

The Turing Trust Annual Report 2016

Charity registrations

England and Wales: 1156687

Scotland: SCO046150

<http://turingtrust.co.uk/>



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The Turing Trust Annual Report 2016

The Turing Trust aims to promote education with re-used information technology equipment to bring essential learning resources to rural schools and communities in sub-Saharan Africa.

The Turing Trust was set up in 2009 in honour of Alan Turing by his closest family. Today we honour his remarkable legacy by providing quality IT resources and training to schools in sub-Saharan Africa. Our operations in the UK, based in our Edinburgh workshop, provide valuable training & volunteering opportunities.

Our work to date has improved education in over 120 community-based schools throughout rural areas of Ghana, Kenya and Malawi. We have sent over 2500 computers to Ghana and Malawi through our computer reuse scheme in the UK.

Structure

Trustees:

Dermot Turing (Founder)
Andrew Clark
James Turing (Founder)
Philip McAllister

Advisory board:

Nicola Turing
John Turing
Brett Simpson
Omaima Hatem
Jonathan Burns
Cliff Robertson
Jim Wilson

The Turing Trust is overseen by the above board of four trustees and seven advisors who met as a whole group four times in 2016 with numerous smaller meetings amongst available members.

New trustees appointed in 2016 include Philip McAllister, who replaced Conor Scott.

The Turing Trust continue to recruit volunteers to work in our Edinburgh facility. All volunteers are trained in wiping computers. In 2016 we had approximately eight volunteers per week and a total of 33 trainees completed all modules of our training course and another 100+ volunteers helping with smaller ad hoc activities. We have 15 more volunteers working across the UK and internationally to help with fundraising, communications, administration, and the development of our e-library.

2016 Aims In Review

The Turing Trust had three main aims for 2016: to bring at least 1,000 more computers to Africa; to ensure sustainability; and to promote effective education in rural African communities.

2016 Facts & Figures

Computers:

Our first shipment to Malawi - 592 computers sent to Malawi
(a further 400 sent to Ghana in January 2017)

Sponsorship:

17 students sponsored in Ghana

School development:

Development of our workshop in Kumasi
Appointment of IT technicians in Ghana & Malawi
Installations of PCs in over 30 classrooms in Ghana

IT training in Ghana:

3 advanced IT trainings for 67 IT teachers and Centre Managers
2 trainings for practical lessons for 30 teachers
4 days of dedicated training for 26 IT teachers in the Northern Ghana

Corporate Sponsorship:

Continuing major partnerships with Expert Agent, The University of Edinburgh and Reusing IT
New partnerships established with British Computer Society, Barclays Technology Centre, Redbooth, EasyGenerator, Wistia, SkyScanner, BuroHappold, Turing Festival, LITE Conference, EduTech
Donations of IT equipment from many other businesses and educational establishments

Monitoring and evaluation:

Reviews conducted in 13 Ghanaian Schools (9 ICCES and 4 Primary / Junior High Schools), 3 Kenyan Schools and through our entire UK operations.

Development of the [SolarBerry](#):

Completion of designs including substantial support from a major UK engineering company
Shipping of all necessary parts to Malawi

Achievements & Performance Overview

The greatest achievement of 2016 was beginning in earnest our IT programme to Malawi. This was enabled by securing a £60,000 grant from the Scottish Government's International Development Small Grants programme that will run from 2016-2019. This project has seen us send our first shipment of nearly 600 PCs to Malawi and will shortly see our first [SolarBerry](#) (solar powered IT lab using Raspberry Pi computers) installed in an off-grid community. From this grant the Turing Trust received £30,000 in 2016, 36% of our annual income, which has resulted in an increase of 122% in fundraising compared to 2015.

The number of computers donated in 2016 has continued to increase (1,702 PCs - an increase of 54% compared to 2015). This is largely due to over 1,170 PCs being donated by ReusingIT. At times this has made the workshop spaces cramped and limited the rate of our volunteer refurbishment operations. Conversely, the number of computers sent to Africa has decreased to only 592 computers, a decrease of 47% from 2015. This was largely due to awkward timing of shipments; in October 2015 703 computers were sent to Ghana, then in January 2017, 402 computers were sent to Ghana. This therefore accounts for the appearance of relatively fewer computers being sent to Africa in 2016.

Despite shipping only one 20' container in 2016, this has proved extremely expensive due to Malawi's landlocked nature. This has raised our price per PC from an average of £8.22 to Ghana in 2015, to £13.87 per PC to Malawi in 2016. Therefore, fundraising will be increasingly important in 2017 to meet the higher shipping costs of working in the significantly poorer Malawi where we have identified the greatest need. In Ghana we completed a thorough monitoring and evaluation programme of the Turing Trust's impact on the 61 ICCES schools. This showed that whilst the installation of computer laboratories had taken place at a fantastic rate, there was a real need for improved teacher training in the use of electronic resources, maintenance and repair, and integration of IT-assisted learning into the general curriculum. As many IT instructors in the ICCES are National Service personnel on a placement of only 10 months, there is no continuity and teachers must be trained every year. Moreover, the process of reporting damaged computers showed significant delays as well as many repairs required for computers that were inadequately maintained. Our work in setting up computer laboratories in the ICCES has encouraged the government, through the Ghana Investment Fund for Electronic Communications (GIFEC), to supply the ICCES that already had a functional computer laboratory with further computers. To date, GIFEC has supplied over 300 high-spec PCs to various ICCES meaning that now all ICCES with adequate building infrastructure have a set of 20 PCs – something that without the Turing Trust would have been difficult to achieve. However, it should be noted that these resources came without any training or support for installation and maintenance. Therefore, this will be the most crucial element of the Turing Trust's support for ICCES in the coming years until sufficient organisational knowledge is generated.

We have continued to build our Corporate Social Responsibility (CSR) relationships, most notably with Expert Agent, our largest donor, who contributed 88% of our CSR funds in 2016. The University of Edinburgh have continued to support us in-kind, most notably through the donated premises at High School Yards from where we run our refurbishment operation. Reusing IT have provided 69% of our donated computers this year, as

detailed earlier, and have supported us with affordable supplies of accessories and ongoing mentoring. The Turing Trust has added two permanent part-time staff members and has also recruited two additional part-time staff members for shorter projects. We have now crossed a pivotal mark whereby the charity has grown beyond the capabilities of a volunteer-only operation and therefore it is critical that in 2017 we are able to retain our staff, provide continuity and ensure a stable funding base.

We have completed thorough monitoring and evaluation of our projects in Ghana and Kenya which have shown that there is plenty of work that needs to be done for the PCs that are now installed in schools to be of as much benefit as possible. Therefore, we need to ensure an adequate portion of our efforts are spent on improving the skills of teachers to effectively use the software and hardware we are providing.

2016 Objectives In Review

Aim 1- Bring at least 1,500 more computers to Africa.

Objectives-

- Ensure all new donations are processed using the Turing Track system and ensure its efficiency in increasing donations with email and data analytics.
 - We have encountered several challenges with the Turing Track system, most notably its dependence on a single volunteer who designed the system who was then unavailable to fix bugs and to continue to develop the system to meet requirements. We initially had difficulty finding a volunteer with the relevant skills to be able to work on this system, but are pleased to have found a volunteer who is a skilled programmer and who has been working hard to improve Turing track over the last few months. We hope this system will be in use for all individual donations of all PCs by March 2017 and for all bulk donations by June 2017.
- Send our first large shipment of IT equipment to our partners in Malawi.
 - We have achieved this target thanks to the support of the Scottish Government grant.
- Support the increase of in-country revenue streams for partner organisations in Africa to ensure all supported partners are well functioning and financially sustainable.
 - We have worked on this objective with great success in both Kenya and Malawi where our partners have a variety of income streams. Ghana has proven to be the most challenging situation, partially due to the nature of ICCES and their inability to generate revenues from impoverished areas of Ghana where they are located. By broadening our reach in Ghana beyond ICCES (supporting schools with IT installations and services in urban areas that have larger budgets) we are aiming to subsidise our projects with ICCES in 2017.
- Continue our positive relationship with the British High Commission in Ghana to ensure smooth shipping transitions for the foreseeable future.

- Our relationship with the British High Commission (BHC) has been assured through critical meetings where members of the Turing family met the BHC Deputy Head of Mission in person in Accra, Ghana. This has helped to ensure that this positive relationship will continue to enable smooth shipping in 2017.

Aim 2- Develop our partner relationships with a particular focus on Corporate Social Responsibility (CSR)

Partners

Objectives-

- Establish a clear call to action online for new CSR partners.
 - We have developed our CSR brochure that has been used hundreds of times and helped to bring in numerous IT donations. Further work is needed to secure new CSR relationships that will bring in the sustainable funding this call to action was designed to achieve.
- Keep current partnerships ongoing through effective communication and mutual benefits.
 - We have continued all of our CSR relationships from 2015 successfully.
- Begin at least 2 new partnerships, at least one of which is financial.
 - We have begun successful partnerships with several corporates as detailed earlier, that have brought numerous in-kind benefits. However, we are still looking to secure a new financial partnership.

Aim 3- Establish The Turing Trust officially in Kenya and Malawi, based on our successes in Ghana.

Objectives-

- Send our first large shipment of IT equipment to our partners in Malawi.
 - We achieved this shipment to Malawi in September and the 20' container was received in Mzuzu in December 2016, with the first computers being distributed to 8 schools before Christmas.
- Build the first Turing Trust [SolarBerry](#) in Kenya
 - Through the Scottish Government grant this location was changed to Malawi, and will be constructed in early 2017 now that all the required components have been received in Malawi.
- Introduce our e-learning system in both Kenya and Malawi through focused IT teacher training.
 - We have achieved this objective in Kenya and are continuing to develop the system based on feedback received.
 - In Malawi the first IT installations and trainings on the e-learning system will occur in early 2017 in coordination with the arrival of the shipment in December 2016.

Financial Review

Our in-kind donations (computer equipment donated) valued at £54,758.00 and our monetary funds totalled £85,101.61 including all restricted and unrestricted funds.

Please note that the value placed on in-kind donations (mostly donated IT equipment) is solely for the trustee's valuation. It is set at an amount that represents the value of benefit received by our partner schools in Africa, essentially the costs they would have incurred were they to seek similar products and services from local markets. Donated services are valued at the amount that the Charity would have paid for the service if it had been obliged to.

At the end of the year the Turing Trust held the following liabilities:

£10,000 owed to CYD for the costs of the in country development of the Malawi project.

<u>Inflow</u>	<u>Amount</u>	<u>Notes</u>	<u>2015 Comparison</u>
Corporate Sponsorship	£7,954.04	Vast majority of support received from Expert Agent, other supporters include TuringEmail, Sawston College, 7Stars, Barclays, Apply Property,	£16,034.18
Sales	£15,129.05	We have intensely focused on this in 2016 and subsequently nearly tripled our income from sales of donated materials.	£5,613.62
Fundraising	£585.26	We shifted focus from donations to sales, and did not run a major fundraising campaign in 2016, hence the drastic decreasing in income from these events.	£5,046.75
Grants	£42,406.18	Largely thanks to the success of our Malawian project supported by the Scottish Government's Small Grants programme (£30,000 in 2016) we have increased income from grants by over 800% from 2015.	£5,113.35
Individual Donations	£16,453.64	The significant increase in individual donations, over 300%, was thanks to one donor who provided nearly £10,000.	£4,314.25
Gift Aid	£1,989.36	This increase was largely due to a backlog in collecting Gift Aid from 2014, hence nearly double 2015's figures.	£941.87
Easyfundraising	£584.08	Thanks to the support of University of Edinburgh adopting EasySearch for the Turing Trust, these incomes have nearly doubled from last year. UoE adopted Easysearch in summer 2015.	£343.58
Total Cash Income	£85,101.61	2016 was a great success in more than doubling cash incomes - although the influence of the Scottish Government Grant and one individual donor had a huge influence on this.	£37,406.60
In-Kind donations	£40,914	Significant donors include: ReusingIT, Buro Happold, SkyScanner, University of Edinburgh, Re-Tek, Barclays, 7Stars, St Peters School	

Outflow	Amount	Notes	2015
UK Staff	£13,686.27	A large increase due to hiring two-part time staff in 2016.	£6,630.00
Shipping	£7,554.77	x1 20ft container to Malawi - 592 PCs. Malawi is a significantly more expensive shipping location than Ghana, largely due to Malawi being landlocked.	£8,240.92
Computer Repairs in Edinburgh	£6,291.20	A large increase in repair costs due to buying the necessary parts to send complete PC units (including mice, keyboards, leads) and adding many hard drives for PCs donated without.	£2,563.58
Computer Repairs in Ghana	£4,643.02	A large increase due to hiring a full-time staff member in Ghana to carry out maintenance visits across all our partner schools in Ghana.	£351.93
Admin	£4,524.53	A significant increase due to establishment of our premises in central Edinburgh - covering the delayed costs of 2015 as well.	£374.48
Fundraising	£415.98	Costs of leaflets and wristbands etc.	£471.42
Student Sponsorship	£1,020.00	A slight decrease as we shift focus away from sponsoring students that has proven to be a distraction from our core IT related objectives.	£1,203.46
Monitoring & Evaluation	£7,709.48	Nearly double spent in 2016 on M&E due to an extensive study of all of our African operations inc. Ghana, Malawi, Kenya. Crucial lessons focused around maintenance and the need for teacher training.	£3,036.10
Workshops	£2,250.90	Relatively fewer workshops were held in 2016, subsequently reducing expenditure, primarily due to lack of funds available for this specific purpose.	£5,100.30
Building Computer Labs	£716.36	This significantly decreased as we followed a strategic decision to move away from expenditure on construction where we saw relatively small impact per £.	£3,587.25
Educational Software Development	£245.23	A massive reduction in expenditure on this element as we carried out testing of the software developed in 2015.	£8,845.90
New Projects	£0	Having established our base operations in Malawi and Kenya in 2015, expenditure has subsequently been allocated to specific countries and projects in 2016.	£7,786.19
SolarBerry	£4,435.51	The majority of equipment, and technical design for the	£0.00

		SolarBerry was sourced with these funds.	
Malawian Developments	£0	Whilst there has been considerable spending in Malawi to date, our partner CYD has covered these costs expecting payments to be made from the UK in the order of £10,000 expected in early 2017.	£0.00
Social Enterprise Sales	£4,205.45	In creating gross sales of £15,129.05 there were associated costs of £4,205.45 - representing a profit of £10,693.54, a fundraising efficiency of 71%.	£0.00
Kenyan Developments	£1,000.00	This spending was for one particular project in Nyamira County that was funded through a restricted grant. There have been several other smaller projects with schools with minimal costs included within the monitoring and evaluation expenditure.	£0.00
Total Cash Expenditure	£58,698.71	Overall surplus from 2016, largely due to the Malawian expenditures anticipated in early 2017, as this is when payments are required by CYD our partner.	£48,291.53

2017 Aims & Objectives

Aim 1- Continue to install computers in African classrooms in a sustainable manner that supports a holistic learning approach.

Objectives-

- To install 1,500 computers in classrooms within the year through our projects primarily in Malawi and Ghana.
- Ensure that all new donations are processed using the Turing Track system (both in the UK and Africa) and ensure its efficiency in increasing donations with email and data analytics, to ensure adequate stock control.
- Meet the requirements in Ghana to upkeep all computer labs (including those with GIFEC donations, none of which included a maintenance or training plan). This will include training staff in maintenance procedures and teaching methodologies to create an institutional knowledge base. This is a substantial undertaking that will be supported by installing new computer labs in (comparatively wealthier) Ghanaian schools outside of ICCES to create a sustainable revenue stream in Ghana.
- Support the increase of in-country revenue streams for partner organisations in Africa to ensure all supported partners are well functioning and financially sustainable. To do this we will start pilot projects for sustainable revenue generation at individual computer labs in Ghana through internet cafés and at the [SolarBerry](#) in Malawi.
- To complete our first [SolarBerry](#) in Malawi and test out the system, including the financial sustainability of the model with regard to revenue generation and cost effectiveness for the number of beneficiaries impacted.
- Create a regional co-ordinator scheme for monitoring, evaluation and training to ensure the upkeep of installed IT resources and adequate training of teachers is provided.
- Meet the targets of the Scottish Government grant for our Malawian project – shipment of 1000 PCs to Malawi in 2017.
- Continue to develop e-learning resources that can be integrated with a learning management system to enable robust monitoring and evaluation in all partner countries. Moreover, supporting a methodological shift so that ITs are used to support all taught subjects, not just digital literacy.
- To continue expanding the number of schools using our e-learning resources in Kenya and focus on software development in Kenya.
- Run a national IT competition in Ghana throughout all of our partner schools to encourage students to develop their skills and also enable dissemination of offline e-library techniques to all schools.
- Continue our positive relationship with the British High Commission in Ghana to ensure smooth shipping transitions for the foreseeable future.

Aim 2- Develop our partner relationships with a particular focus on Corporate Social Responsibility Partners to create sustainable funding streams that are critical to continuing and improving our operations

Objectives-

- Develop our CSR partner offerings, with a focus on securing financial support.
- Keep current partnerships ongoing through effective communication and mutual benefits.

Aim 3- Build our UK operations to enhance our volunteering programme and increase our ability to process donations efficiently

Objectives-

- Produce modular sets of volunteer training packages to enable monitoring and evaluation of volunteer outcomes.
- Increase volunteer retention through improved and more regular communications including personalised follow up for volunteer skill development.
- Appoint an additional full-time permanent member of staff to ensure our Edinburgh hub is operational 6 days a week.

Aim 4 - Develop our marketing strategy and materials to maximise donations in a sustainable manner

Objectives-

- Work with our supporters to improve the website and promotional materials.
- Organise events (such as Turing Talks) aiming to establish them as annual events.

Aim 5 - Our BHAG (Big Hairy Audacious Goal)

To have provided 50 million hours of IT supported student learning in African classrooms by 2020!