDS

Income received by the charity, the application of which is restricted to a specific purpose by the donor, is treated as restricted funds, and is unavailable for other charitable uses. During the current year the company transferred a sum of €409,613 from unrestricted reserves to restricted reserves to correct the previous accounting treatment of allocating all charitable activities expenditure costs against restricted income.

14. LEGAL STATUS OF THE COMPANY

The company is limited by guarantee and has no share capital. At 31st December 2014, there are 8 members whose guarantee is limited.

15. POST BALANCE SHEET EVENTS

No significant events have taken place since the period end that would result in adjustment to 2014 financial information or inclusion of a note thereto.

16. CONTROLLING PARTY

The company is controlled by the Board of Directors acting in concert.

Detailed Statement of Financial Activities

(NOT COVERED BY THE INDEPENDENT AUDITOR'S REPORT)

YEAR ENDED 31ST DECEMBER 2014

	Cost of generating income (€)	Charitable activities (€)	Governance costs (€)	2014 (€)	2013 (€)
Core costs					
Rent	3,619	29,674	2,895	36,188	41,438
Wages and salaries	74,477	835,802	79,155	989,434	745,515
Fund raising	8,938	-	-	8,938	4,839
Shipping and packaging	-	51,532	-	51,532	59,462
Insurance	1,158	10,421	-	11,579	7,965
Repairs and maintenance	463	4,165	-	4,628	5,811
Depreciation	-	1,913	-	1,913	1,913
Motor and travel	-	73,408	-	73,408	73,683
Printing, postage and stationery	1,659	3,752	-	5,411	5,354
Auditors fees & payroll services	-	-	8,506	8,506	10,421
General expenses	8,342	16,416	2,413	30,171	31,523
Bank charges	272	1,539	-	1,811	1,054
Training	450	2,551	-	3,001	2,250
Telephone	1,141	6,493	-	7,604	6,960
Marketing	1,016	2,372	-	3,388	6,680
Workshop expenses	591	72,898	-	73,489	78,378
Multimedia expenses	-	1,154	-	1,154	-
African Hubs	-	949,273	-	949,273	270,664
Caribbean Hubs	-	140,245	-	140,245	50,735
Irish Hubs	-	57,564	-	57,564	70,914
International Refurbishment Hubs	-	-	-	-	361
Africa Service Centre	-	29,912	-	29,912	35,360
Cost of computers donated	-	232,460	-	232,460	198,620
Bad debts provision	-	58,904	-	58,904	-
Foreign exchange	-	8,679	-	8,679	5,518
	102,126	2,594,097	92,969	2,789,192	1,715,418

Monitoring & Evaluation

Photo: Tim Mansel *Ganjoni Primary School, Mombasa, Kenya*

Introduction

A Monitoring and Evaluation (M&E) exercise is conducted annually to assess the effectiveness of Camara's work. The product of this exercise is this M&E section. Not only is this an important learning tool for Camara internally but it is also an important way of communicating our results to external stakeholders. We believe that communicating our results in such a comprehensive manner demonstrates our commitment to both a results based approach and transparency. It is consistent with two of our organisational values:

> We want to measure our impact;
>
> We are honest and transparent in our work.

A renewed focus on M&E was implemented in 2014, driven by our Strategic Plan. This annual M&E exercise proved to be a useful testing ground for new data collection methods. A major departure in data collection this year was the use of Android tablets to collect data in the field. This is explored in more detail below.

RATIONALE

Similar to previous years, the main objectives in conducting the monitoring exercise are threefold:

> Determine the reported usage of Camara computers in Camara supported schools;
> Determine the perceived value of the Camara package by the students, teachers, and school management of Camara supported schools;
> Collate data regarding the effectiveness of training, effectiveness of Camara educational content, usage of content, and rates of maintenance required for computer upkeep.

The approach to addressing these objectives did not differ markedly from previous years. The main difference was the introduction of an additional tool, the Performance Scorecard, which will be discussed further later.

SAMPLING

Unlike previous years, it was decided to visit a sample of schools rather than attempt to visit all schools. The main reason for this was that the major cost and effort involved by the staff of the educational hubs was very onerous in the past. Also, it is standard practice to sample a population rather than attempt to survey all of it in social surveys.

A representative sampling methodology was utilised. The characteristics of schools supported by Camara were taken into account when determining the representation. Therefore, issues such as gender of students taught, ownership type of the school (government school, faith school etc), location of the school (urban, peri-urban, rural), and the school level (primary or secondary) were taken into account. The aim was to have a 95% confidence level and a 7% margin of error in total. This would have entailed visiting 139 schools.

Due to challenges encountered which are explored more below, the sample size was not reached in all countries. Only Tanzania reached the full sample size. The total number of school reached was 62. This represents a margin of error of 12% at a 95% confidence interval.

METHODOLOGY AND DATA COLLECTION

Three different approaches to data collection were utilised. Traditional, paper-based surveys were used in Tanzania and Lesotho; similar questionnaires delivered via Android tablets with a purpose designed app were used in Kenya, Ethiopia, and Zambia; and webforms and telephone interviews were used in Ireland. The use of the three different approaches was based on circumstance rather than design. Tanzania was the first country visited and was used as a pilot site for the tools. At the time the surveys were conducted there, we did not have the Android tablets available to us. In Lesotho, while the surveys were completed at a later stage, tablets were not available to Camara staff in the country. Furthermore, self-administered questionnaires were utilised in Tanzania with teachers and students but not in Lesotho. This approach was dis-continued based on the amount of missing data from Tanzania. The Android tablets were used in Kenya, Ethiopia, and Zambia because the tablets were available to Camara staff in these countries and Camara is keen to utilise this method of data collection on an ongoing basis. This is explored more below. Questionnaires in webform format and telephone interviews were used in Ireland due to the difficulty and cost in organising school visits in comparison to countries in Africa. These forms of communication are also comparatively more reliable in Ireland. In each African country the surveys consisted of questionnaires for school management, teachers, and students and a performance scorecard completed by school management. In Ireland, the surveys consisted of a questionnaire for principals and teachers. The fact that different approaches were used in different countries should be borne in mind when taking in the results presented here. The degree to which the different methods had an effect on the data gathered is difficult to ascertain.

Data collection was conducted by Camara staff in all countries. The Camara Global Monitoring and Evaluation Officer, based in Dublin, oversaw the management of the exercise and also travelled to Tanzania, Kenya, and Zambia to train staff and oversee the beginning of the data collection. Staff in Kenya and Zambia was trained in the use of Android tablets for data collection by the Global Monitoring and Evaluation Officer and in Ethiopia by the Chief Technology Officer for Africa.
`

Data collection using Android tablets was accomplished through the use of the Open Data Kit (ODK) Collect app and the Ona.io online repository. ODK Collect is an open-source tool designed by developers at the University of Washington to ease the collection of data in the field. Ona.io is an online repository that syncs with ODK Collect. It stores the forms that are the basis of the questionnaires used in the field as well as all the data gathered. The collected data is sent from the Android tablets to the Ona.io repository for downloading and analysis As such, it allows us to collect near real time data. The major advantages of collecting data in this way are twofold. First, it saves time as paper questionnaires do not need to be printed, filled out and the results entered into a dataset. Second, it greatly reduces the possibility of errors and/or omissions occurring due to incorrectly entered data or questions being skipped. It also fits into our identity as a technology-focused organisation. However, there are drawbacks to their use. First, creating the actual questionnaire is a more time-consuming process as it must be created in a specific format (XLSform) which requires a certain level of expertise. Second, the use of such technology in the field can reinforce power relations between interviewer and interviewee, especially if the interviewer is from the Global North. Despite these drawbacks, it was felt that the benefits in using the technology were too great.

Camara Kenya Data Collector at Mbheni School, Mombasa.

DATA ENTRY AND ANALYSIS

For Tanzania, data entry of the paper forms was conducted by staff in Ireland after the completed questionnaires were delivered from Tanzania. The Lesotho data was entered by staff in Ireland after the completed questionnaires were sent by email. As noted above, the data from Ethiopia, Kenya, Zambia and Ireland were collected electronically so no data entry was required. Once the data is downloaded from the Ona.io repository it needs to be cleaned to make it easily analysed.

Analysis was conducted using Excel. This application was chosen due to its adaptability and the fact that only descriptive statistical analysis was required. For more in depth statistical analysis a tool such as SPSS would be used. Excel also provides good chart and table creation functionality.

CHALLENGES ENCOUNTERED

As always with conducting field research, a number of challenges were encountered. These can be summarised as follows:

- Time and budget constraints meant that the full sample size could not be reached in Ethiopia, Kenya, Lesotho and Zambia. In Ireland, the full sample size was not reached because of the difficulty in arranging interview times with respondents and low response rates to the online webform questionnaire.
    - In Ethiopia, the difficulties involved in visiting the Afar region meant schools based there could not be visited
- Self-administered questionnaires were trialled in Tanzania but were dis-continued based on the amount of missing data and difficulties in respondents' understanding of some questions.
- Using the Android tablets to administer the questionnaires had a learning curve for some of the data collectors.
- Similarly, creating the questionnaires in the format required by the Android app had a steeplearning curve. It required many versions of each questionnaire to be tested before being deployed.

OUR IMPACT

Our impact as noted in last year's Annual Report, there is a difficulty in accurately documenting the actual impact of computers. Therefore, it is difficult to accurately and fully address the third objective above. While we have made strides in our recent projects in implementing comprehensive systems for tracking results and proving impact, including a real-time system for the iMlango project in Kenya, the research for this year's Annual Report relied on self-reported and perception based methods. This was due to the fact that projects and operations conducted in 2013 did not generally have a specific desired impact at the outset. For example, projects did not generally have a Theory of Change or Logical Framework articulated at the outset. These documents would have set out the change that Camara is expecting to see as a result of its intervention and how to track the project to ensure it is on course. Camara is now making this approach mandatory to all projects undertaken and instigating a programmatic approach to all education hubs so that their operations have a set result or impact to aim towards. Where applicable, the collection of systematic data on educational outcomes in Camara supported and non-Camara supported schools, such as grades, will be a standard procedure for education hubs. This will allow them to demonstrate an important measure of Camara's effectiveness and go some way to proving our impact.

This new approach is an outcome of our current Strategic Plan. This plan includes proving the impact of Camara as one of its main components. In doing so, we aim to prove in quantitative terms what our impact is. However, it is important we do not abandon completely perception based research. In fact, this area of research should be deepened so that qualitative data is consistently gathered and interwoven with quantitative data. Our aim is to provide the stories behind the numbers. To do this, a framework for the gathering and analysis of qualitative data will be developed to work in tandem with the quantitative tools. We will also aim to make the information gathered open and accessible to everyone. This is to ensure that our M&E system abides by the two values shown above.

Over the next number of pages the results of the data collection exercise will be displayed. The sections cover the following areas: demographics, performance scorecards, satisfaction levels, and access, usage and integration.

Demographics

This section presents a demographical breakdown of the schools, school management reps, teachers, and students surveyed.

SCHOOLS

A total of 62 schools across six countries were surveyed for this year's monitoring exercise. The breakdown of school numbers across the countries is shown below.

Country	Number of Schools
Ethiopia	10
Kenya	21
Lesotho	3
Tanzania	12
Zambia	12
Ireland	4
Total	62

Table 1: Number of schools surveyed

SCHOOL CHARACTERISTICS

Characteristics of schools in terms of location, student genders taught, school level, and ownership differ from school to school as Camara does not target one particular type of school over another. Therefore, the sampled schools were chosen to be representative of the schools that received computers and training from Camara hubs during 2013. The table below details the characteristics of the schools surveyed.

	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Location							
Urban	80%	24%	33%	50%	50%	50%	48%
Peri-Urban	20%	52%	33%	33%	42%	0%	30%
Rural	0%	24%	33%	17%	8%	50%	22%
Student Genders							
Female	0%	5%	0%	17%	17%	25%	11%
Male	30%	24%	0%	33%	0%	0%	15%
Mixed	70%	71%	100%	50%	83%	75%	75%
School Level							
Primary	70%	86%	67%	0%	50%	75%	58%
Secondary	30%	9%	33%	100%	50%	25%	41%
Integrated	0%	5%	0%	0%	0%	-	1%
School Ownership							
Government School	90%	71%	33%	42%	33%	-	45%
Faith/Church School	0%	5%	33%	8%	25%	75%	24%
Community School	0%	5%	0%	25%	8%	0%	6%
Private School	10%	19%	33%	25%	33%	0%	20%
Voluntary School	-	-	-	-	-	25%	4%

Table 2: Characteristics of schools surveyed

STUDENT NUMBERS

The table below details the average student numbers and standard deviation across all the countries. The relatively high standard deviation shows that the student population is unevenly distributed across the schools Camara surveyed. This is especially the case in Zambia where the standard deviation exceeds the average. The student numbers were obtained during the interview with school management reps.

Student Numbers	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Average	1,185	630	694	771	888	190	771
Standard Deviation	649	314	355	545	949	146	512

Table 3: Breakdown of student numbers

The box and whisker plot below illustrates the distribution of the student numbers. The boxes contain the second and third quartiles of the data points, and therefore highlight the middle half. The 'whiskers' show the extent of the first and fourth quartiles, and therefore highlight the minimum and maximum amounts contained in the data. The yellow dots are the averages. The high level of variance in Zambia can be seen by the length of the top 'whisker'.

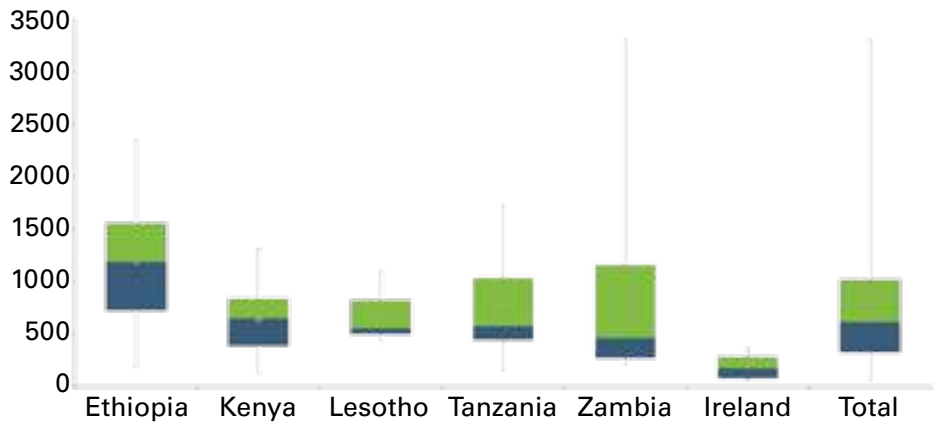


Chart 1: Distribution of student numbers

The number of students in schools varies significantly across the various school characteristics. While student numbers is correlated with location, with urban schools more likely to have greater numbers, and school level, with secondary schools more likely to have greater numbers, the ownership type has the strongest correlation to student numbers, with government schools more likely to have greater numbers than any other type. The average number of students in Government Schools is 1,088 while it is 373 for all other ownership types. It should be noted, however, that there is a high level of variation in the student numbers of Government Schools with the standard deviation being 638. This distribution is illustrated by the chart below. Note that Lesotho is excluded because only one of the three schools visited was a Government School. Ireland is excluded because of the different type of school ownership when compared to African countries.

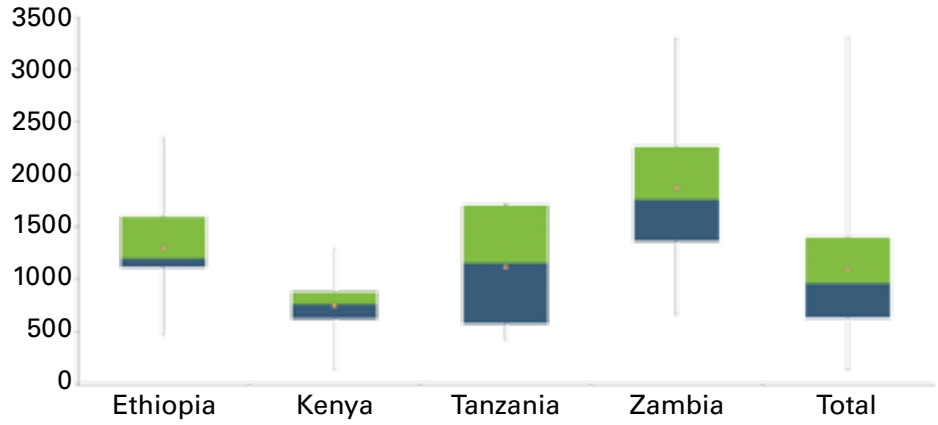


Chart 2: Distribution of Government School student numbers

STUDENT GENDER

The gender make up of co-educational or mixed schools is close to being equal across all countries. The most unequal is Zambia with female students representing 48% of the student population. Lesotho and Ireland are the only two countries where females represent a higher amount of the student population. However, the low number of schools surveyed in these countries should be borne in mind, as this may not be representative of all Camara schools in these countries. The table below displays the breakdown.

Country	Female Students	Male Students	Number of Schools
Ethiopia	49%	51%	7
Kenya	49%	51%	15
Lesotho	51%	49%	3
Tanzania	50%	50%	6
Zambia	48%	52%	10
Ireland	51%	49%	3
Total	50%	50%	44

Table 4: Gender representation in mixed schools

TEACHER NUMBERS

The table below displays the average and standard deviation for the teacher numbers across all surveyed countries. Similar to student numbers the variation is high relative to the average, apart from Kenya. This largely mirrors the level of variation in student numbers. The teacher numbers were obtained during the school management reps interviews.

Teacher Numbers	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Average	56	21	21	50	31	12	33
Standard Deviation	25	8	10	39	21	10	26

Table 5: Breakdown of teacher numbers

The chart below illustrates the distribution of the number of teachers in schools.

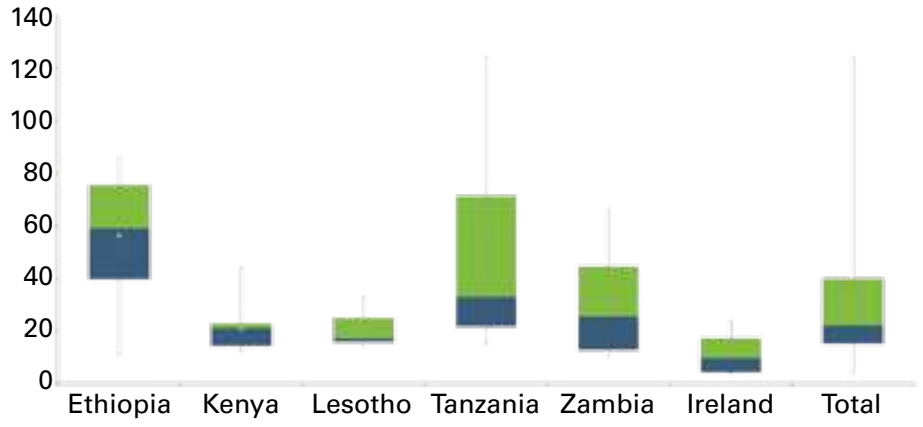


Chart 3: Distribution of teacher numbers

ICT TEACHER NUMBERS

The table below displays the average and standard deviation for the number of certified ICT teachers across all countries. This question was not asked of school management reps in Ireland as it was not applicable. The number of certified ICT teachers tends to vary greatly both within countries and across countries. The latter is demonstrated by the total overall average of three and the standard deviation of four.

ICT Teacher Numbers	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Total
Average	2	5	9	1	2	3
Standard Deviation	2	5	7	1	1	4

Table 6: Breakdown of certified ICT teacher numbers

The chart below illustrates the distribution of the certified ICT teacher numbers.

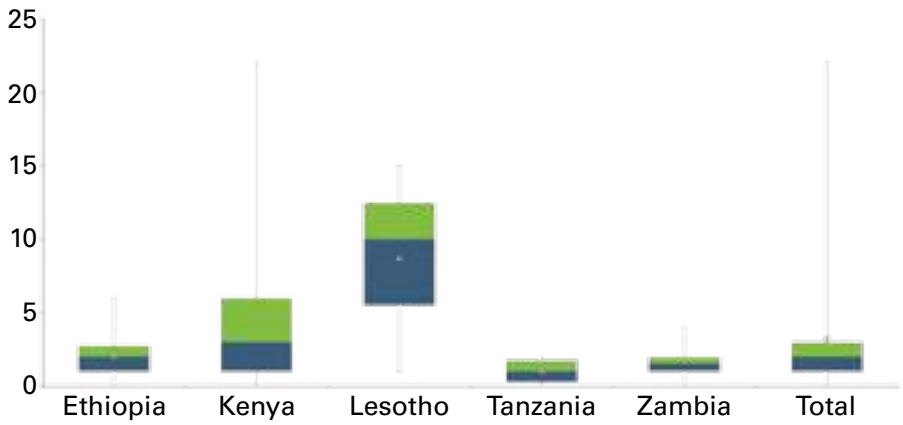


Chart 4: Distribution of certified ICT teacher numbers

STUDENT TO TEACHER RATIO

The table below details the breakdown of the student to teacher ratio across all countries. This has been calculated by dividing the number of students in each school by the number of teachers in each school. Therefore, it includes teachers who are not currently class teachers but may also be administrative or resource teachers. The standard deviation figure relates to the number of students relative to one teacher.

Student to Teacher Ratio	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Average	20:1	30:1	25:1	15:1	25:1	18:1	24:1
Standard Deviation	5	13	8	3	12	3	11

Table 7: Student to teacher ratio

The chart below displays the distribution of the student to teacher ratio across all countries.

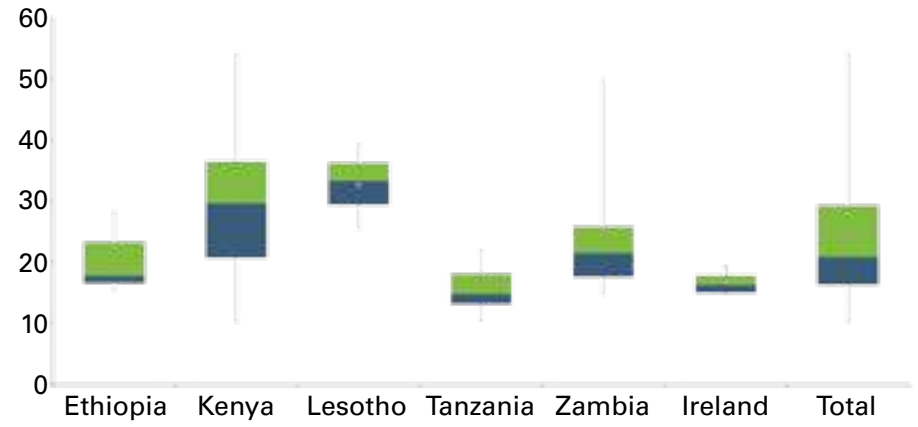


Chart 5: Distribution of student to teacher ratio

AVERAGE CLASS SIZE

The average class size as reported by teachers is at variance with the student to teacher ratio, as calculated above. This can be explained by the fact that the student to teacher ratio includes all teachers in a school whereas the average class size was reported by current class teachers. The table below details the breakdown of the average class size per country. Unsurprisingly, the average for the African countries is higher than in Ireland. The relatively high standard deviation for Ethiopia, Kenya, and Zambia also shows that average class size varies significantly from school to school. The relatively low standard deviation for Lesotho and Ireland shows that the average class is stable across the schools surveyed. Again, however, it should be borne in mind that a low number of schools were surveyed in these two countries.

Average Class Size	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Average	36	50	43	47	38	29	45
Standard Deviation	19	23	5	11	18	3	19

Table 8: Breakdown of average class size

The chart below displays the distribution of average class size figures. The Tanzania graphic coupled with that country's figure for standard deviation show that there are a high number of schools bunched within the second and third quartiles. This means that the number of schools with an average class size close to the average for that country is relatively high.

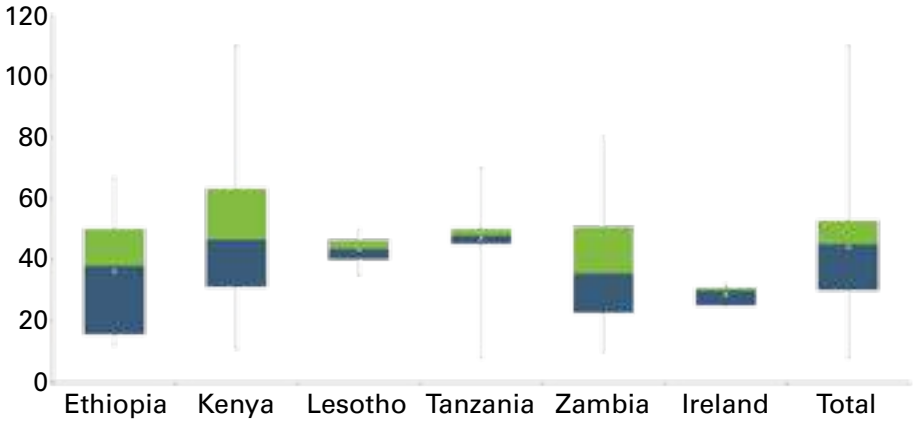


Chart 6: Distribution of average class size

SCHOOL MANAGEMENT

Camara data collectors interviewed a representative of school management in every school surveyed. The demographic details of those interviewed are explored here.

SCHOOL MANAGEMENT POSITIONS

The table below details the positions of school management representatives interviewed. The preference was to interview the Headteacher or Principal but this was not always possible. In Ireland, telephone interviews were conducted with the Principals.

Position	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Headteacher/ Principal	11%	60%	100%	58%	25%	100%	59%
Deputy Headteacher/ Principal	33%	35%	0%	42%	50%	0%	27%
Superior	0%	0%	0%	0%	8%	0%	1%
Director	44%	0%	0%	0%	17%	0%	10%
Vice Director	11%	0%	0%	0%	0%	0%	2%
Administrator	0%	5%	0%	0%	0%	0%	1%
missing	10%	5%	0%	0%	0%	0%	3%
Count	10	21	3	12	12	4	62

Table 9: Breakdown of positions of school management interviewed

GENDER AND AGE

The gender and age demographics of school management representatives interviewed are shown in the table below.

School Management Gender & Age	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Gender							
Female	30%	29%	100%	42%	58%	-	39%
Male	70%	71%	0%	58%	42%	-	55%
Missing	0%	0%	0%	0%	0%	100%	6%
Age Range							
25 or below	0%	0%	0%	0%	0%	0%	1%
26-35	50%	5%	0%	8%	8%	-	13%
36-45	20%	38%	33%	25%	25%	-	27%
46+	30%	57%	67%	50%	67%	-	50%
missing	0%	0%	0%	8%	0%	100%	8%

Table 10: Breakdown of age and gender demographics of school management

Unsurprisingly, 50% of all school management representatives interviewed fall in the eldest cohort (46+). At a country level, the exception is Ethiopia with 50% of its representatives falling in the 26-35 cohort.

TEACHING EXPERIENCE

School management representatives were asked how many years of teaching experience they have. The average and standard deviation of the answers are summarised in the table below. Principals in schools decided not to provide this information.

Years of Teaching Experience	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Average	16	21	24	21	18	-	20
Standard Deviation	11	12	8	8	9	-	10

Table 11: Breakdown of School Management representatives' years of teaching experience

The years of teaching experience generally correlates with the average age. The lowest average experience level is in Ethiopia which corresponds with that country's relatively high number of younger school management representatives. The chart below shows the distribution of the years of experience.

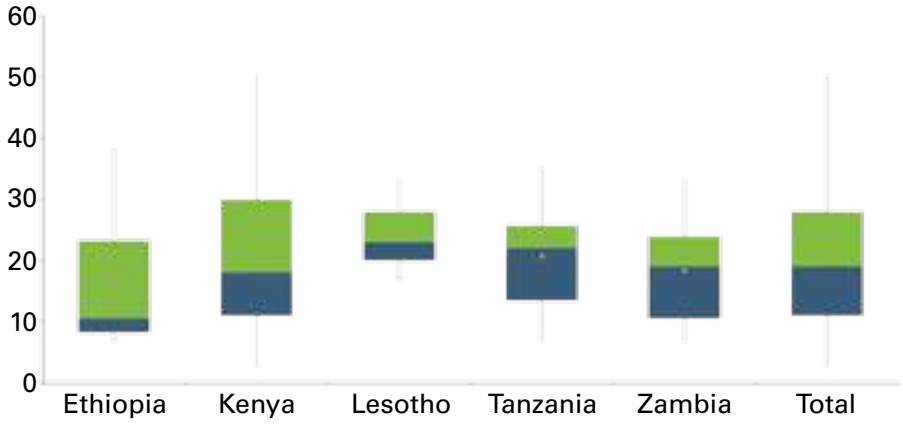


Chart 7: Distribution of School Management representatives' years of teaching experience

TEACHERS

A total of 266 teachers were interviewed across the six countries. The Camara data collectors aimed to interview six teachers per school with a preference for a gender balance and those teachers who had received Camara training. The number of six teachers was chosen as it gives the optimal balance between getting representative information and time spent in each school. The number of teachers interviewed across all countries is shown in the table below.

Country	Number of Teachers Invterviewed
Ethiopia	33
Kenya	76
Lesotho	10
Tanzania	76
Zambia	66
Ireland	5
Total	266

Table 12: Number of teachers interviewed

The aim of interviewing six teachers per school was not possible to achieve in every school. This was mainly due to lack of availability on the day of the survey.

GENDER AND AGE

The gender and age demographics of the teachers interviewed are shown in the table below.

Teachers Gender & Age	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Gender							
Female	18%	58%	60%	33%	59%	80%	47%
Male	82%	42%	40%	67%	41%	20%	53%
Age Range							
25 or below	36%	5%	0%	1%	14%	0%	10%
26-35	55%	55%	70%	67%	50%	40%	58%
36-45	3%	36%	0%	12%	32%	40%	23%
46+	6%	4%	30%	18%	3%	20%	9%
missing	0%	0%	0%	1%	2%	0%	1%

Table 13: Breakdown of age and gender demographics of teachers

As can be seen, it was not always possible to achieve the gender balance desired. This can be due to a number of reasons such as unavailability of teachers and the low number of teachers in some schools. However, the overall result is skewed somewhat by the Ethiopia figure. If this country's figure is excluded then the female to male ratio is 49% to 51% respectively. The age range figures show that teachers in the African countries are more likely to fall in the 26-35 cohort. This may be due to the drive to train more teachers over the past decade and a half in an effort to achieve the Millennium Development Goals for education. In Ireland, the most represented age ranges fall evenly between the 26-35 and 36-45 cohorts.

HIGHEST EDUCATION LEVEL

Teachers were asked what is the highest level of education they hold. The qualification frameworks do not exactly match across all the countries but they can broadly be compared and categorised according to the table on the next page.

Highest Education Level	Ethiopia		Kenya		Lesotho		Tanzania		Zambia		Ireland		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Doctorate Degree	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%	1	0%
Master's Degreee	0	0%	3	4%	1	10%	3	4%	0	0%	1	20%	8	3%
Postgraduate Qualification	6	18%	0	0%	0	0%	2	3%	0	0%	2	40%	10	4%
Bachelor's Degree	18	55%	15	20%	3	30%	45	59%	21	32%	2	40%	104	39%
Diploma	9	27%	37	49%	3	30%	23	30%	31	47%	0	0%	103	39%
Certificate	0	0%	17	22%	0	0%	0	0%	11	17%	0	0%	28	11%
Secondary Education	0	0%		0%	3	30%	1	1%	0	0%	0	0%	4	2%
Primary Education	0	0%	3	4%	0	0%	0	0%	2	3%	0	0%	5	2%
Other	0	0%	0	0%	0	0%	0	0%	12	0%	0	0%	1	0%
missing	0	0%	0	0%	0	0%	2	3%	0	0%	0	0%	2	1%

Table 14: Breakdown of highest education level obtained

In the African countries teachers are more likely to have a diploma or bachelor's degree, apart from Kenya and Lesotho. In Kenya certificates are higher than in other countries at 22% while in Lesotho teachers are equally likely to have a bachelor's degree, diploma or secondary school education. In Ireland, teachers are equally likely to hold a bachelor's degree or postgraduate qualification.

TEACHING EXPERIENCE

Similar to school management reps, teachers were asked how many years of teaching experience they have. The average and standard deviation of the results can be seen in the table below.

Years of Teaching Experience	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Ireland	Total
Average	6	10	11	9	8	15	9
Standard Deviation	7	7	11	9	7	9	8

Table 15: Breakdown of teachers' years of teaching experience

The average number of years of teaching experience in the African countries is eight compared to 15 in Ireland. The standard deviation is high across all the countries, showing that there is a high degree of variation within the figures. This is illustrated by the box and whisker plot below.

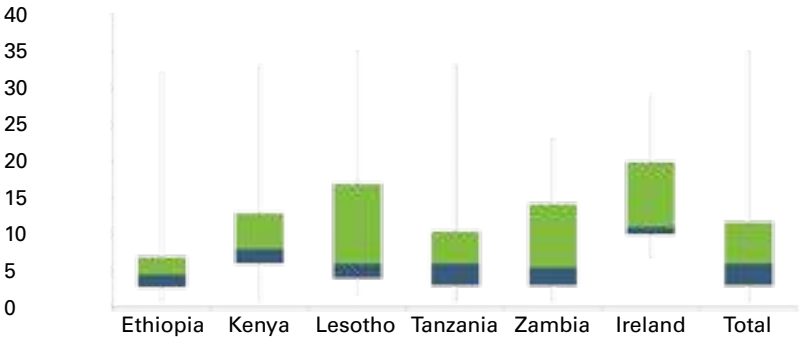


Chart 8: Distribution of teachers' years of teaching experience

The distribution of figures in the African countries, with a relatively large fourth quartile represented by the top 'whisker', illustrates the degree to which the majority of teachers have a lower number of years of teaching experience. Similar to the age range noted above, this can be viewed as an effect of the drive to increase the number of qualified teachers since the introduction of the Millennium Development Goals.

STUDENTS

A total of 628 students were interviewed across the five African countries. Irish students were not interviewed due to the difficulties in organising school visits to Irish schools. A separate section reports on an evaluation from the 2013 TechSpace programme. The Camara data collectors aimed to interview a gender balanced representation of students from years that had access to the Camara eLearning centre. Based on this criteria, a minimum of 10 and a maximum of 20 students per school was stipulated. It was not always possible to reach these figures due to unavailability and time pressure. The table below shows the breakdown of student numbers according to country.

Country	Number of Students Invterviewed
Ethiopia	45
Kenya	190
Lesotho	38
Tanzania	240
Zambia	115
Total	628

Table 16: Breakdown of student numbers

GENDER

Camara data collectors attempted to achieve a gender balance in the students they interviewed. While a 50:50 balance was not achieved in any country, the overall balance was extremely close. The table below shows the gender breakdown.

Student Gender	Female		Male	
	%	N	%	N
Ethiopia	49%	22	51%	23
Kenya	44%	84	56%	106
Lesotho	55%	21	45%	17
Tanzania	51%	122	49%	118
Zambia	58%	67	42%	48
Total	50%	316	50%	312

Table 17: Breakdown of interviewed student gender

AGE

As Camara supports both primary and secondary schools, a wide distribution of ages was expected from the students. However, this did not turn out to be the case in all countries. As opposed to school management and teachers, students were asked for their actual age rather than what range they fall into. This is due to the obvious fact that student ages would not be spread over as high a range. The table below shows the average age and standard deviation per country.

Age of Students	Ethiopia	Kenya	Lesotho	Tanzania	Zambia	Total
Average	15	14	11	16	14	15
Standard Deviation	1	2	4	1	3	2

Table 18: Breakdown of student age

As can be seen, the overall average age is 15 and the average standard deviation of 2 shows that there is little deviation from this. The box and whisker plot below illustrates the distribution of student ages.

Chart 9: Distribution of student age

The chart shows that the distribution of ages is not uniform across the countries. For example, Zambia has a high range of distribution with a minimum age of five and a maximum of 24 while Ethiopia has a low range of distribution with a minimum age of 11 and a maximum of 17. The lower than expected ranges of distribution in some countries can be explained by the fact that students who have access to the eLearning centre were preferred for the interviews and not every school year is timetabled for access in every school. The high maximum ages displayed in Kenya, Tanzania and Zambia (20, 22, 24 respectively) demonstrate the determination of some people in African countries to return to school after missing years.

Performance Scorecards

The Performance Scorecard is a methodology adapted from the Weighted Checklist developed by M&E Specialist Rick Davies[1]. As Davies notes, it is a participatory method of measuring complex change. It was completed by the representative of school management in each of the schools visited in Ethiopia, Kenya, Tanzania and Zambia. It was also completed in Lesotho but only in two schools, so these results have been excluded as they would not be representative of Camara's performance in that country. They were not completed in Ireland as it would have been too difficult to complete by phone interview and it was felt that principals would not necessarily have the required knowledge of Camara's performance in their school. Also, the schools surveyed in Ireland had mainly received training only, and not hardware.
The form the scorecard took was of a table with three columns:

Performance Area	Importance to you 1 = low, 5 = high	Camara's performance 1 = low, 5 = high
Understanding your needs		
Provision of relevant training		
Provision of reliable hardware		
Provision of relevant software		
Provision of quality support (e.g. maintenance)		
Ease of communicating with Camara		
Meeting agreed deadlines		
Timely resolution of problems you have had		
Attitude of Camara staff		
Value for money		

Table 1: Performance Scorecard

The first column listed ten performance areas that respondents were asked to score. These ranged from 'understanding your needs' to 'value for money'[2]. The second column asked the respondent to rate how important each performance area is to them on a scale of 1 to 5, with 1 being low and 5 being high. The third column asked the respondent to rate how Camara performed in relation to each performance area. The methodology allows both Camara's performance and beneficiary perception of importance to be compared as well as an average percentage score calculated for each respondent.

Gathering ratings from school management representatives has been a practice undertaken as a part of the annual M&E activity. However, in the past, school management representatives were asked to provide an overall rating for their local Camara hub, categorising them as either good, poor, or neither (neutral rating). The use of the Performance Scorecards allows Camara to see exactly what areas school management representatives are most and least happy with, providing more nuanced information.

There are three main reasons for using an adaptation of Davies' Weighted Checklist:

1. It is best used when a project or operation is complex and difficult to measure with a single indicator. This is the case with Camara's interventions.
2. Different users and beneficiaries can have different views and experiences of Camara's products and services. This methodology helps to account for this.
3. It is a participatory form of evaluation because the respondents determined the importance or weight to be attached to each performance area, rather than an external expert. As such it obtains both value data and observational data.

[1] http://mande.co.uk/special-issues/weighted-checklists/

[2] 'Value for money' was not asked of schools in Tanzania. The schools surveyed there were part of a donor funded project and did not have to pay for their eLearning centre. Instead, they were asked to rate the building of the lab because Camara constructed the labs for these schools as part of the project.

The second column, schools' importance ratings, represents value data whereby the significance or weighting of different indicators of success or performance is decided by the beneficiaries themselves. The third column, schools' rating of Camara's performance, represents observational data whereby the beneficiaries provide ratings of what they have observed or experienced. Value data would usually be prescribed to indicators prior to a project's commencement, whereas this methodology elicits indicator weightings from the beneficiaries themselves, allowing them to prioritise what they deem to be most important.

While the scorecards give valuable information on areas that schools consider important and how Camara performed, there are some limitations to the method. Firstly, the performance areas were decided by Camara Education Ltd staff in conjunction with in-country staff while the views of beneficiaries as to what the most important performance areas are were not elicited. This meant that potential performance areas that beneficiaries may value could be omitted. Secondly, the methodology does not provide reasons behind the scores given. To fully elicit and understand the reasoning behind the scoring more qualitative research would need to be conducted, for example a semi-structured interview or focus group with school management reps. The results of the Performance Scorecards from Ethiopia, Kenya, Tanzania and Zambia as well as overall results are shown below.

PERCENTAGE SCORES

The methodology provided by Davies for calculating the percentage score is as follows:

1. The score from the 'Importance to you' column is multiplied by the score from the 'Camara's performance' column for each performance area;
2. These are added together to obtain the actual raw score;
3. The score from the 'Importance to you' column is multiplied by the highest possible rating (5) for each performance area;
4. These are added together to obtain the highest possible raw score;
5. Divide the actual raw score by the highest possible raw score to get a percentage score for each school management representative;
6. Calculate the average percentage for all school management representatives to get an overall score.

The final percentage score is a weighted score that factors the importance or weight of each performance area into the final score. A high percentage score shows a high degree of satisfaction amongst the school management whereas a low percentage score shows a low degree of satisfaction. The percentage scores are shown in the table below.

Country	Score
Ethiopia	71%
Kenya	68%
Tanzania	85%
Zambia	79%
Total	77%

Table 2: Scores received

Kenya is the lowest scoring hub while Tanzania is the highest scoring hub. There is a relatively high level of variation between the highest and lowest scoring hubs with a difference of 17% between the hubs. This obviously suggests a variation in satisfaction levels amongst school managers in different countries but also a variation in the quality of service and product delivered across the hubs. When considering the score received by Tanzania it should be borne in mind that all of the schools surveyed in that country were part of a donor funded project that covered the cost of the eLearning centre set-up. This means that all of the schools surveyed did not pay for the eLearning centre. Therefore the expectations and demands of these schools may differ from those that did pay for the eLearning centre. It may be the case that schools who did not pay for the eLearning centre feel more grateful for what they received and less inclined to criticise. They may also have analysed their needs to a lesser degree than schools that decided to pay for the eLearning centre and so may not have as good an idea as to what areas are important to them and how Camara performed in them.

Analysing the percentage scores of the individual performance areas gives a good indication of the areas school management is most and least satisfied with, as well as the areas that Camara hubs seem to excel in more. The chart below illustrates the individual scores of the performance areas across all countries.

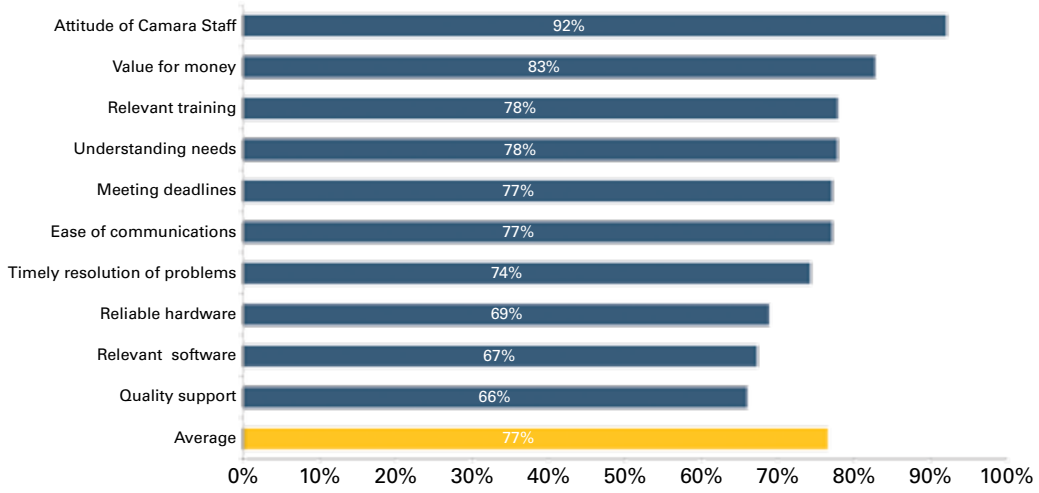


Chart 1: All countries performance areas scores

As can be seen, the attitude of Camara staff scored the highest satisfaction levels rating, meaning school management is generally happy with the way Camara staff conduct themselves. Value for money also scored highly, meaning school management reps are happy with the quality of products and services they received relative to the price paid. An interesting aspect is the difference in scores given to the performance areas related to the different Camara services and products: relevant training, reliable hardware, relevant software, and quality support. Provision of relevant training scored third highest, meaning school management is generally happy with the relevance of Camara's training. However, the remaining three service and product related performance areas all scored in the bottom three with 'Quality support' being given the lowest satisfaction rating. This points to a significant difference in the quality of service and product offerings from Camara hubs with the training service being perceived to be of a higher quality. This is an area that has been noted in previous annual reports. For the 2013 Annual Report, teachers were asked whether they believed the level of maintenance, an important aspect of quality support, provided by the hub is adequate. On average, only 38% of teachers believed that it is adequate.

The charts below illustrate the performance areas scores per country. The performance areas are arranged from highest scoring at the top to lowest scoring at the bottom. The average for the country is also included.

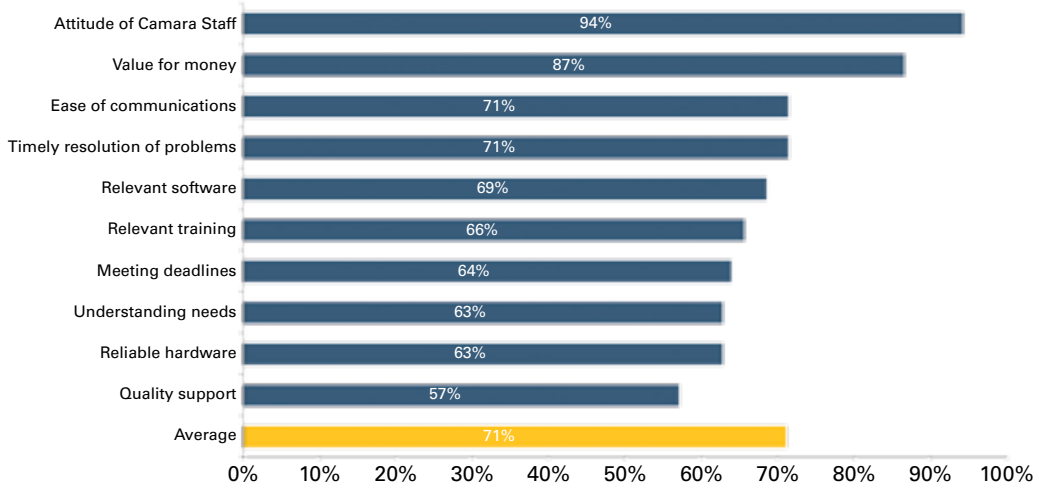


Chart 2: Ethiopia performance area scores

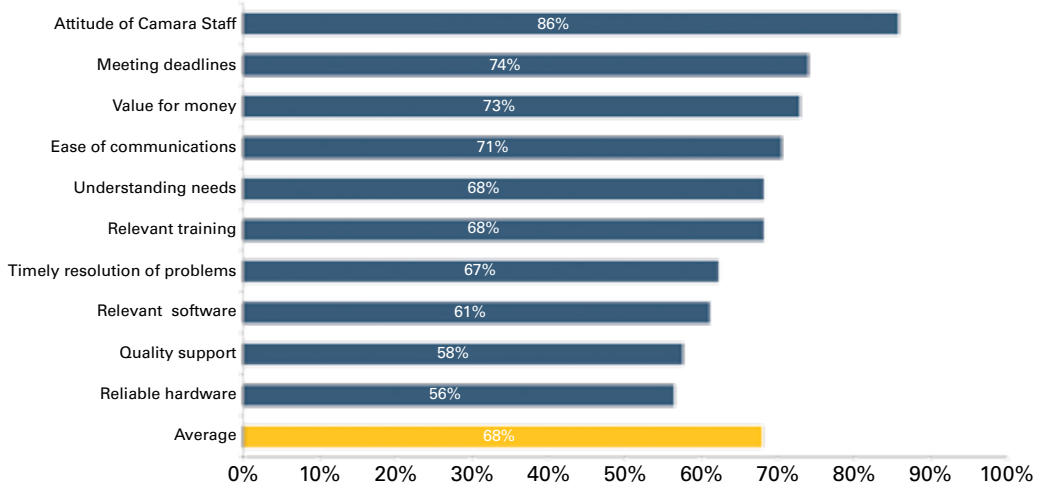


Chart 3: Kenya performance area scores

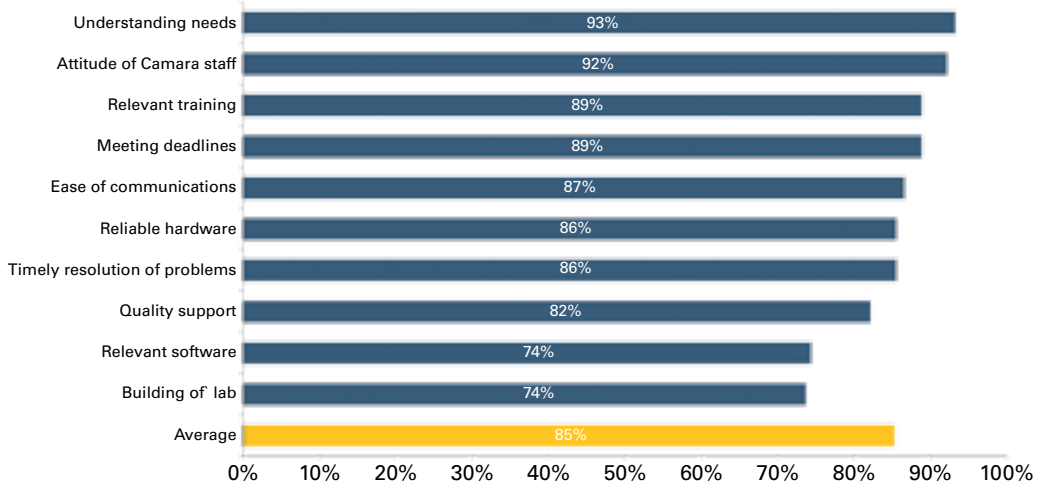


Chart 4: Tanzania performance area scores

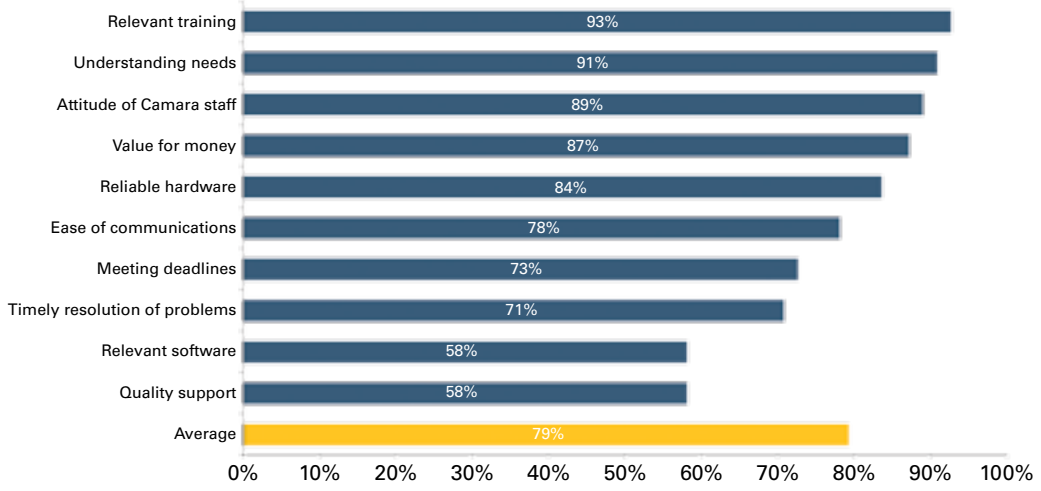


Chart 5: Zambia performance area scores

These charts illustrate that there is a degree of variance across the countries as to the satisfaction levels of the different performance areas. For example, 'Relevant training', placed third overall, was placed sixth in Ethiopia and Kenya, third in Tanzania, and first in Zambia. This could suggest that training quality or the perceived relevance of the training to teachers' jobs varies from country to country. The performance area that scores consistently low is the provision of quality support. This points to the fact that school management reps are not satisfied with the after sales services provided by the various hubs.

COMPARISON SCORES

As noted above, the performance scorecards also provide a useful opportunity to compare the hubs' performance against the most important performance areas as decided by school management. In this way, the performance areas where the hubs are doing well and not so well relative to the importance rating can be seen. It should be noted that while both importance and performance ratings were scored out of five, they are not exactly the same units of measurement. This is because the importance rating is a value rating while the performance rating is an observational rating. However, by keeping this in mind, it is possible to get an idea of how Camara performed in relation to the most important performance areas. The charts below illustrate the comparisons in all countries as well as each individual country.

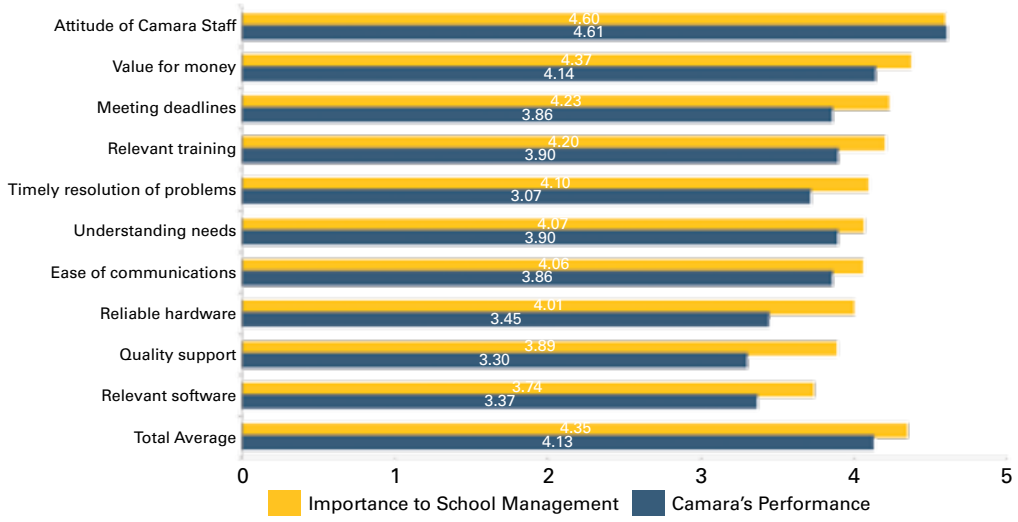


Chart 6: All countries performance scorecard comparison scores

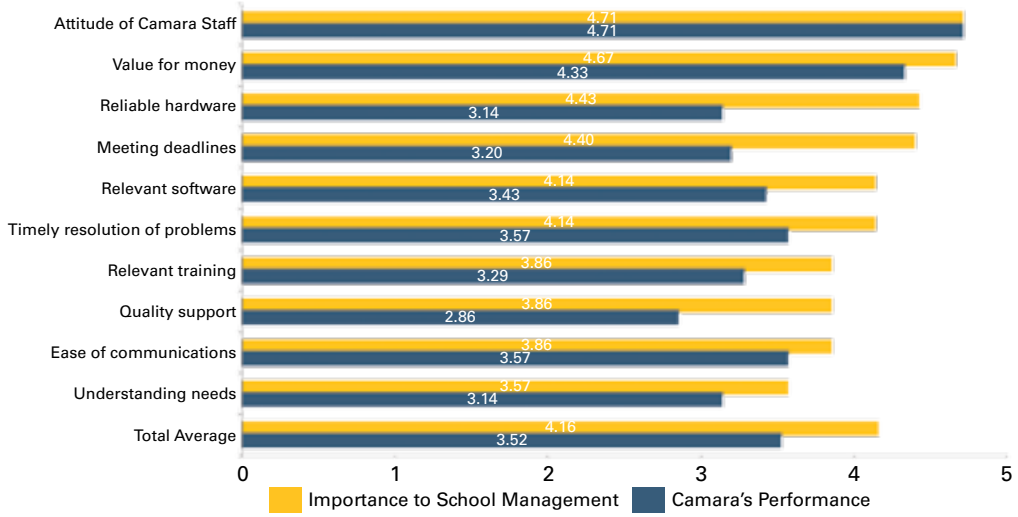


Chart 7: Ethiopia performance scorecard comparison scores

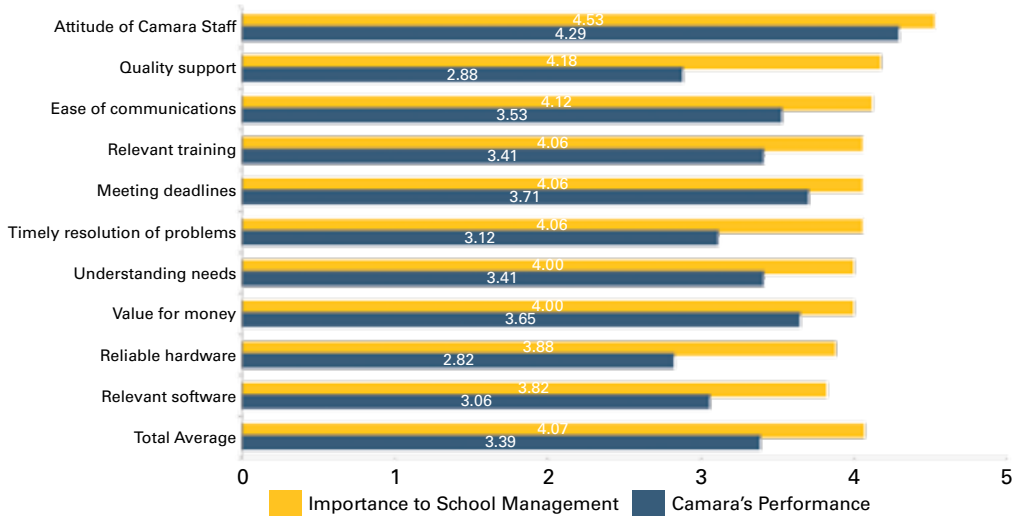


Chart 8: Kenya performance scorecard comparison scores

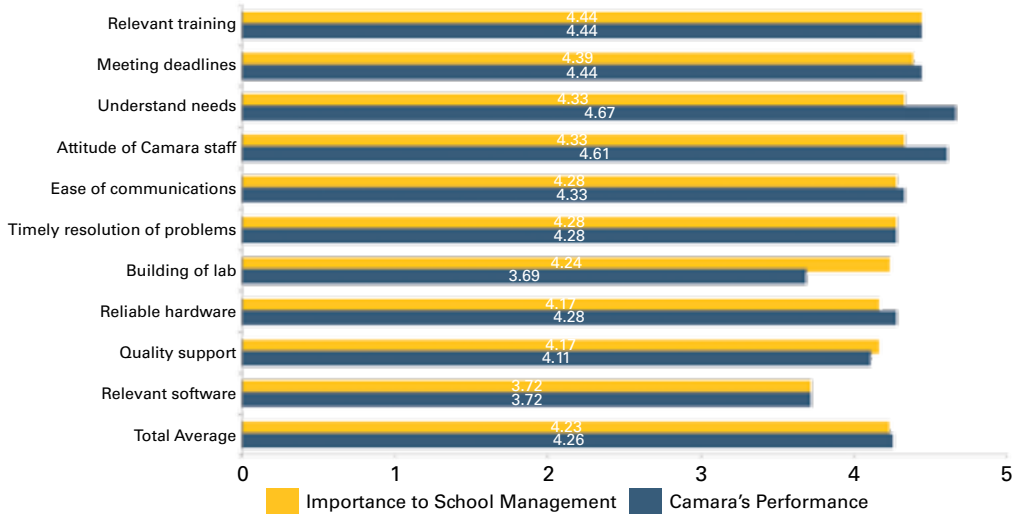


Chart 9: Tanzania performance scorecard comparison scores

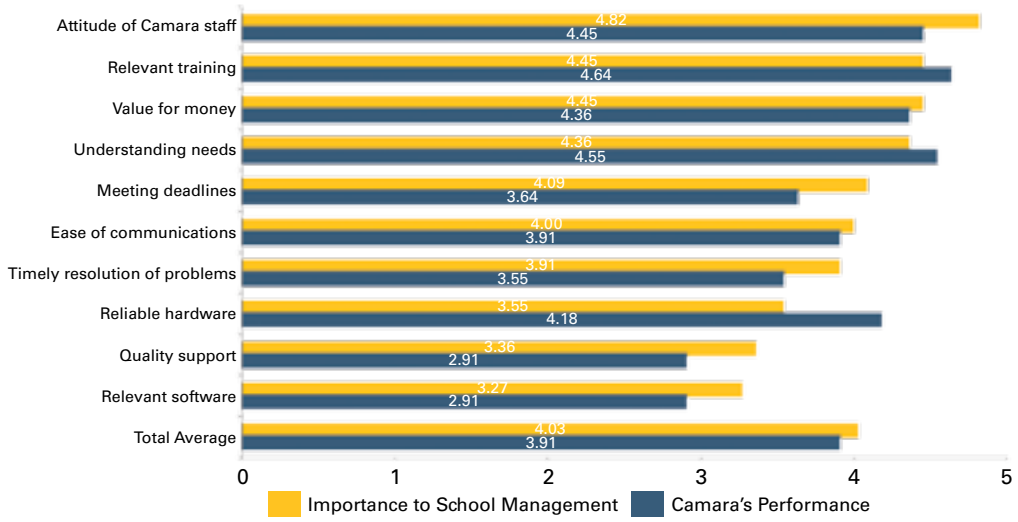


Chart 10: Zambia performance scorecard comparison scores

These charts illustrate that the Camara hubs' performance differs from country to country. There are higher gaps between the performance areas rated most important and the performance rating in Ethiopia and Kenya compared to Tanzania and Zambia. These last two countries are the only two where the performance rating exceeded the importance rating in any of the performance areas. The table below, showing the average rating and standard deviation of each performance area, will help to illustrate this point further.

	Importance to the school		Camara's Performance	
Performance Area	Average	Standard deviation	Average	Standard deviation
Understanding needs	4.07	0.37	3.94	0.78
Relevant training	4.20	0.30	3.94	0.69
Reliable hardware	4.01	0.38	3.61	0.73
Relevant software	3.74	0.36	3.28	0.37
Quality support	3.89	0.38	3.19	0.61
Ease of communications	4.06	0.18	3.84	0.37
Meeting deadlines	4.23	0.19	3.75	0.52
Timely resolution of problems	4.10	0.15	3.63	0.48
Attitude of Camara staff	4.60	0.21	4.52	0.18
Value for money	4.37	0.34	4.11	0.41

Table 3: Average and standard deviation of ratings

It can be seen that the standard deviation of the importance ratings is generally low, relative to the performance ratings. This means that the importance ratings did not vary very much from country to country and schools were fairly uniform in their ratings. The performance ratings differ in that the standard deviation is higher, meaning the ratings varied more from country to country. This would help to explain the larger gaps seen in Ethiopia and Kenya noted above.

In conclusion, the Performance Scorecards indicate the areas that Camara hubs, individually and together, need to improve on. As already noted, the quality of support is an important area that scored poorly in every country. This is the first time Camara has used these Performance Scorecards and, overall, they can be considered to have been successful. Two alterations will be made to improve their use in the future. First, the design will be altered so that the method of completing the scorecard is more easily understood. It was observed that in some cases the school management representatives had trouble understanding the layout. Second, school management representatives will be consulted in order to ascertain whether there are any areas omitted from the scorecards which they believe should be included. This will help to make them more participatory in nature.

Satisfaction Levels

School management reps, teachers and students were asked a range of questions regarding their level of satisfaction with Camara's products and services. For teachers and students, they mainly took the form of statements that respondents were asked to either agree or disagree with. The standard Likert scale of strongly disagree, disagree, agree nor disagree, agree, strongly agree was used. For school management, the questions focused on their experience with Camara and whether or not Camara has had a positive or negative effect in their schools in a range of different areas.

Tanzania and Ireland will be missing from some of the questions below. This is because, as noted earlier, the Tanzanian exercise was used as a pilot for the tools used. The tools were subsequently adjusted to include some questions not asked in Tanzania. Ireland is missing from some questions because they were not applicable to the Irish setting.

SCHOOL MANAGEMENT

School management were asked five questions. They are shown in the table below.

1	Overall, have you had a positive or negative experience with Camara?
2	Has the Camara ICT equipment and training had a positive, negative or no effect on the ability of teachers to deliver their curriculum?
3	Has the Camara ICT equipment and training had a positive, negative or no effect on the motivation of the teachers?
4	Has the Camara ICT equipment had a positive, negative or no effect on the ability of the students to attain the curriculum?
5	Has the Camara ICT equipment had a positive, negative or no effect on the motivation of the students?

Table 1: School management questions

The results of the first question are illustrated in the chart below.

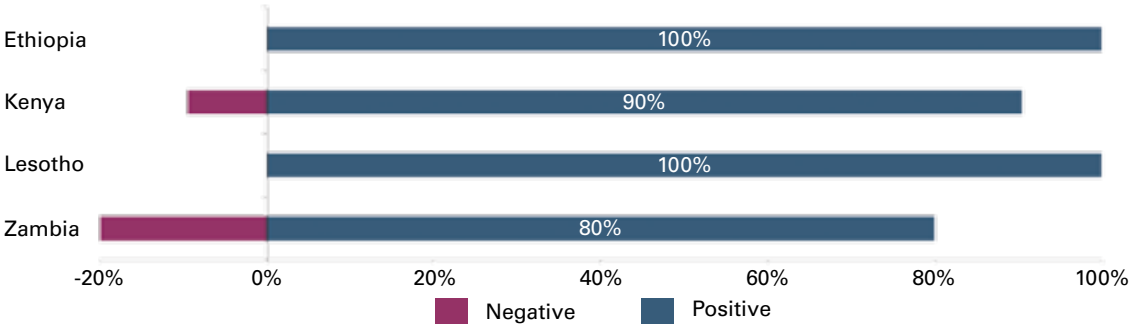


Chart 1: Overall, have you had a positive or negative experience with Camara?

As can be seen, the reported positive experiences amongst school management are very high with all representatives of school management in Ethiopia and Lesotho claiming they had a positive experience with Camara. The lowest is Zambia with 80% of school management representatives claiming they had a positive experience.

The charts below illustrate the results of the other four questions.

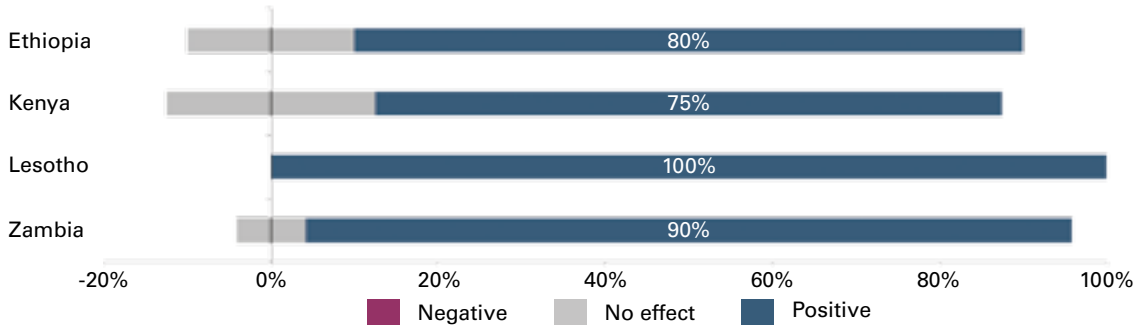


Chart 2: Has the Camara ICT equipment and training had a positive, negative or no effect on the ability of teachers to deliver their curriculum?

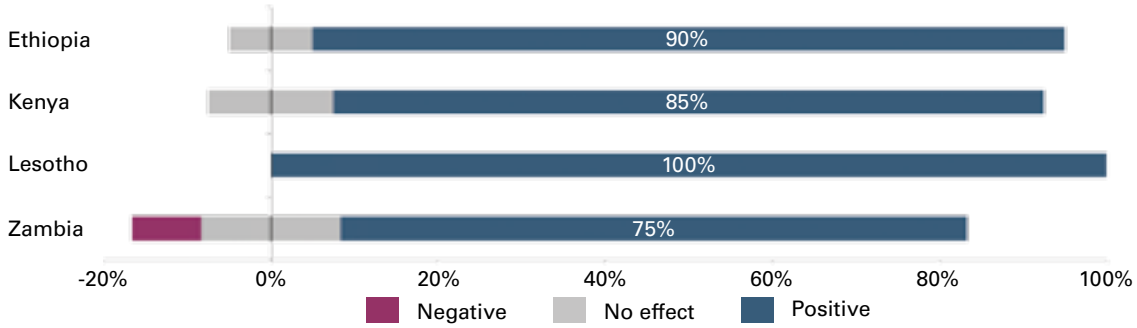


Chart 3: Has the Camara ICT equipment and training had a positive, negative or no effect on the motivation of the teachers?

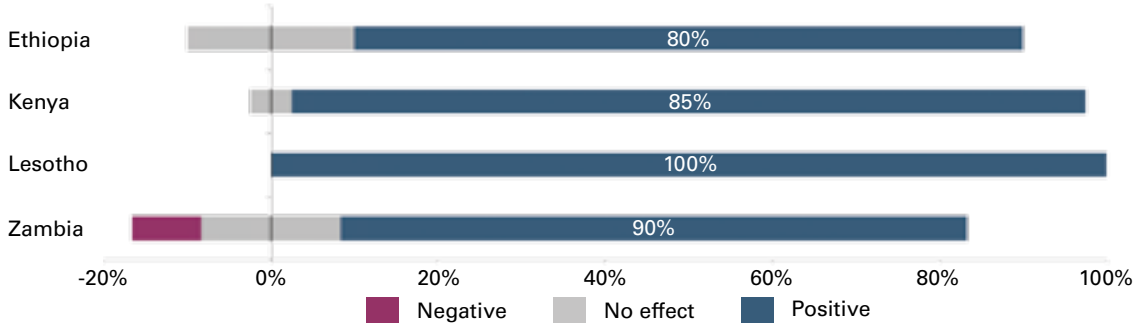


Chart 4: Has the Camara ICT equipment had a positive, negative or no effect on the ability of the students to attain the curriculum?

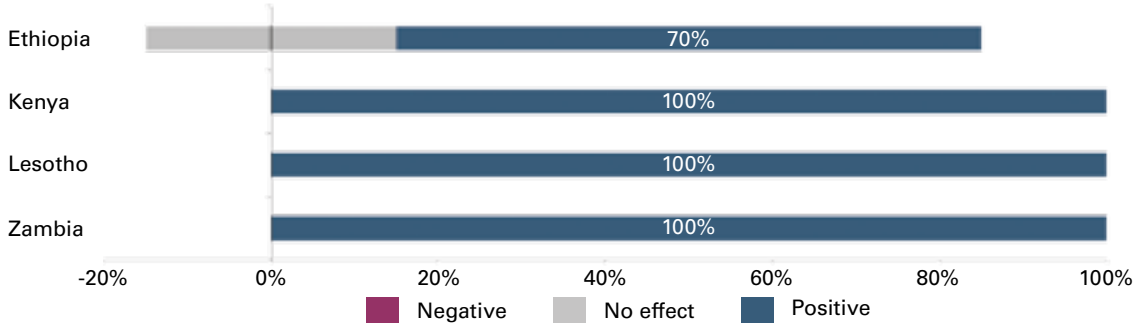


Chart 5: Has the Camara ICT equipment had a positive, negative or no effect on the motivation of the students?

These charts show hugely positive results across all four questions. The result of the question related to Camara's effect on student motivation is most striking, with three of the four countries reporting a 100% positive effect. This chimes with anecdotal evidence from field research. During informal conversations, school management and teachers often report that students are extremely interested in using the computers and enjoy learning with them. It is also easy to observe how much enjoyment students get from the computers when visiting eLearning centres.

TEACHERS

Teachers were asked to consider a total of 21 statements during the interviews. The number of statements highlights the fact that teachers are the main point of interface for Camara's products and services. As noted above, they were in the standard Likert scale format ranging from strongly disagree to strongly agree. The statements covered a range of topics related to training satisfaction, ICT equipment and software satisfaction, and hardware satisfaction. The full list of statements is shown in the table below.

Training Related	
1	The Camara training has made me more confident in using ICT.
2	The Camara training has been relevant to my job.
3	The Camara training has helped me to plan lessons using ICT.
4	The Camara training has helped me to integrate ICT into the classroom when delivering lessons.
5	The Camara training has helped to alter the way I approach teaching.
6	The Camara training was long enough.
7	I feel I need more training from Camara to refresh and increase my ICT skills and knowledge.
ICT Equipment and Software Related	
8	I enjoy using the ICT equipment and software.
9	The ICT equipment and software have been easy to use.
10	The software supports my curriculum.
11	Using the ICT equipment and software makes my job as a teacher easier.
12	Using the ICT equipment and software has had a positive effect on the enthusiasm and motivation of the students.
13	Using the ICT equipment and software has had a positive effect on the literacy and numeracy levels of the students.
14	Using the ICT equipment and software has had a positive effect on the ICT skills of the students.
15	Using the ICT equipment and software has had a positive overall effect on the students'curriculum attainment.
16	The software has been relevant to the learning needs of the students.
Hardware Related	
17	The Camara PCs have been reliable.
18	The Camara PCs have been easy to use for teaching purposes.
19	The Camara PCs have been easy for the students to use.
20	The Camara PCs are of a high enough specification for our purposes.
21	The Camara PCs are easy to maintain.

Table 2: Teacher statements

The charts below illustrate the results from the training related statements.

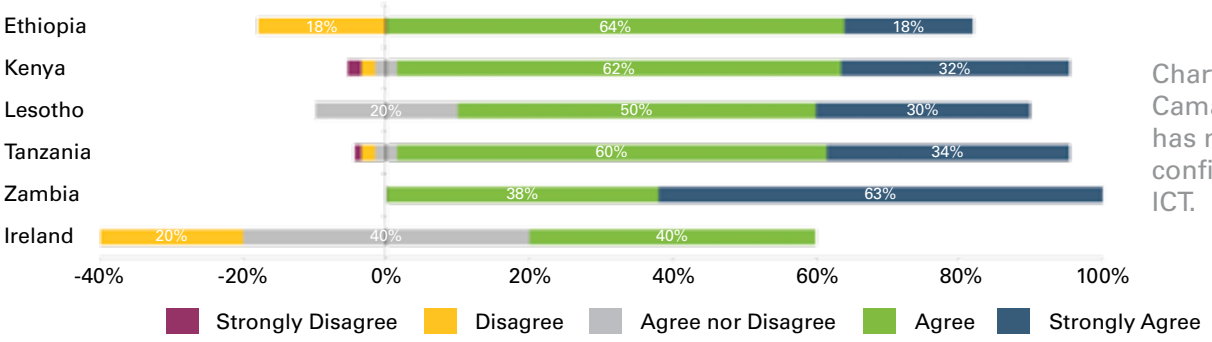


Chart 6: The Camara training has made me more confident in using ICT.

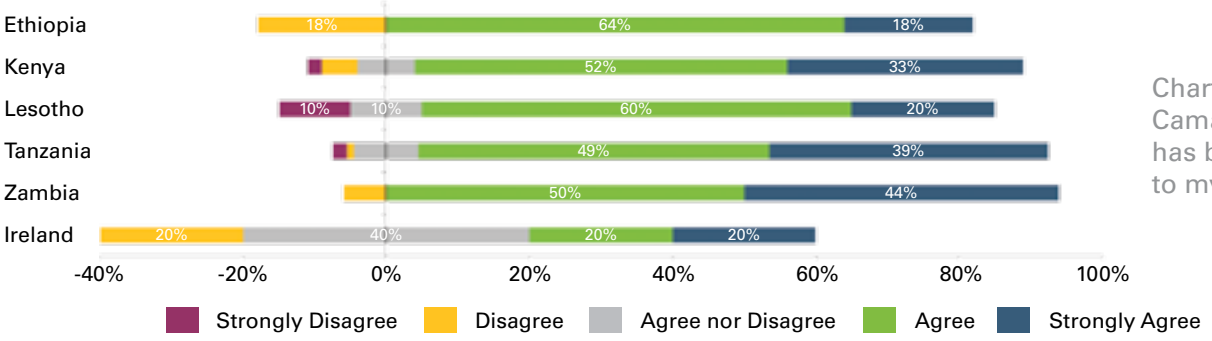


Chart 7: The Camara training has been relevant to my job.

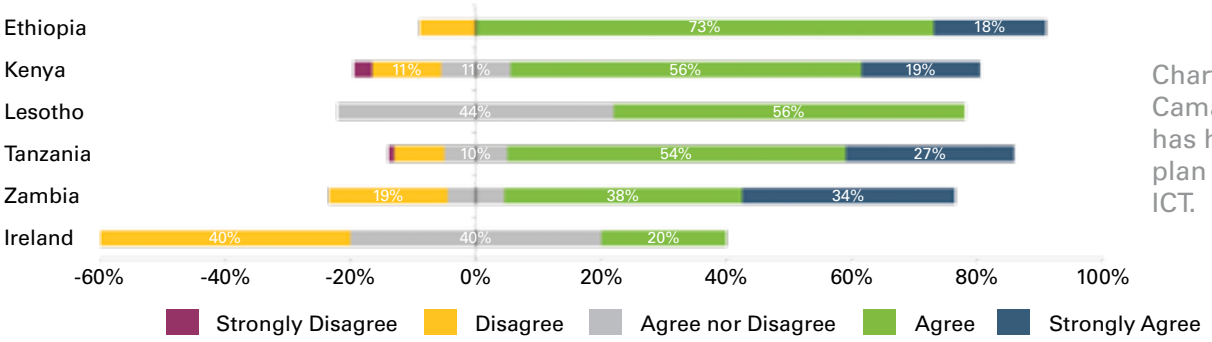


Chart 8: The Camara training has helped me to plan lessons using ICT.

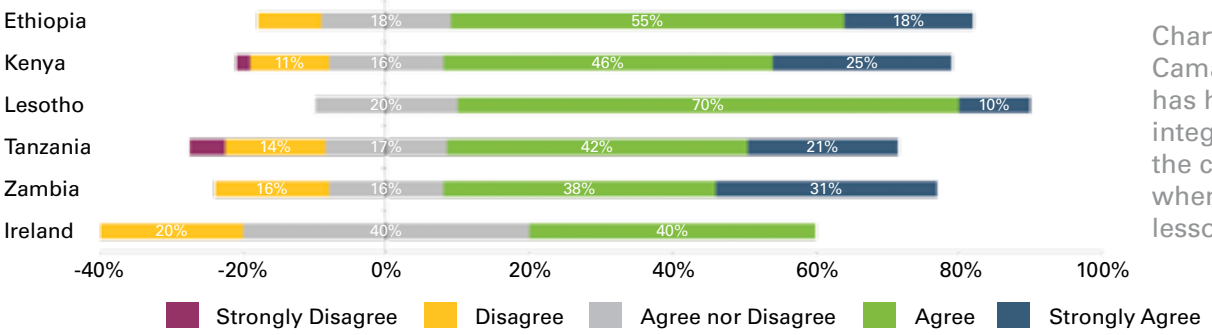


Chart 9: The Camara training has helped me to integrate ICT into the classroom when delivering lessons.

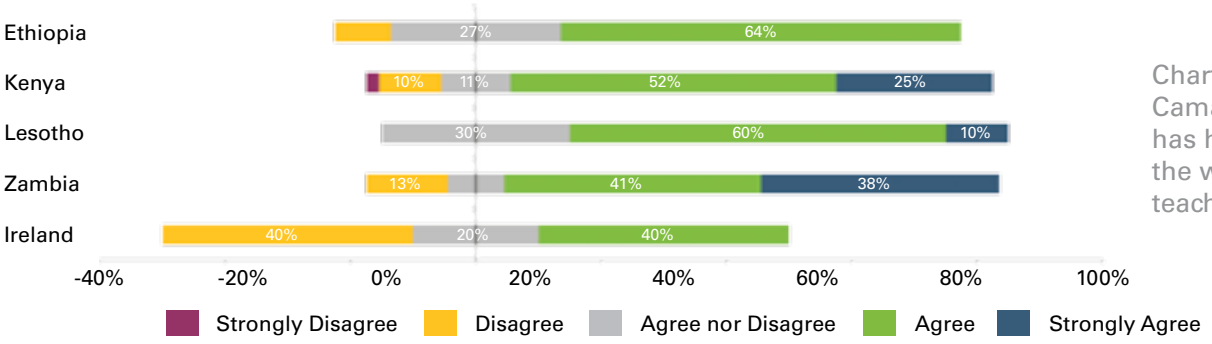


Chart 10: The Camara training has helped to alter the way I approach teaching.

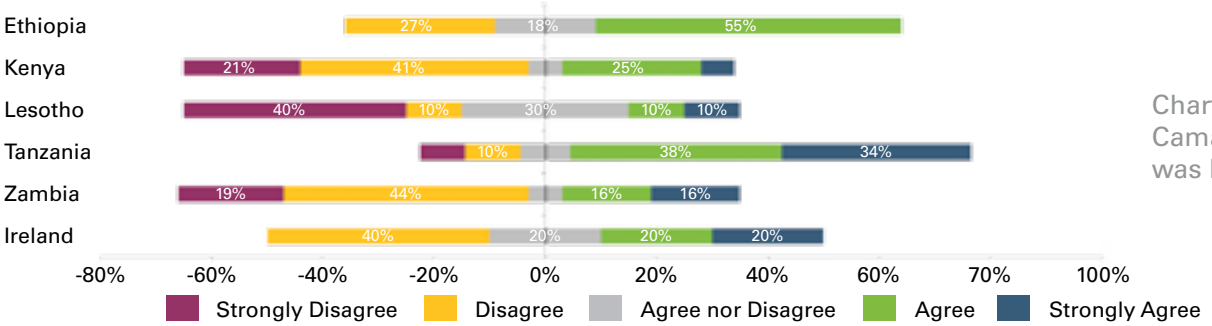


Chart 11: The Camara training was long enough.

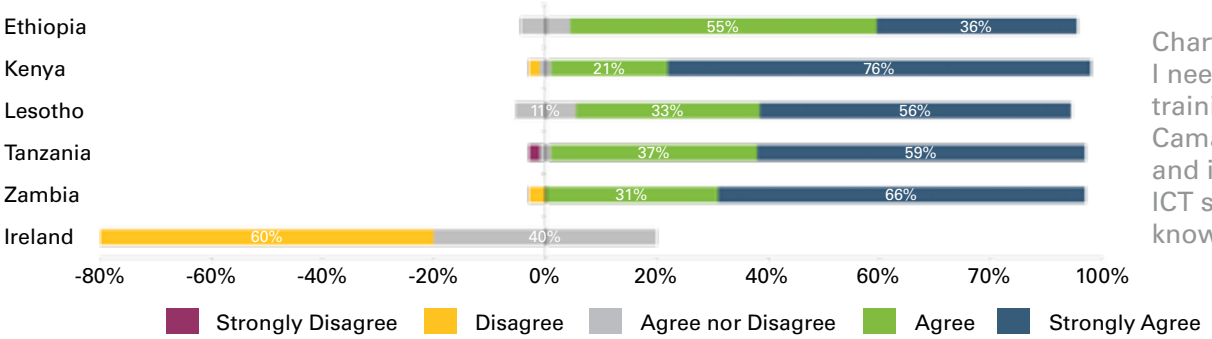


Chart 12: I feel I need more training from Camara to refresh and increase my ICT skills and knowledge.

It can be seen that the results are broadly positive from a Camara perspective. There is a general trend towards the results from Ireland differing from those of the African countries, with one exception. The teachers from Ireland have been more likely to disagree or remain neutral when answering the statements in comparison to teachers from the other countries. This is not to say that Irish teachers have been overwhelmingly negative in their answers to the statements. Forty percent agreed or strongly agreed to five out of the first six statements. The exception to the trend is the statement related to whether the training was long enough. The country that bucked the trend in relation to this statement was Tanzania. This could be due to the fact that teachers in Tanzania received the training as part of a donor funded project and did not have to pay. Therefore, their expectations may differ from those of other countries. Furthermore, it should be noted that training for teachers in Ireland differs significantly from that in the African countries. In the African countries the training runs for a week and is generally introductory in nature whereas in Ireland it is a lot shorter and can vary in content.

An encouraging result is that related to the statement on whether the Camara training has helped to alter the way the teachers approach teaching. Across the African countries, teachers overwhelmingly either agreed or strongly agreed. In Ireland, 40% of teachers agreed with the statement. This is an important indication that the Camara training has an impact on the behaviour of the main beneficiaries. Further research would be required to gain insight into how exactly the training has impacted the teachers' approach to teaching.

The charts below illustrate the results of the statements related to ICT equipment and software. Ireland is excluded from these as the teachers from Ireland surveyed received training only, and not Camara equipment.

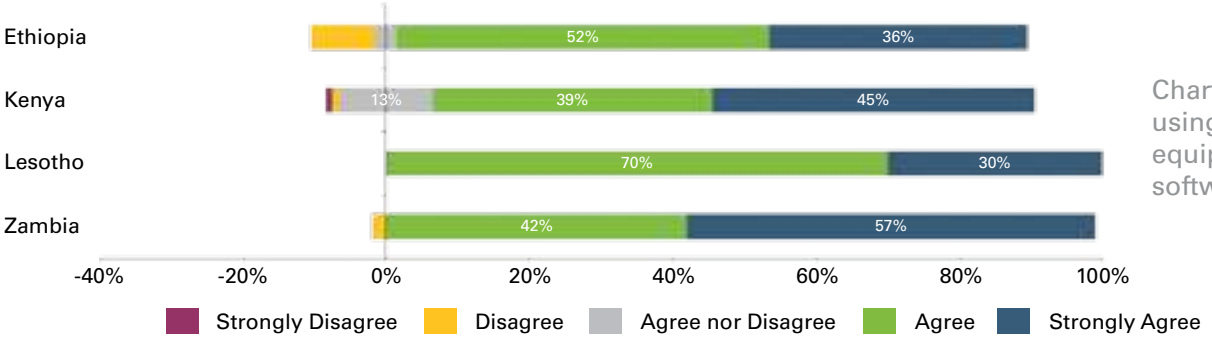


Chart 13: I enjoy using the ICT equipment and software.

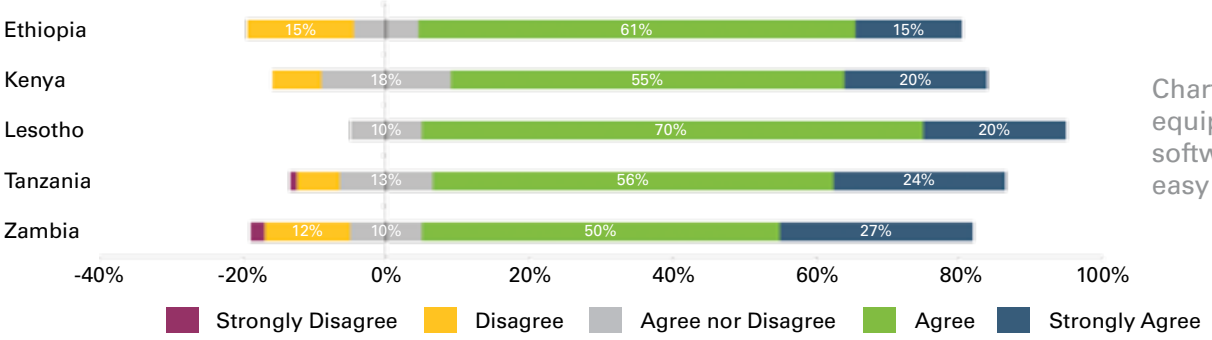


Chart 14: The ICT equipment and software have been easy to use.

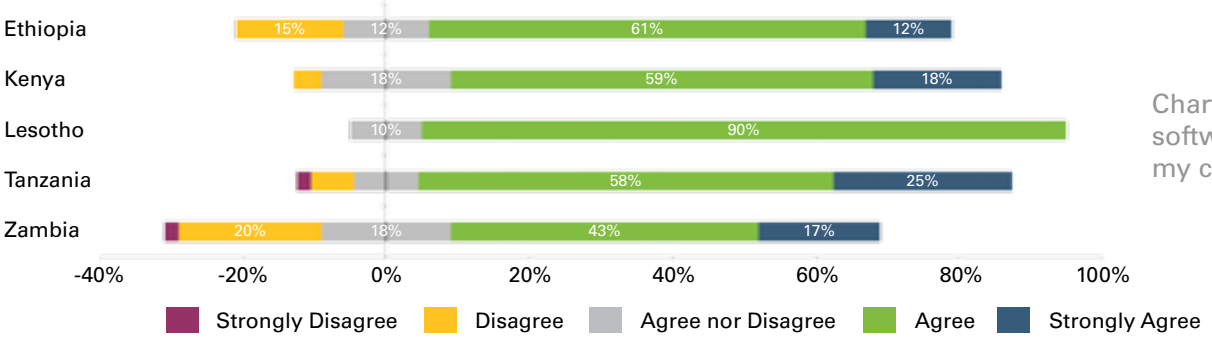


Chart 15: The software supports my curriculum.

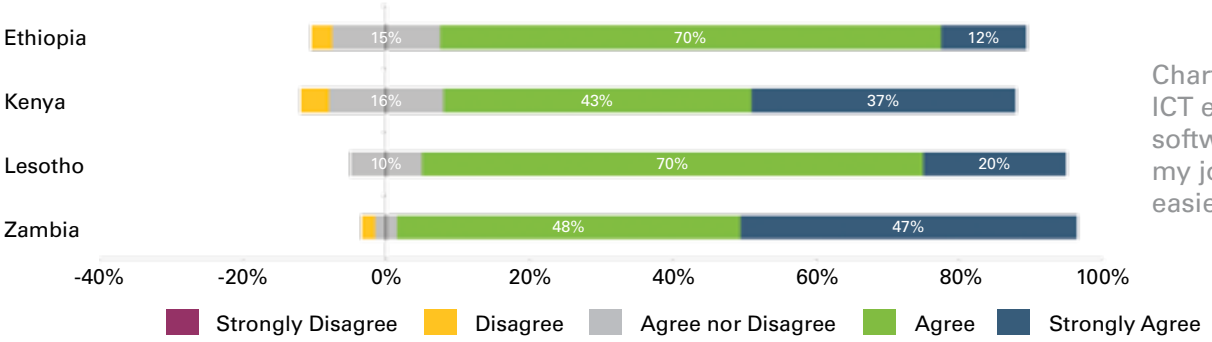


Chart 16: Using the ICT equipment and software makes my job as a teacher easier.

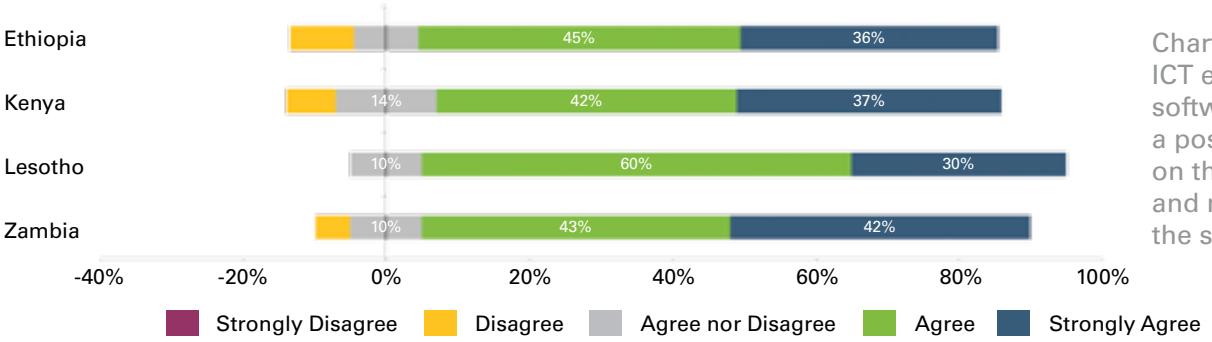


Chart 17: Using the ICT equipment and software has had a positive effect on the enthusiasm and motivation of the students.

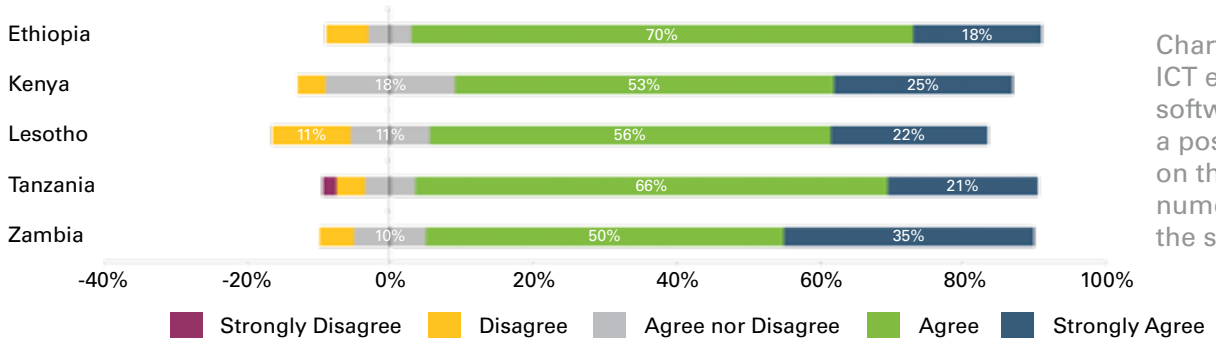


Chart 18: Using the ICT equipment and software has had a positive effect on the literacy and numeracy levels of the students.

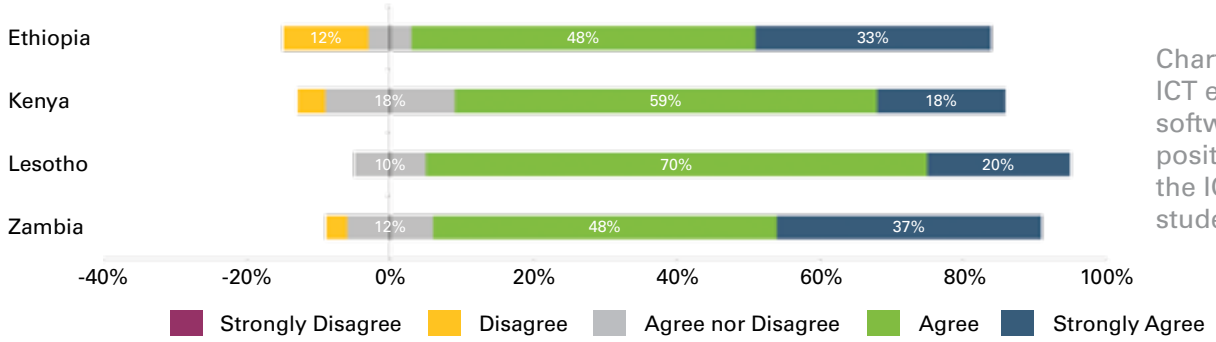


Chart 19: Using the ICT equipment and software has had a positive effect on the ICT skills of the students.

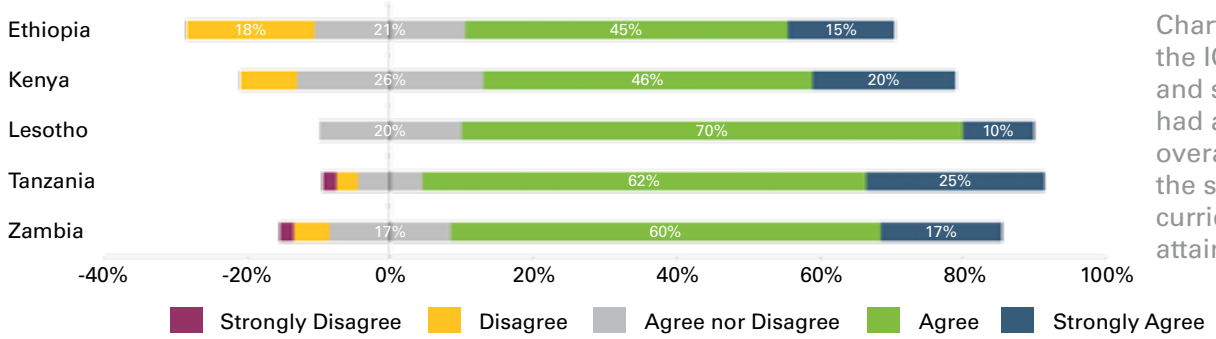


Chart 20: Using the ICT equipment and software has had a positive overall effect on the students' curriculum attainment.

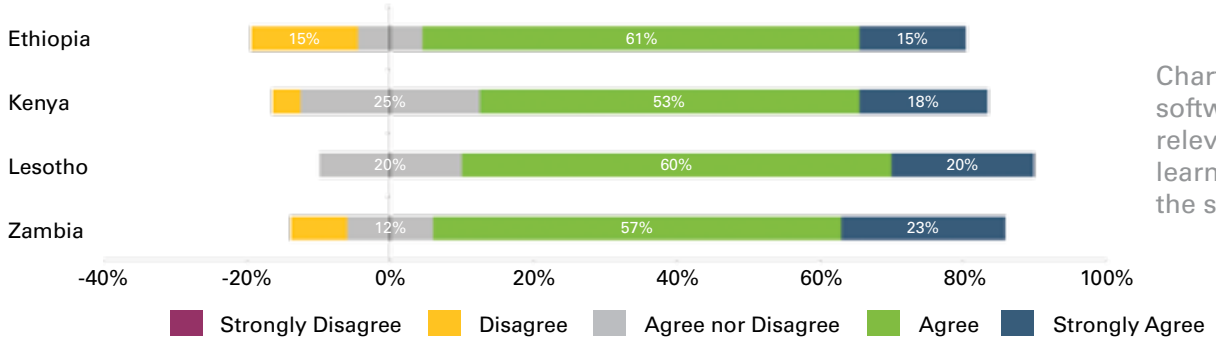


Chart 21: The software has been relevant to the learning needs of the students.

Again, there is a general positive trend across all the countries for these statements. This is especially encouraging for those statements related to learning and educational outcomes. The positive reported effects on student numeracy and literacy, student ICT skills, and student curriculum attainment are an indication of the degree to which teachers appreciate the added value ICT training and equipment can give. However, it should be noted that these are teacher perception surveys and more rigorous research would be required to fully ascertain the impact of Camara's work on learning and educational outcomes.

The charts below illustrate the results of the hardware related questions.

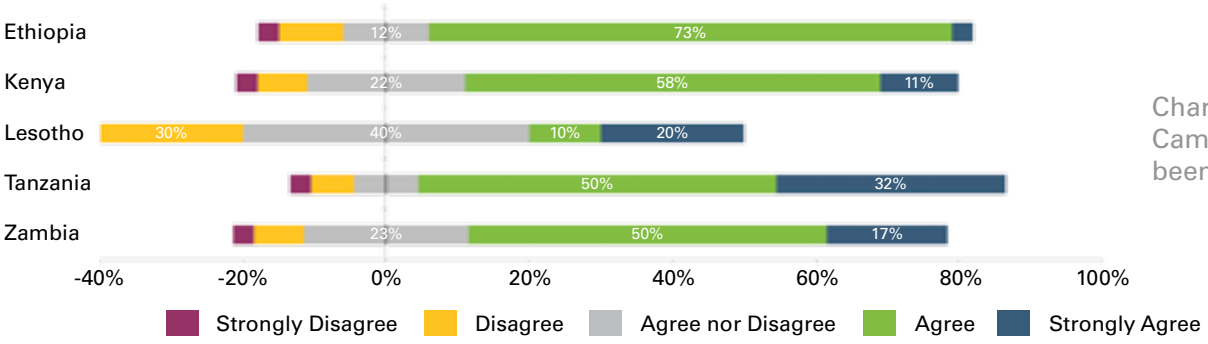


Chart 22: The Camara PCs have been reliable.

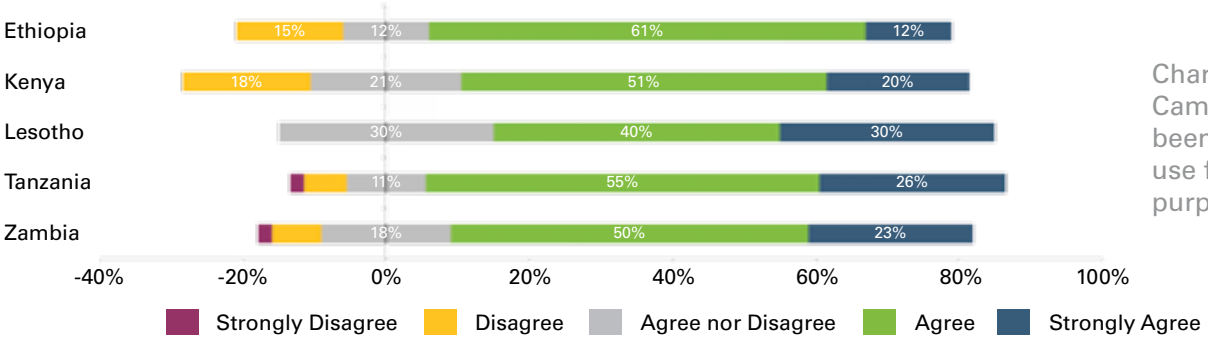


Chart 23: The Camara PCs have been easy to use for teaching purposes.

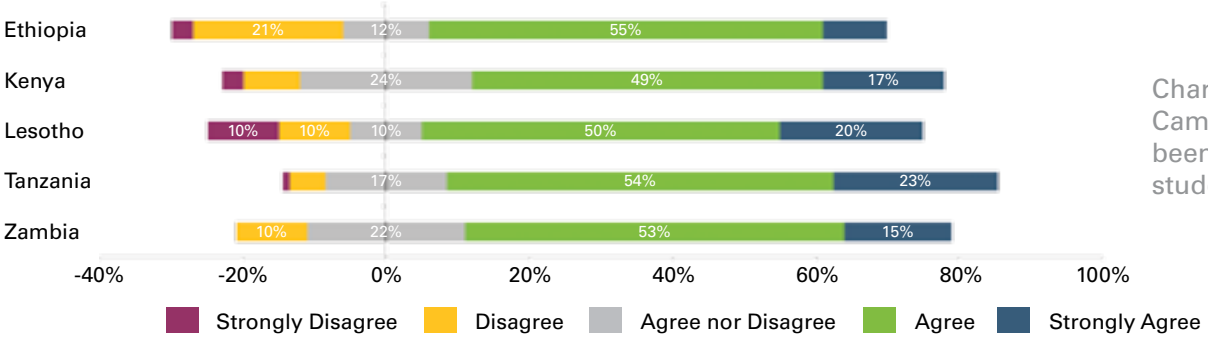


Chart 24: The Camara PCs have been easy for the students to use.

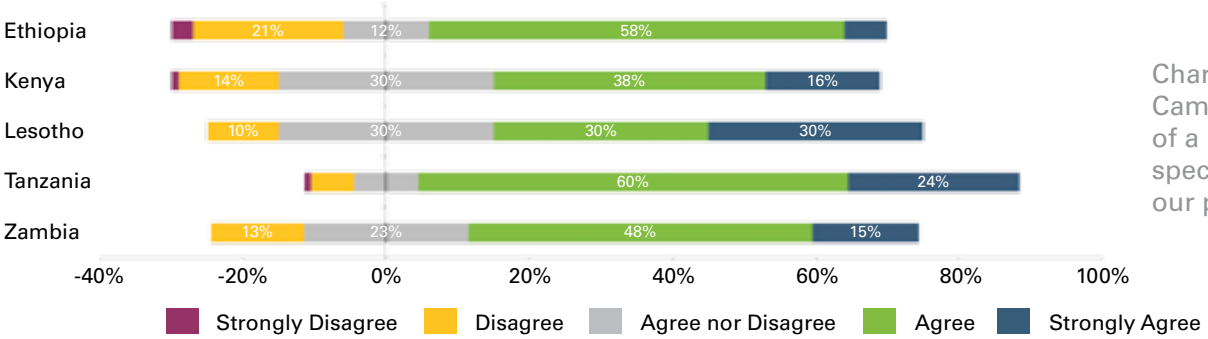


Chart 25: The Camara PCs are of a high enough specification for our purposes.

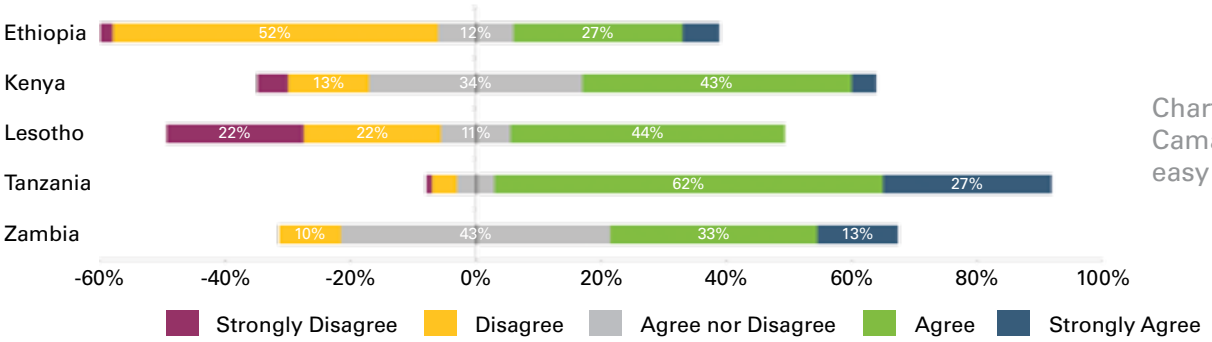


Chart 26: The Camara PCs are easy to maintain.

As before, there is an overwhelmingly positive trend for these statements. The main exception to this is the final statement on the ease of maintaining the computers. Teachers in Ethiopia were more likely to disagree with this statement while teachers in Lesotho were evenly split between negative and positive answers. This shows that there is a perception amongst some teachers that the PCs are difficult to maintain.

STUDENTS

Students were asked to agree or disagree with six statements. The options were formulated in a different manner than usual to make them more easily understood to students. However, they still corresponded to the usual Likert strongly disagree to strongly agree scale. The statements asked are shown in the table below.

1	Using a computer in school makes learning more enjoyable.
2	Using a computer in school makes learning easier.
3	The computers are easy to use.
4	The software program makes learning maths easier.
5	The software programs make learning English easier.
6	The computers and software programs are good enough to improve my ICT skills.

Table 3: Student perception statements

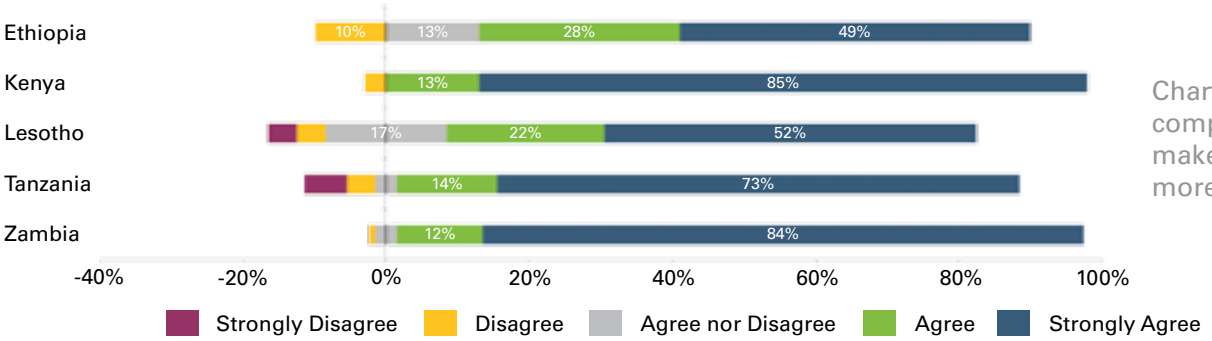


Chart 27: Using a computer in school makes learning more enjoyable.

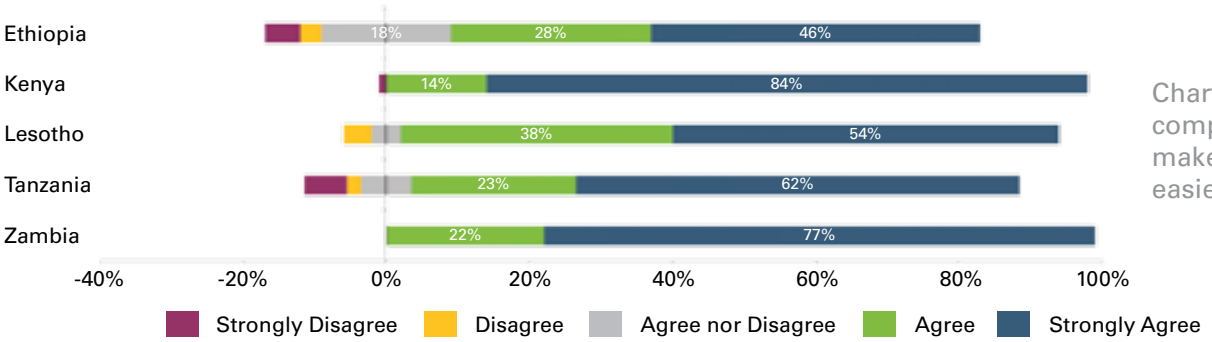


Chart 28: Using a computer in school makes learning easier.

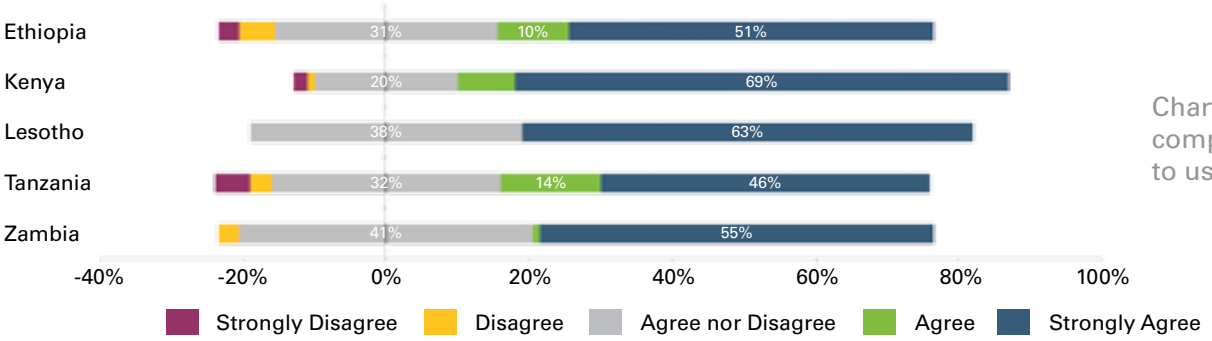


Chart 29: The computers are easy to use.

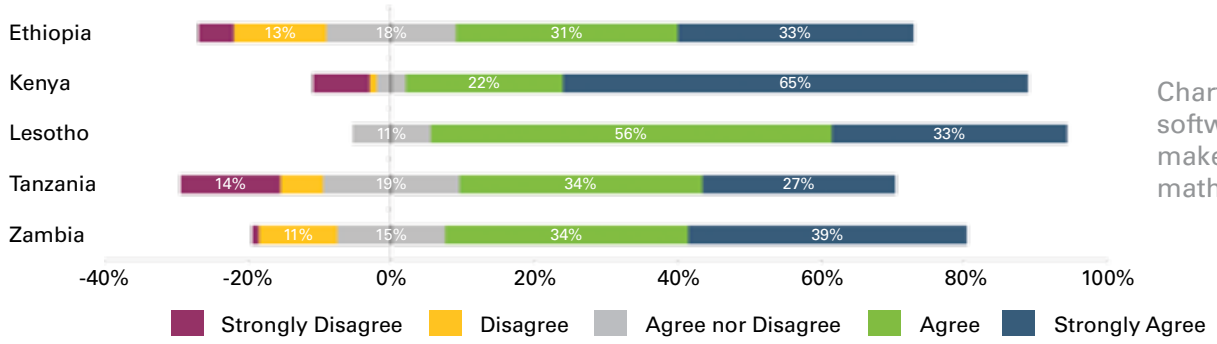


Chart 30: The software program makes learning maths easier.

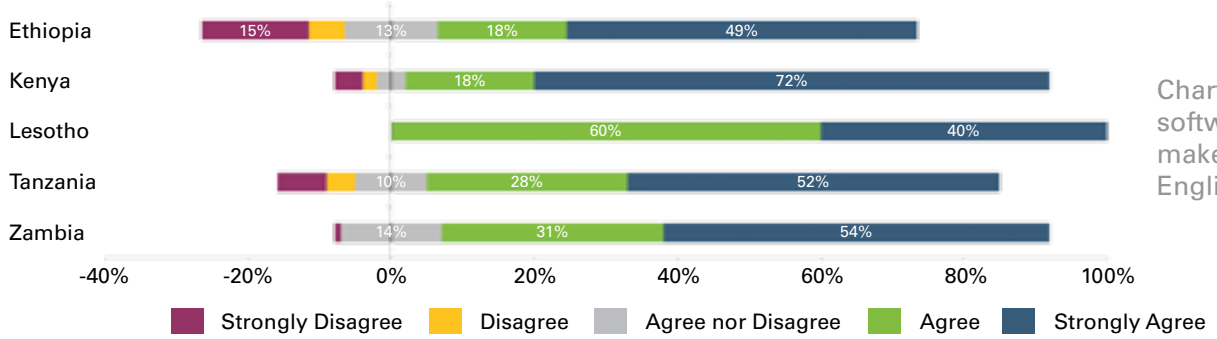


Chart 31: The software programs make learning English easier.

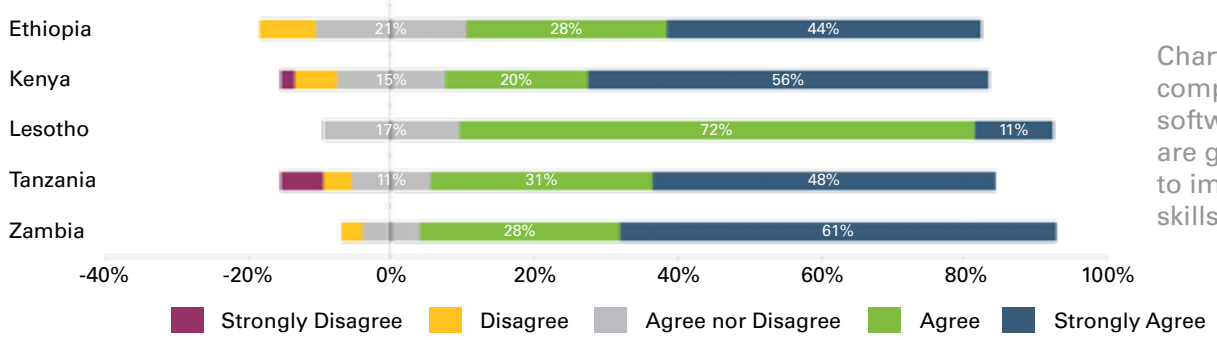


Chart 32: The computers and software programs are good enough to improve my ICT skills.

Similar to the teacher results, the student results are broadly positive. Again, the statements related to educational and learning outcomes are encouraging as it points towards the fact that Camara's offering has a positive impact on these areas. Similar to the above however, more research will be needed.

Access, Usage and Integration

School management, teachers and students were asked a range of questions related to the levels of access to, usage, and integration of the ICT equipment that teachers and students have. A number of the questions asked in previous years' monitoring activities were asked again so trends over time could be ascertained. This section is split into three areas covering access, usage, and integration. Each area will display the results of the questions asked of school management, teachers, and students. The results are shown below.

ACCESS

Access is defined by Camara as the quality of means available to beneficiaries and agency to utilise ICT resources. This means that Camara is not solely interested in whether or not beneficiaries have physical access to ICT equipment but also the nature of the institutional and personal channels that beneficiaries can utilise to access the ICT equipment. For example, school management is asked whether they have a timetable for the eLearning Centre, and all levels of beneficiaries are asked if the eLearning Centre is open for informal access. This section presents results from reported levels of eLearning centre access by school management representatives, teachers, and students. Each interviewee from each beneficiary category was asked to provide details of time spent in the eLearning centre each week as well as the degree of informal access that students have. In doing so, we can validate the information provided by each beneficiary category against the others.

ICT POLICY

Representatives of school management were asked whether they have an ICT policy or guidelines for the school. While not directly related to access levels, it is an indication of the institutional level of access quality. A school with an ICT policy is theoretically more likely to facilitate greater access to the ICT equipment. The chart below shows the breakdown of figures for whether or not the school has an ICT policy or guidelines.

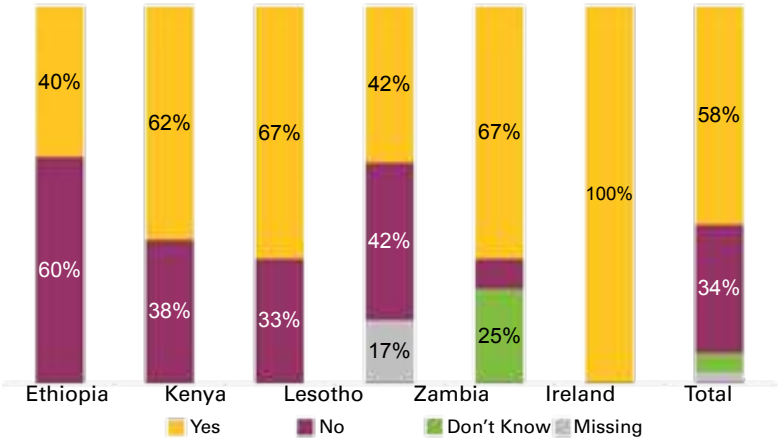


Chart 1: Do you have an ICT policy or guidelines for your school?

FORMAL ACCESS

As noted above, school management representatives were asked whether or not they have a timetable for the eLearning centre. This is a basic measure of the quality of institutional channels of facilitating access for students. The results are shown in the chart below. Ireland was not included in this question as it is not applicable.

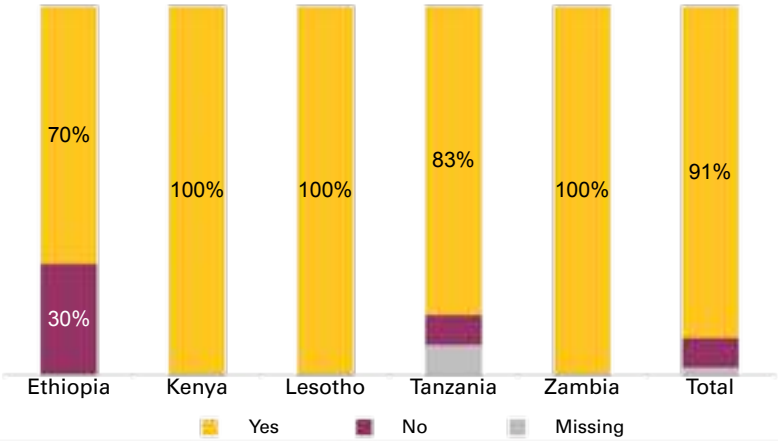


Chart 2: Does your school have a timetable for the eLearning centre?

The results show that an overwhelming majority (91%) of schools have a timetable for their eLearning Centre. The lowest score was from Ethiopia with 70% of schools with a timetable. Three countries (Kenya, Lesotho, and Zambia) reported 100% of schools with a timetable.

Following on from the timetable question, school management representatives were asked which school years are timetabled to have access to the eLearning centre. The naming of school years differs from country to country and from school level to school level, so the question was formulated to be appropriate. The results are shown in the table below.

Country	Average	Standard Deviation
Ethiopia	16%	17%
Kenya	53%	17%
Lesotho	95%	13%
Tanzania	41%	25%
Zambia	42%	20%
All Countries	50%	18%

Table 1: Breakdown of % of school years timetabled to have eLearning centre access

The table shows that the results vary considerably across the different countries. Ethiopian schools timetable only 16% of their school years for the eLearning centre while Lesotho schools timetable 95%. However, it should be borne in mind that the Lesotho figure is based on results from only two schools.

FORMAL ACCESS/USAGE TIMES

Information regarding the amount of access and usage time students have with the computers was obtained from school management, teachers, and students.

In order to arrive at a figure for levels of access per week, school management representatives were asked on average how many classes per school year were timetabled in the eLearning centre per week and how long these classes last. Students were asked questions on how many times per week they have classes in the eLearning centre and how long this access lasts. Teachers were asked how many times per week they teach a class using the eLearning centre. The table below shows the average and standard deviation in minutes of the amount of time school management, teachers and students reported access to the eLearning centre. Tanzania and Ireland are not included in the school management section as this information was not asked of the school representatives during the pilot and it was felt headteachers would not be able to provide specific information on levels of ICT use in classrooms by teachers in Ireland.

	School Management			Teachers			Students		
Country	Average	Standard Deviation	N	Average	Standard Deviation	N	Average	Standard Deviation	N
Ethiopia	244	155	7	280	270	18	65	30	30
Kenya	124	137	15	126	210	40	79	50	136
Lesotho	320	396	2	88	67	2	101	75	21
Tanzania	-	-	-	132	123	39	122	47	173
Zambia	168	127	12	148	107	31	117	57	79
Ireland	-	-	-	514	495	5	-	-	-
All Countries	214	204	36	167	208	135	103	55	439

Table 2: Breakdown of school management, teacher, and student reported number of minutes formal access to eLearning centres

Generally, the figures reported by teachers are closer to those reported by school management, apart from Lesotho. The results of what students reported vary significantly from both the school management and teacher results, in that they are usually lower. The exception to this is Lesotho. For example, the total average reported by school management is more than double that reported by students. There is a high degree of variation between countries and within countries across the three different respondent types. For example, the reported average from teachers in Ireland is by far the highest but the very high standard deviation shows there is a high degree of variation. In fact, the standard deviation is high across all countries which shows that the amount of timetabled hours varies greatly from school to school. It is difficult to ascertain the exact reason(s) for the large variance. School observation based research or a student log in system that counts usage hours would be required to get an exact figure.

The figures reported are in contrast to those gathered for the 2013 Annual Report. Across all countries, school management reps reported formal use per week for the 2013 Annual Report as 11 hours compared to 3.5 hours for the current report (as reported by school management representatives). The large difference is probably due to the method used to gather the data. As noted above, the current method uses timetabled hours, whereas the previous report did not specifically refer to timetabled hours when school management representatives were asked. This illustrates the variance in responses that different methods can provide and provides further proof that a more in-depth method of tracking usage hours is needed.
The teacher reported figures are more similar between the last Annual Report and the current one, however. Teachers reported a total weekly usage of 188 minutes for the 2013 report. The figure for the current report is 167 minutes. The relatively low variance can be explained by the fact the same method was used to gather the information.

INFORMAL ACCESS

In addition to obtaining information regarding the amount of timetabled or formal class-based access students have, information regarding the level of informal access students enjoy was also obtained. This is an important factor to consider as students can improve their literacy and numeracy levels purely by using ICT equipment in a non-structured environment. School management representatives, teachers, and students were asked whether students have access to the eLearning centre for informal use, outside of class time. The results from school management representatives are shown below. The results from the school management representatives goes some way to indicating the ethos of the school regarding the use of ICT.

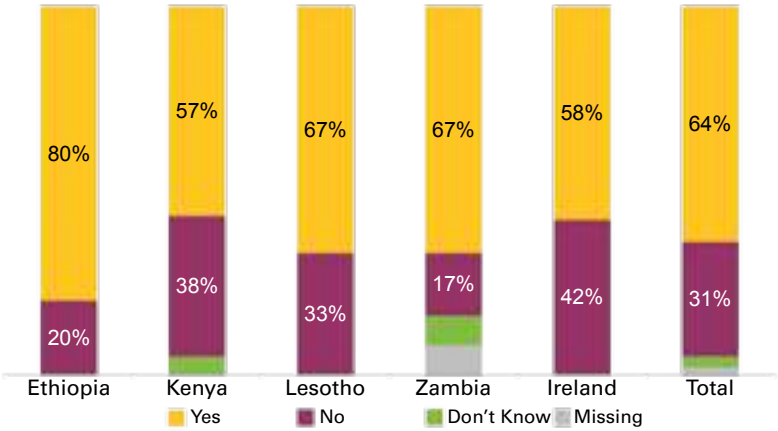


Chart 3: Are the Camara computers available for informal learning, outside of class time?

The results show that overall, schools are more than twice as likely to make the eLearning centre available for informal learning. This is an encouraging result as it means schools recognise the importance of allowing students to learn independently. Regarding correlations with school demographics and the likelihood to allow informal access, it was found that the school location has some bearing. Across all countries, 81% of school management representatives from urban-based schools responded that they do allow informal access. This is in contrast to 48% of peri-urban based schools and 56% of rural schools. The exact reason for this is difficult to ascertain. Again, more research would be needed to uncover the reasons.

As noted above, the availability of the ICT equipment for informal learning was a question also asked of teachers and students. This was done to validate the results from the school management. Initially, it was only asked of school management and students but following the pilot in Tanzania, it was decided to ask the teachers also. The results of this question from teachers and students are shown in the charts below. In Ireland, teachers were asked whether students had access to ICT equipment as opposed to an eLearning centre to make the question more applicable.

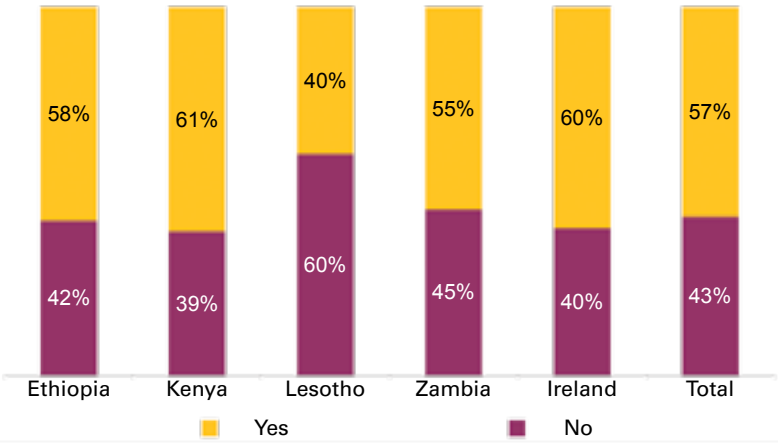


Chart 4: Do students have access to the eLearning centre/ ICT equipment for informal learning?

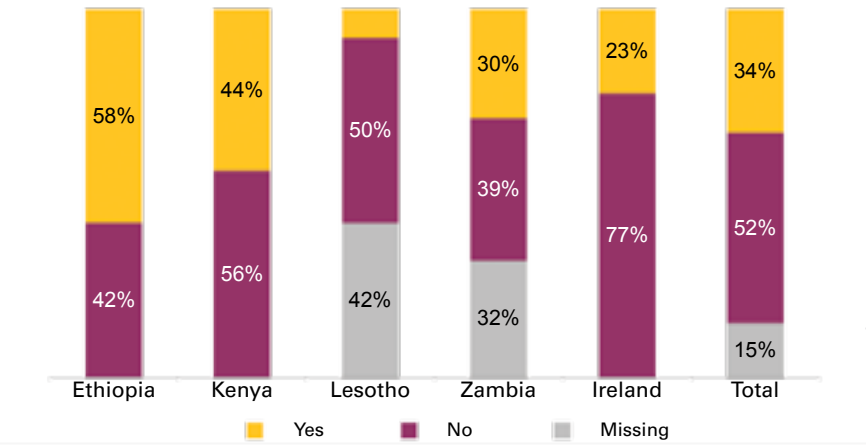


Chart 5: Is the computer lab open to use when you don't have class?

The results show a much lower tendency on the part of students to provide a positive reponse when compared to school management representatives and teachers. They also show an interesting variation in the reported levels of student informal access across schools. Of the 64% of schools where school management representatives gave a positive response to the question on informal access, 57% of teachers gave a positive response while 34% of students gave a positive response. Of the 31% of schools where school management gave a negative response, 40% of teachers gave a positive response while 23% of students gave a positive response. The biggest contrast is the fact that a majority of students (55%) report having no access on an informal basis in the schools that school management report the eLearning centre being available for informal access. There can be a number of reasons for this. Anecdotally, it has been observed that the eLearning generally tends to only be available to students from certain years, usually the senior ones. Also, the small number of computers relative to the number of students means that a lot of students may be unable to access the computers.

INFORMAL ACCESS/USAGE TIMES

Only students were asked to provide information regarding the amount of time they access and use the eLearning centre for informal use. This is because school management representatives and teachers are less likely to know the amount of time students spend accessing the ICT equipment on an informal level. Students were asked how often per week they use the lab when they do not have class and how long this usage usually lasts. Results from Tanzania and Lesotho are not available as the information was not gathered during the pilot phase and the information from Lesotho is missing. The table below shows the average and standard deviation of the results from Ethiopia, Kenya and Zambia.

Country	Average	Standard Deviation	N
Ethiopia	56	30	17
Kenya	82	53	72
Zambia	79	75	21
All Countries	77	55	110

Table 3: Breakdown of students' reported levels of informal access

The table shows a high degree of variation within and across countries. This is especially the case in Zambia where the standard deviation is particularly high. Therefore, this shows that access is unequal from school to school and student to student. There can be a number of reasons for this, including differences in availability of computers, and restrictions on school years that are given access.

Similar to the formal access times, this result contrasts significantly with what was reported in the 2013 Annual Report, which was 10 hours. Again, this is explained by the different methods of data gathering used. For the 2013 report, school management representatives were asked the question regarding informal access, whereas for the 2014 report the information was elicited from students only.

ACCESS TO EQUIPMENT

In relation to access to equipment, teachers were asked what equipment they have access to for teaching purposes. The level of access for teaching purposes teachers reported having varied across different equipment. The table below displays the results of the access to equipment.

	PCs		Laptops		Tablets		Whiteboards		Projectors	
	%	N	%	N	%	N	%	N	%	N
Ethiopia	79%	26	6%	2	3%	1	18%	6	6%	2
Kenya	87%	66	11%	8	1%	1	3%	2	0%	0
Lesotho	90%	9	0%	0	0%	0	0%	0	20%	2
Zambia	90%	66	5%	3	0%	0	3%	2	8%	5
Ireland	40%	2	40%	2	40%	2	0%	0	0%	0
All Countries	77%	169	12%	15	9%	4	5%	10	7%	9

Table 4: Access to equipment for teaching purposes

Unsurprisingly PCs are the most available piece of equipment in African countries. Their level of availability is far higher than any other item of equipment. The picture is different in the Irish schools with PCs, laptops and tablets equally available. These figures demonstrate the different methods of utilisation of equipment in different locales. Schools in the African countries are more likely to use a traditional method with students sitting in front of desktop PCs in a dedicated lab. Irish schools are more likely to utilise more mobile devices such as laptops and tablets within a classroom, rather than a dedicated lab.

Students were also asked to provide their perceptions on the quality of access to the ICT equipment they enjoy. They were asked whether access to computers is limited because they are often not working and whether access is limited because there is not enough computers. The results of these questions are shown in

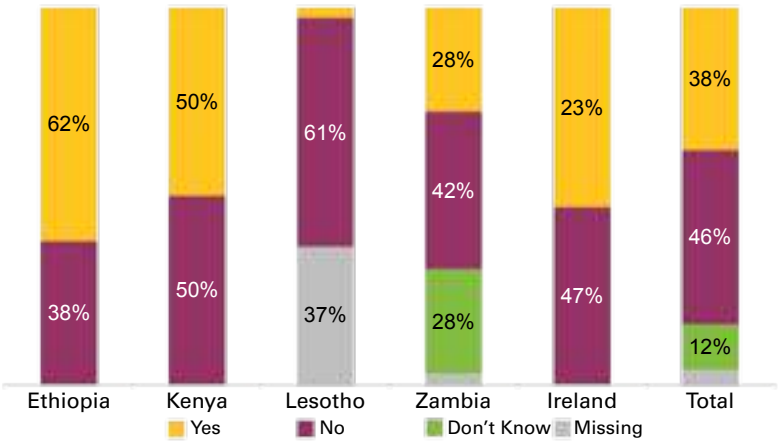


Chart 6: Do you feel that access to the computers is limited because they are often not working?

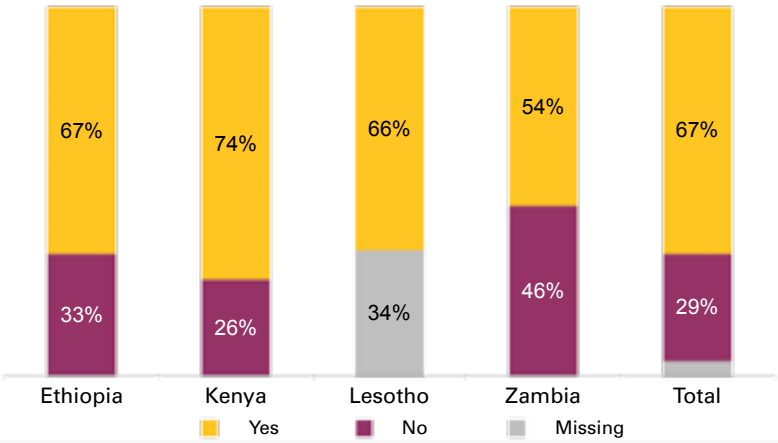


Chart 7: Do you feel that access to the computers is limited because there is not enough of them?

These two questions were asked of students for the 2013 Annual Report. The results of the first question show improvement in some countries but dis-improvement in others. In 2013, Kenya, Lesotho and Tanzania show improved results while Ethiopia and Zambia don't. The biggest change was observed in Lesotho. In 2012 31% of students believed access is limited because the computers are often not working. It has reduced to 3% in 2013.

The results of the second question show dis-improvement in all countries. Again, the biggest change is in Lesotho. In 2012, 47% of students believed access to computers was limited because there was not enough of them but this has increased to 66% in 2013.

EQUIPMENT ATTRITION RATE

The rate of attrition of the Camara computers is an important aspect to consider for levels of access. As computers break and become unavailable, they limit the amount of access and usage that students have. The table below shows the average number of computers received by schools and the number of computers that are now not working. The figures from the 2013 Annual Report are included for comparison purposes. They are shown in the 2012 columns as they relate to 2012 activities. Figures for the current Annual Report are shown in the 2013 column as they relate to that year.

	2012			2013		
	PCs received	PCs broken		PCs received	PCs broken	
Country		N	%		N	%
Ethiopia	28	6	22%	24	6	25%
Kenya	15	4	29%	15	7	47%
Lesotho	28	6	20%	15	15	100%
Tanzania	20	4	22%	25	1	4%
Zambia	20	4	22%	25	8	3%
Ireland	34	21	62%	11	1	12%
Total	24	8	30%	19	6	32%

Table 5: Comparison of computer attrition rate

The table shows that overall there has been little change in the final percentage attrition rate across all countries from 2012 to 2013. The high figure for Lesotho in 2013 is based on only two schools so it is probably not representative of Camara supported schools in that country.

USAGE

Along with access, the level of usage is key to gaining an estimation of ICT's impact on schools. In considering usage, Camara is concerned that it is both practical and effective, for both teachers and students. In order to gain an understanding as to the levels of usage in each school, school management representatives, teachers, and students were all asked questions focusing on different aspects of usage.

TEACHER USAGE

Teachers in the African countries were asked whether they ever brought their class to the eLearning Centre to teach while teachers in Ireland were asked if they ever used ICT equipment to teach, either in the classroom or in a lab. The results of this question are shown below.

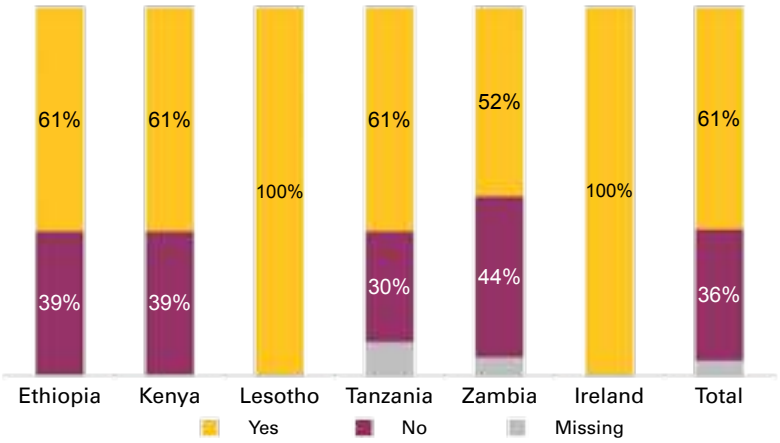


Chart 8: Do you ever use ICT equipment to help you teach, either in the classroom or in an eLearning Centre?

The chart shows that a majority of teachers overall (61%) state that they use ICT to help them teach, either in the classroom or in an eLearning centre. In contrast to the results from the 2013 Annual Report, these results show a regression. For the last Annual Report, the total average across all countries for a positive response was 74%. However, not all countries regressed. Ethiopia, Kenya and Zambia showed a dip of 25%, 29%, and 24% respectively. Tanzania and Lesotho showed an increase in positive responses of 17% and 28% respectively.

It would be useful to know what factor(s) have the most influence over whether or not a teacher uses ICT to teach. While age range would seem to have a bearing at the overall level with 66% of those aged 26-35 stating they use ICT to teach, this is not the case across all countries. Furthermore, those aged 25 or below (50%) are almost as likely as those aged 46 and above (48%) to use ICT to teach. Therefore, age range does not have a strong correlation with teachers' likelihood to use ICT to teach. The two factors that have the strongest correlation are the ownership type of the school and whether or not the teacher attended Camara training. Overall, teachers in private schools are more likely to use ICT to help them than teach than any other school type. This is the case across all countries, apart from Ireland and Lesotho where teachers from all school types were equally likely to use ICT to help them teach. Furthermore, it is difficult to compare ownership types in Ireland and African countries as they differ. However, teachers from only three different schools were surveyed in each of those countries. The greater likelihood of teachers who attended Camara training to use ICT to help them teach is present across all countries, apart from Tanzania and Ireland. In those two countries only teachers who attended Camara training were interviewed. Even when those two countries are excluded, there is still a greater likelihood for those teachers who attended Camara training to use ICT to help them teach than those who didn't, at 67% as opposed to 45%. The results are shown in the tables below.

	Do you use ICT to help you teach, either in the classroom or an eLearning centre?							
What is the ownership type of your school?	Yes		No		Missing		Total	
	%	N	%	N	%	N	%	N
Community School	48%	14	48%	14	3%	1	100%	29
Faith School	59%	19	38%	12	3%	1	100%	32
Government School	56%	77	38%	53	6%	8	100%	138
Private School	79%	45	21%	12	0%	0	100%	57
Missing	20%	1	80%	4	0%	0	100%	5

Table 5: Correlation of schools ownership type and teaching through ICT

The table shows that there is a difference of 20% in positive responses between the private schools (70%) and the next highest, faith schools (59%). Teachers in community schools are the least likely to teach with the help of ICT at 48%. There can be a number of reasons for the results shown. The main assumption to make would be that private schools have more money than other schools and can, therefore, afford more ICT equipment and teacher training. However, this doesn't take into account the fact that many private schools in African countries are affordable private schools and do not charge high school fees. The ethos of the school could also have an effect on the propensity of teachers to teach through ICT. Private schools can have a different ethos which derives from the school owner which would have an effect on the way teachers teach. Anecdotally, community schools have more difficulty in paying for the electricity required to power the eLearning centre as they tend to have less cash reserves. However, more research would be required to confirm this and the other reasons discussed. The table below shows the correlation between teacher use of ICT in teaching and whether they attended Camara training.

	Do you use ICT to help you teach, either in the classroom or an eLearning centre?							
Did you attend Camara training?	Yes		No		Missing		Total	
	%	N	%	N	%	N	%	N
Yes	66%	131	30%	60	5%	9	100%	200
No	45%	30	53%	35	2%	1	100%	66

Table 6: Correlation of Camara training attendance and teaching through ICT

The table shows that two thirds of teachers who attended Camara training are now using ICT to help them teach. In comparison, less than half of those who did not attend Camara training (45%) now use ICT to help them teach. This shows a significant impact of Camara's training on teachers' ability to integrate ICT into their teaching techniques.

TEACHER USAGE BEFORE CAMARA

In order to gain some level of insight into how Camara training and ICT equipment have impacted on the level of ICT usage in teaching practices, teachers were asked if they used ICT in teaching before they received Camara training and Camara equipment. These questions applied only to those teachers who currently integrate ICT into their teaching practices. In Tanzania, teachers were asked only if they integrated ICT into their teaching practices before the Camara PCs, which assumed the meaning of the entire Camara package. Following the pilot, the question was split into two, emphasising the training and the equipment. This is in order to gauge which has had a bigger influence on teachers decision to use ICT to help them teach: training or equipment. The Tanzania results are shown in the equipment results as the meaning of that question is closer. The results are shown in the charts below.

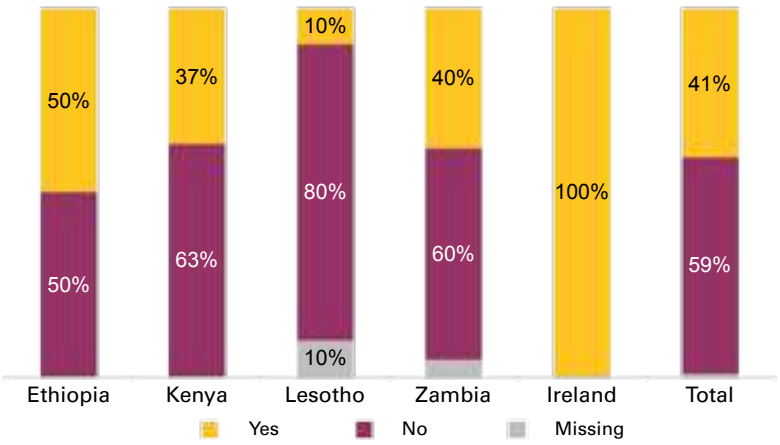


Chart 9: Did you use ICT to help you teach before you received Camara training?

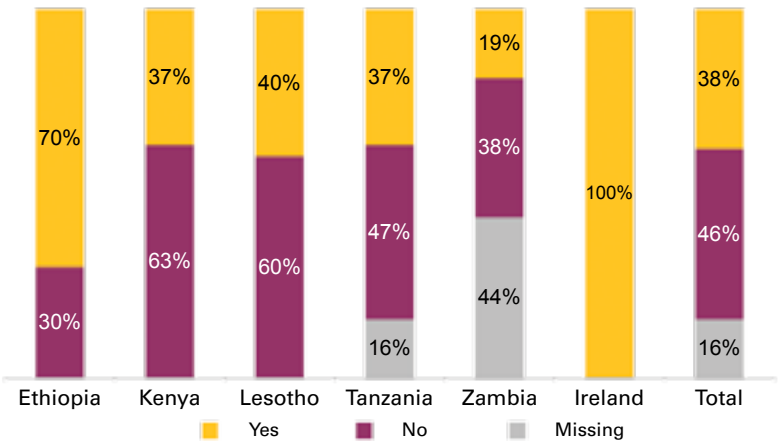


Chart 10: Did you use ICT to help you teach before you received Camara ICT equipment?

The results of these questions show that the Camara training and equipment has had a much greater impact on the decision by teachers to teach using ICT in the African countries. All teachers in Ireland reported that they used ICT to help them teach before receiving Camara training and equipment. Overall, the results seem to show that the training has had a greater influence over teachers' decisions. Across all countries, 59% of teachers stated that they didn't use ICT to help them teach before receiving training while 46% stated they didn't use ICT to help them teach before receiving Camara ICT equipment. This is a validation of the Camara package.

To gain further insight into this issue, school management representatives were also asked if any of the non-ICT teachers who currently use ICT to teach used ICT to help them teach before the school engaged with Camara. A total of 28 school management representatives across the African countries reported that non-ICT teachers use ICT to help them teach. The question was not asked in Ireland as it was not applicable. The results are shown in the chart below.

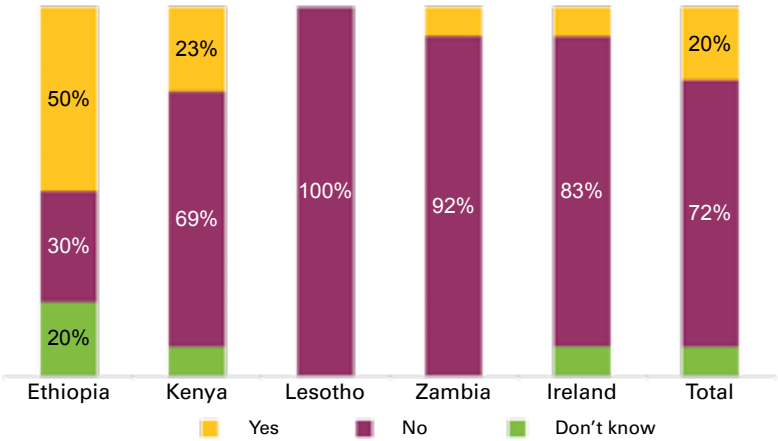


Chart 11: Did any of the non-Computer Studies teachers use computers to teach before Camara?

The results show that an overwhelming majority of the 28 school management representatives who reported that non-ICT teachers use ICT to teach believe this was not the case before the school engaged with Camara. The exception is Ethiopia with only 30% reporting this to be the case. It should be noted that while the Lesotho result looks impressive, it is based on only one school. School management from the other two schools reported that non-ICT teachers do not use ICT to help them teach.

STUDENT USAGE

The previous section on access reported the amount of time students have access to the ICT equipment. This could also be construed as the amount of usage time students have. To gain some understanding of a major factor that influences the quality of access and ultimately usage students enjoy, teachers and students were asked how many students, on average, share a computer or piece of ICT equipment during class. The results of the teachers' responses are shown in the table on the next page.

Country	Average	Standard Deviation	N
Ethiopia	3	3	22
Kenya	4	3	61
Lesotho	4	3	6
Tanzania	2	1	38
Zambia	2	1	41
Ireland	2	0	5
All Countries	3	2	173

Table 7: Breakdown of teacher reported levels of sharing

The results from the teachers show that the averages in Ethiopia, Kenya and Lesotho are relatively high, as is the level of variation. The averages in Tanzania, Zambia and Ireland are relatively low and there is not much variation. The result from Ireland shows that there is a constant number of students sharing a computer (two). Students were asked the same question for last year's annual report which allows for a comparison to be made. The results from the students for both years are shown below.

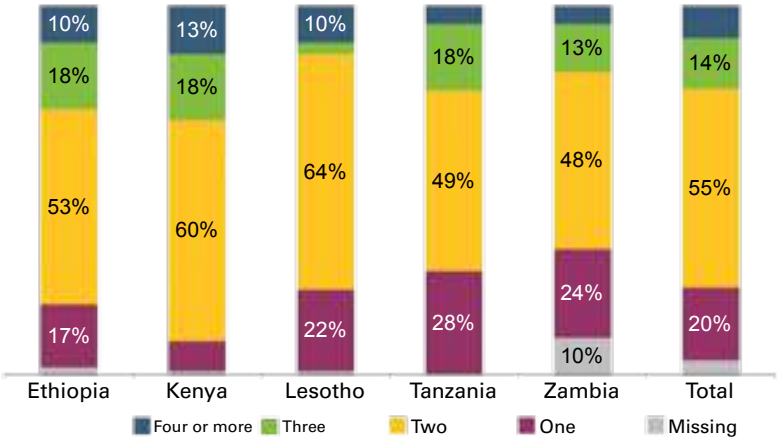


Chart 12: On average, how many students share the same computer? (2013 Annual Report)

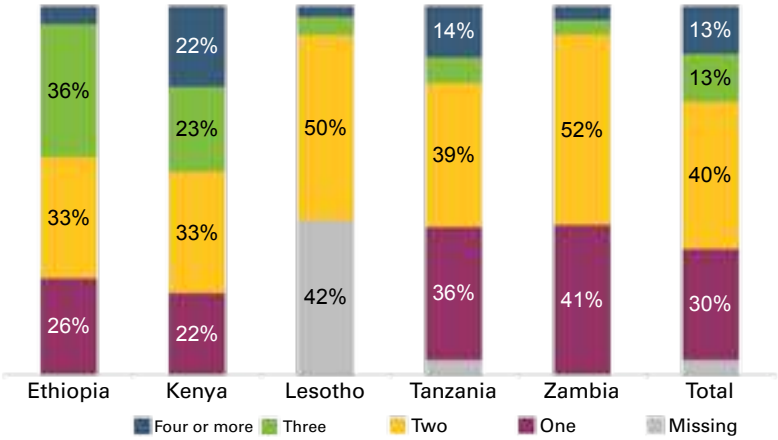


Chart 13: On average, how many students usually share the same computer? (2014 Annual Report)

Comparing the results from this year with those of last year shows a general trend of improvement, in that all countries apart from Lesotho show an increase in the number of students reporting sharing a computer with nobody. However, the trend towards improvement is not consistently strong across all countries. For example, Ethiopia and Kenya reported a greater tendency to have three or more students sharing in the more recent results.

TRAINED TEACHER RETENTION RATE

The degree to which schools hold onto trained teachers is an important aspect to consider for usage. As shown above, trained teachers are more likely to use ICT in their teaching practices. The table below shows the average retention rates of trained teachers in schools. Similar to the computer attrition rate above, the figures from 2012 are included for comparison purposes.

	2012			2013		
	Teachers trained	Teachers retained		Teachers trained	Teachers retained	
Country		N	%		N	%
Ethiopia	2.6	1.8	69%	5	2.6	52%
Kenya	6.5	5.5	86%	10.3	7.2	70%
Lesotho	11.5	11	96%	13.3	8.3	62%
Tanzania	18.3	17.3	95%	8	6.7	84%
Zambia	-	-	-	7	4.88	69%
Total	9.7	8.9	87%	8.7	5.9	67%

Table 8: Comparison of retention rate of trained teachers

The table shows that overall there has been a decrease in the retention rates of Camara trained teachers in the African countries. The degree to which Camara has any control over this area is minimal, as it is a decision made by teachers and/or school management. However, as noted above, it does have an important effect on the potential usage of Camara computers for teaching.

SOFTWARE USAGE

As Camara PCs arrive pre-loaded with a range of educational content, it is important to find out the extent to which teachers use it. Teachers were asked whether they have used the educational content on the Camara computers. The results are shown in the chart below.

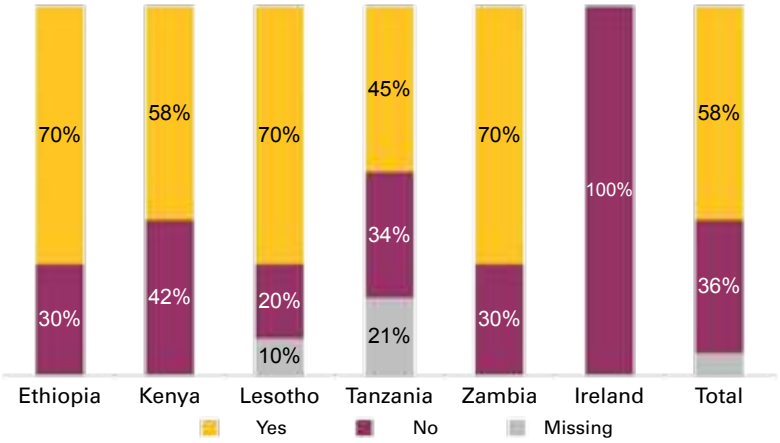


Chart 14: Have you used the educational software on the Camara PCs?

The results show that a majority of teachers reported having used the educational content in Ethiopia, Kenya, Lesotho and Zambia. None of the teachers in Ireland reported having used the educational content. While these results are generally encouraging, it shows that there is room for improvement in demonstrating to teachers the potential utility the educational content can deliver for their jobs.

When compared to the results from 2012, there has been very little change. In 2012, 63% of teachers across all countries reported using the educational content on the Camara computers, compared to 58% for 2013. However, the figures from 2012 do not include Ireland while the 2013 figures do. If Ireland is excluded from the 2013 figures, 63% of teachers reported using the educational content on the Camara computers.

To gain more insight into the software programs and educational content that proved most useful, teachers were asked to name which three they have most used while students were asked to name their favourite. The results are shown in the tables on the next page.

	No 1 Ranked		No 2 ranked program		No 3 ranked program	
Program	%	N	%	N	%	N
Abracadabra	2%	2	2%	2	3%	2
Child's Play	2%	2	2%	2	1%	1
Desktop Publishing Application	1%	1	1%	1	1%	1
Educational Games	4%	4	4%	4	1%	1
Office Suite	4%	4	4%	4	1%	1
Presentation Program	1%	1	1%	1	1%	1
Spreadsheet Application	13%	13	11%	10	9%	6
Tux Painting	1%	1	1%	1	1%	1
Tux Typing	2%	2	2%	2	3%	2
Tux Math	4%	4	4%	4	6%	4
Wikpedia	30%	31	31%	28	31%	21
Word Processor	19%	20	14%	13	12%	8
Missing	17%	18	20%	18	27%	18

Table 8: Teachers' most used software and educational content

The popularity of Wikipedia chimes with the results from 2012. For that year, teachers were asked to indicate whether they had used certain programs or applications. On average, 85% of teachers across the African countries stated that they had used Wikipedia.

Program	%	N
Child's Play	0%	1
Database Management System	1%	4
Desktop Publishing Application	1%	2
Drawing Application	1%	2
Encounter Kids	1%	3
Educational Games	18%	68
Encarta	0%	1
English Software	1%	3
Learning Tool Kit	0%	1
Maths Software	3%	12
Office Suite	5%	18
Presentation Program	1%	2
Science Software	1%	2
Spreadsheet Application	6%	24
Tux Math	1%	4
Tux Painting	1%	2
Tux Typing	4%	16
Wikipedia	15%	54
Word Processor	13%	49
None	5%	17
Missing	23%	86

Table 9: Breakdown of students' favourite software programs and educational content

The tables show that Wikipedia and word processor are popular amongst both teachers and students. The educational games loaded onto the Camara computers are also popular amongst students but, unsurprisingly, less so amongst teachers.

Integration

Integration is a further measure of ICT utilisation and goes beyond usage to give a deeper understanding of impact. Camara emphasises the importance of integrating ICT into teaching and learning practices, as a tool to help deliver learning and educational outcomes.

In order to gain a more nuanced understanding of how teachers use the ICT equipment when teaching, they were asked to indicate what they do. Five questions were asked that represent different levels of integration of ICT. The table below summarises the questions asked.

1	Do you use ICT equipment as an aid to help deliver or demonstrate lessons?
2	Do you use ICT resources to deliver presentations to the students?
3	Do you have students use the ICT resources to research issues/areas?
4	Do you have students use the ICT resources to solve problems?
5	Do you have students use the ICT resources to develop their own digital content?

Table 10: Questions related to teacher use of ICT in the classroom

The results of these questions are shown in the charts and table below.

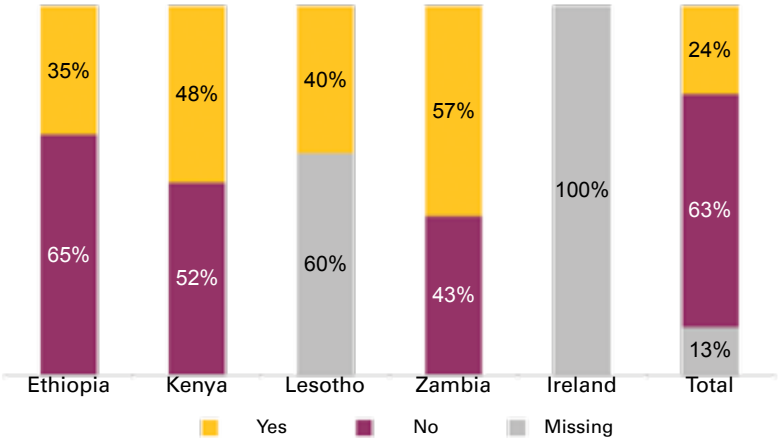


Chart 15: Do you use the ICT equipment as an aid to help deliver or demonstrate lessons?

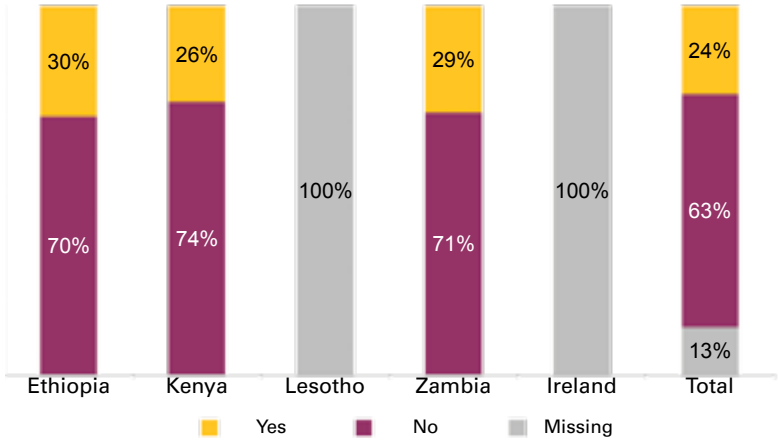


Chart 16: Do you use the ICT resources to deliver presentations to the students?

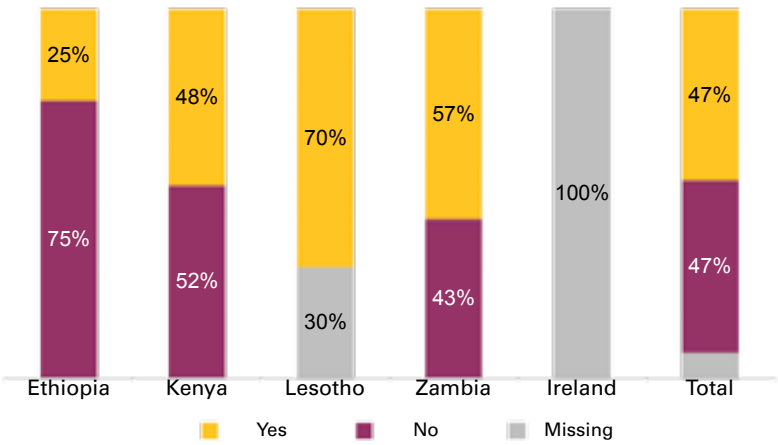


Chart 17: Do you have students use the ICT resources to research issues/ areas?

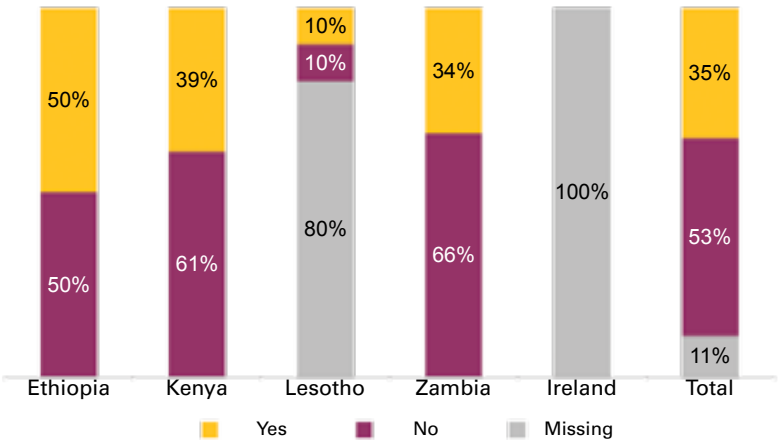


Chart 18: Do you have students use the ICT resources to solve problems?

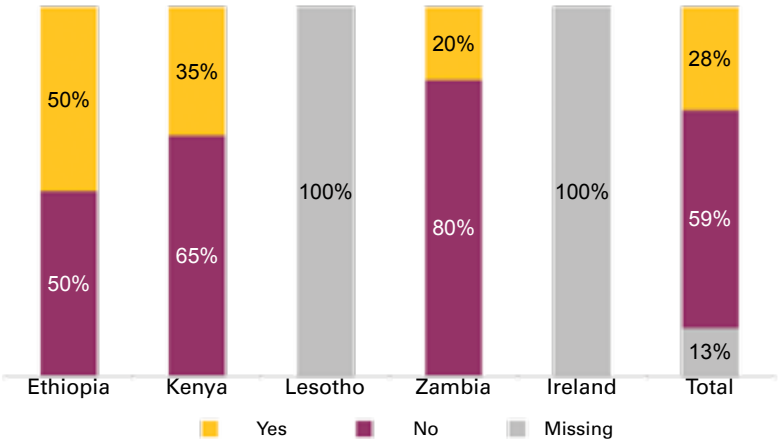


Chart 19: Do you have students use the ICT resources to develop their own digital content?

Question	Average of all Countries
Do you use ICT equipment as an aid to help deliver or demonstrate lessons?	46%
Do you use ICT resources to deliver presentations to the students?	24%
Do you have students use the ICT resources to research issues/areas?	47%
Do you have students use the ICT resources to solve problems?	35%
Do you have students use the ICT resources to develop their own digital content?	28%

Table 11: Average percentage of teachers across all integration questions

The charts and table show that there is variation across the various countries as to the level of integration into teaching practices. Using ICT as an aid to deliver or demonstrate lessons and having students use ICT to research issues/areas are the highest activities at 46% and 47% respectively. The differences in numbers of teachers who claim to use ICT as an aid to deliver or demonstrate lessons compared to those who claim to use it to deliver presentations is initially surprising as both activities are similar. However, the difference could be explained by the low numbers of projectors in schools. The relatively low numbers of teachers who have students use ICT to solve problems and develop their own digital content could be explained by the fact these are deeper levels of integration compared to having students research issues/areas. Therefore, it is unlikely that more teachers would ask this of their students.

In order to gain an insight into the ethos of each school in relation to integration, school management representatives were asked if school management encourages teachers to integrate ICT into their teaching practices. This would help to provide an indication as to the level of importance school management generally attach to ICT in teaching. The results are shown in the chart below.

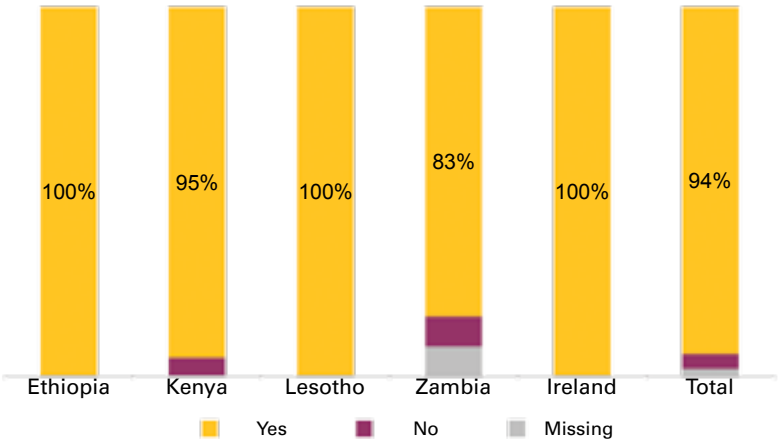


Chart 20: Does school management encourage teachers to integrate ICT into their teaching practices?

The results show that an overwhelming majority of school management representatives responded in the affirmative. While this is initially encouraging, the results should be taken with a pinch of salt. It is highly likely that, in relation to this question, school management representatives would report what they think Camara representatives would like to hear but also like to create a more positive image of the progressiveness of their school. More in-depth research would need to be conducted to gain more insight into the ethos of different schools and the manner in which school management engages with teachers. This points out one of the shortcomings of using questionnaires solely.

21ST CENTURY SKILLS

Contrary to the approach taken in African hubs, Camara Ireland centres its approach on fostering the four learning and innovation skills that form a key part of the 21st century skills: critical thinking, communication, collaboration, and creativity. It is important to assess in some way the degree to which teachers who received Camara training are integrating the imparting of these skills into their teaching practices. Therefore, teachers in Irish schools were asked if they integrate any or all of these four skills into their lesson plans. All five of the Irish based teachers who took part in the survey responded in the affirmative.

Following up this question, Irish based teachers were asked if they use ICT as a tool to help impart these skills. Again, all five of the respondents answered in the affirmative. These results are encouraging but it is difficult to ascertain the extent to which the Camara training had an impact on the teachers' ability to impart these skills and the learning outcomes amongst the students. Again, more research would be needed to find this out.

2014 Hub Audit

METHODOLOGY

The hub audit is an annual exercise conducted in conjunction with our M&E activity. It is a way for Camara Education to evaluate the performance of each hub against key performance indicators. As always, some of the criteria are not applicable for some of the hubs. This will be the last year that the hub audit in its current format will be utilised. We are currently developing a new format that aims to evaluate hub performance but also hub structural integrity, in terms of what criteria hubs need to be viable entities. The aim is to create an audit procedure that is wholly objective.

RESULTS

Camara Ethiopia continued its strong performances of recent years to become the most effective hub of 2014 with a score of 77%. In 2013 and 2012 Camara Ethiopia came third with scores of 77% and 75% respectively. It is a testament to the hard work of the team in Ethiopia that they were the best performing hub in the Camara network in 2014. Just as in 2013, Camara Ethiopia managed to exceed its PCs dispatched and teachers trained targets. It was the only hub to do this in 2014. As in 2012 and 2013, Camara Ireland came second with a score of 75%. Camara Kenya slipped from first in 2013 to third in 2014 with a score of 69%. This represents a regression of 16%. The most improved hub is Tanzania with a score of 65% compared to 48% for 2013. This is very encouraging for the team in Tanzania. With a new, large-scale donor funded project beginning in 2015, a strong performance is expected next year. Lesotho was the lowest scoring hub in 2014 which represented a regression of 18%.

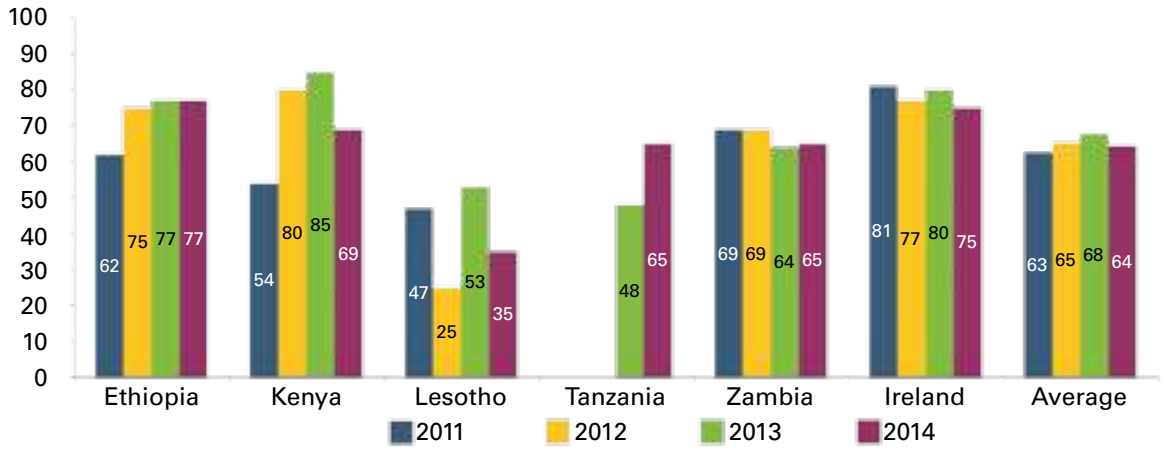
Category	Question	Max score	Kenya	Zambia	Lesotho	Tanzania	Ethiopia	Haiti	Irealnd
Training	Teachers trained versus target	15	11	7	3	12	15	15	15
	Teachers per PC dispatched(target 1:4)	5	4	5	3	3	3	1	3
	Training course quality	10	7	7	4	4	4	7	8
	Total teachers trained versus average (386)	5	5	3	2	5	5	3	5
Technology	PCs dispatched versus target	6	6	4	2	4	6	3	5
	% of PCs received that were dispatched	5	3	5	n/a	5	5	2	
	% of PCs still functioning from M&E	5	3	3	0	5	4	n/a	4
	% of PCs dispatched with €5 held for recycling	3	2	2	1	3	0	2	0
	PCs recycled from schools	2	2	1	0	1	0		
	Total PCs dispatched versus average (962)	4	4	4	1	4	4	1	4
Management & Governance	Number of schools visited for M&E versus total	5	4	4	2	5	4	0	2
	Quality of data back from hub	5	2	2	2	2	4	2	4
	Timeliness and quality of weekly/monthly report	3	1	1	1	1	3	2	2
	Timeliness and quality of financial report	3	1	1	1	1	5	1	1
	Hub profitabilty	5	3	3	2	1	1	1	5
	Financial sustainability	5	3	3	2	2	2	2	5
	External audit	3	1	0	0	0	3	n/a	n/a
	Staffing versus plans	2	2	2	3	2	3	2	2
	Communication with CEL	3	2	2	2	2	3	n/a	
	Minuted Board meetings	3	2	5	1	2		n/a	
	Adherence to tax and legal obligations	3	1	1	1	1	1	n/a	n/a
Total Possible Score		**100**	**100**	**100**	**95**	**100**	**97**	**81**	**81**
Actual Score			69	65	33	65	75	44	61
% Performance			69	65	35	65	77	55	75

Not applicable

Evaluations	Percent
A. Excellent Performance - innovative model for HQ and the other Hubs	100%
B. Good Performance - achieves most things but room to improve	75%
C. Average Performance - substantial performance gaps	50%
D. Poor Performance - achieving very little in the area	25%
E. No Performance - has done virtually nothing in the area	0%

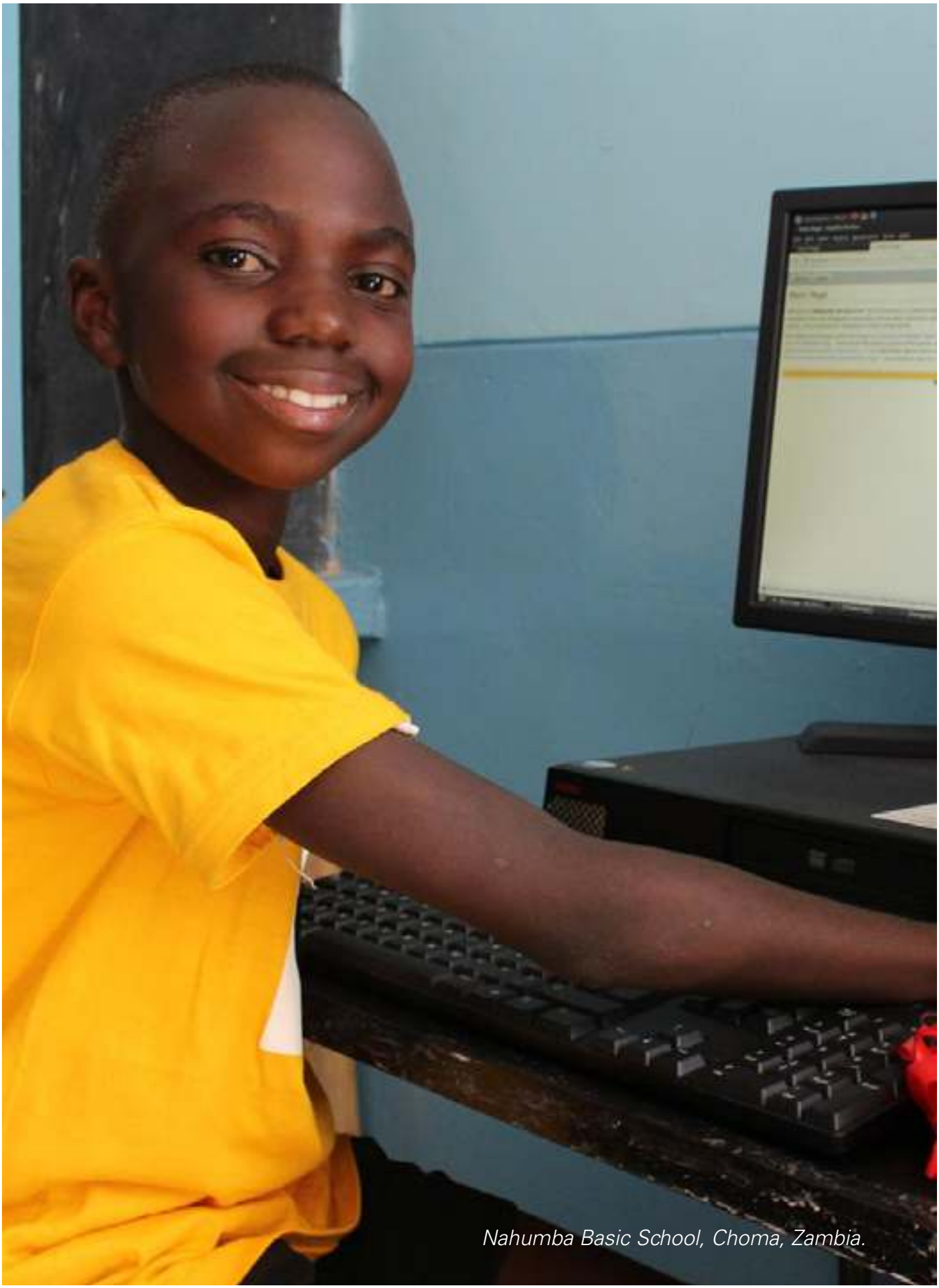
Components	Proportion
Technology Enhanced Learning	35%
Hardware Delivery and Support	25%
Management and Governance	40%

As noted above, this will be the final year this particular format is used for the hub audit. Therefore, it is an opportune time to examine the results trends of the different hubs. The chart below tracks the results of the hubs from 2011, when this format was first used, to 2014. Haiti is excluded because 2014 is the first year it has been audited using this format, therefore there is no trend to analyse.



The chart shows that most hubs generally scored consistently over the years. The exceptions to this are Lesotho, whose performance varied from year to year, and Ethiopia and Kenya, which showed significant improvements from 2011 to 2012. Kenya also showed a regression from 2013 to 2014. Zambia and Ireland showed consistent results from year to year.

Contact Us



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Many thanks to all our staff and volunteers who contributed photos for the report.

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Camara is a registered charity in Ireland (CHY 16922), the UK (1135540), the USA (EIN: 38-3804011), Ethiopia (1923), Tanzania (00NGO/00006076) and Lesotho (Schoolnet, Reg No. 2008/221).