# 2016 ANNUAL REPORT



*Building Strategic Partnerships for Sustainability*

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The present document, *'GESCI Annual Report 2016: Building strategic partnerships for sustainability'* is GESCI's  2016 Annual Report as presented to the Swedish International Development Agency (Sida)

# GESCI 2016 Annual Report

*Building strategic partnerships for sustainability*

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# Acronyms and Abbreviations

| | |
|---|---|
| ADEA | Association for the Development of Education in Africa |
| ADSI | African Digital Schools Initiative |
| AKE | African Knowledge Exchange |
| ALICT | Africa Leadership in ICT and Knowledge Society Development |
| AUC | African Union Commission |
| CEO | Chief Executive Officer |
| CESA | Continental Education Strategy for Africa |
| CoPs | Communities of Practice |
| DCM | Digital Creative Media |
| DSD | Digital Schools of Distinction |
| ECOWAS | Economic Community of West African States |
| ESMT | Ecole supérieure multinationale des télécommunications |
| EWG | Expert Working Group |
| FAWE | Forum of African Women Educationists |
| GESCI | Global e-Schools and Communities Initiative |
| HR | Human Resources |
| ICT | Information and Communication Technology |
| ICT-CFT | Information and Communication Technology Competency Framework for Teachers |
| ICT4E | Information and Communication Technology for Education |
| IGAD | Intergovernmental Authority on Development |
| ISESCO | Islamic Educational, Scientific and Cultural Organization |
| KISE | Kenya Institute of Special Education |
| KMS | Knowledge Management System |
| KS | Knowledge Society |
| LATIC | Leadership africain pour les TOC et le développement de la société du savoir |
| LL | Living Lab |
| LN4SD | Leadership Network for Sustainable Development |
| MoEST | Ministry of Education, Science and Technology |
| MCF | MasterCard Foundation |
| MEL | Monitoring, Evaluation and Learning |
| MoU | Memorandum of Understanding |
| NGO | Non-Governmental Organization |
| OER | Open Education Resources |
| PORALG | President's Office Regional Administration and Local Government |
| RAF | Results Assessment Framework |
| ROTA | Reach Out To Asia |
| SBCs | School-Based Coordinators |
| SD | Sustainable Development |
| SDGs | Sustainable Development Goals |
| Sida | Swedish International Development Agency |
| STEM | Science, Technology, English and Mathematics |
| TPACK | Technological, Pedagogical and Content Knowledge |
| TPD | Teacher Professional Development |
| TVSD | Technical and Vocational Skills Development |
| USAID | United States Agency for International Development |

## BOX 1: Highlights 2016

• New strategic framework for GESCI Strategy 2017 – 2020 focusing on Sustainable Development Goals (SDGs)

• Co-organising partner with ADEA and other global partners for the 2nd Ministerial Forum on ICT in Education in June 2016 IN Abidjan with high visibility and opportunity for advocacy and partnership building

• Showcasing of ADSI at key international for a, e.g. Ministerial Forum on ICT in Education in Abidjan in June 2016

• Well-publicised and successful national launch of ADSI in Kenya in November 2016 in conjunction with the MoEST ans the African Union

• The African Union's Continental Education Strategy for Africa (CESA) Cluster for ICT in Education meeting in November 2016 in Nairobi lauding ADSI as a chosen model for coherent ICT integration in STEM teaching and learning in secondary education.

• Signing of memorandum of Understanding (MOU) with the Cote d'Ivoire Ministry of Education for the implementation of the African Digital Schools Initiative (ADSI)

• Signing of MOUs with the Forum for African Women In Education (FAWE) and Millennium @Edu to work together in areas of mutual interest (e.g. women and girls' education) and working on a joint proposal for women and leadership

• Appointed co-chair of the African Union Commission (AUC) Continental Education Strategy for Africa (CESA) 2016-2025 cluster for ICT in Education

• Significant input to and showcasing of the AKE Creative Media Venture at the AUC's Banjul +10 African Youth Charter commemoration in the Gambia in May 2016

• Showcasing of ALICT Programme and knowledge tools at the African Innovation Summit 2016 organised by "AfricanBrains" in September in Nairobi. The session was jointly facilitated by GESCI and UNESCO

• Launch of the re-conceptualised continent-wide Leadership Network for Sustainable Development (LN4SD) in Abidjan in June 2016 as a major vehicle for sustaining and further building the leadership skills of the ALICT/LATIC public sector leaders(http://www.leadership4sd.org/ ).

• GESCI invited to joint the steering committee of the mEducation Alliance, Washington – a global USAID-led initiative which supports the application of mobile technologies in teaching and learning in the developing world

• Leading sessions, presenting and showcasing GESCI's work at the mEducation Alliance International Symposium in October 2016

• Developing relationships with ROTA and ISESCI in exploring partnerships for programme/project initiatives for refugees and displaces young people in camps in Lebanon, Jordan, Turkey.

**Part 1**

# Introduction and Overview

In 2016 GESCI concluded the final phase of its strategic period 2013 – 2016 and continued the strengthening and consolidation of its models, strategies and programmes. During 2016 GESCI specifically focused on building strategic partnerships to ensure sustainability, to extend its reach and impact and to become more influential in agenda setting in pursuit of its vision, mission and organisational objectives.

In this regard, we invested significant effort and resources in building and nurturing relationships with like-minded and strategic partners. It was at times slow and time consuming, but we were able to not only initiate, but also to successfully conclude several substantive partnerships. In doing so GESCI gained greater visibility and credibility as a reliable partner with substantive models and programmes, and who has the ability to work at both the strategic agenda setting level and the operational and implementation level - something that gives GESCI a particular edge as our policy and strategic advice is authentic and rooted in the realities of the contexts we work in but also informed by emerging trends.

In addition to the partnerships formed in 2015 with ADEA, ISESCO, ESMT, the University of Mauritius and The MasterCard Foundation, we successfully forged partnerships with:

• The Ministry of National Education in Cote d'Ivoire for the implementation of the ADSI Digital Schools Initiative (ADSI)

• The Forum for African Women Educationists (FAWE) for joint work to improve opportunities for women and girls particularly in the STEM fields and in particular to improve the  competencies and skills of women leaders to become more influential and confident in leading policy development and reforms in the public sector.

• The Millennium@Edu Foundation to cooperate in the development of  Sustainable Education Projects and in organising events related to sustainable education

• ADEA appointing GESCI as the technical lead of ADEA ICT Task Force and ADEA's official ICT in education advisor

• AUC appointing GESCI as co-chair for the CESA 2016-2025 cluster of ICT in Education

• mEducation Alliance - USAID invited GESCI to become a member of the Steering Committee of mEducation Alliance.

• St Mary's University, Addis Ababa, Ethiopia to offer GESCI's graduate diploma in ICT and Knowledge Society development in Africa and a Master's top-up to ALICT graduates

• University of Nairobi, Kenya to collaborate on research on relation to GESCI's Digital Schools of Distinction programme.

In addition we strengthened our partnership with UNESCO East Africa Regional Office and UNESCO IICBA through joint and commissioned work on teacher professional development. We expanded our relationship with the AUC from the Infrastructure Development Department to the Department of Human Resource, Science and Technology and started to build relationships with ECOWAS, UNICEF West Africa Region and with Microsoft, INTEL, JP-IK and Orange.

Agreements on these will be further pursued and finalised in 2017 [See Results Assessment Framework  Outcome and Output indicators and targets for 2016 – Table 4 : Summary of programme contributions to RAF result areas and Annex 1: Summary of achievements of GESCI RAF outcome and output indicators and targets - 2016].

We greatly appreciate the support from our donors – Sida for essential core support which enables us to provide essential supports, expertise and administrative services to programme and project delivery.  We highly value the support from Ministry for Foreign Affairs of Finland for programme funding for the ALICT and AKE programmes, and the MasterCard Foundation (MCF) for programme funding for ADSI.  Their generous financial support, advice and encouragement enabled GESCI to operate, grow in capacity and to implement its programmes in an efficient and effective manner aimed at achieving stated outcomes and impacts.

The strategic use of core funding alongside programme funding, enables improved operational and programme impact and efficiencies for the achievement of GESCI's strategic organisational goal and the 8 intermediate outcomes captured in GESCI's Results Assessment Framework (RAF) for 2013-2016.

While Sida funding contributes to GESCI's overall achievement in all the intermediate outcomes, it is specifically focused on the following outputs:

• Strengthened GESCI functional departments

• Strong functional departments (HR, Finance, IT, Programme Management) supported by robust organisational strategies, plans, frameworks, policies and best practice models

• Strengthened GESCI internal capacity

• Highly- skilled, productive and innovative staff for greater efficiencies, impact and reach

• Research and knowledge products developed through programmes for knowledge creation, sharing and dissemination and to inform strategy, and innovation and enable re-purposing in different contexts

• Global advocacy and fostering of strategic partnerships for setting and/ or influencing continental, regional and national agendas in ICT4E, leadership development and TVSD for youth enterprise development.

## Strengthened functional departments

In 2016 GESCI continued to strengthen all its departments through the review and implementation of staff appraisals, improving HR and administrative systems, updating and implementing policies and procedures, reviewing planning, monitoring and reporting frameworks and templates for more robust programme implementation, and aligning all programme planning and reporting more closely to the 2013-2016 RAF outcomes.

During 2016 two Board meetings were held. Due to resignations and the need to maintain gender equity, the Board is in the process of increasing its membership and restoring gender balance. IN 2016 GESCI's staff compliment increased to 22 – 10 male and 12 female - members of staff. The increase was primarily due to the start-up of ADSI in the 4 Kenyan counties involving 80 secondary schools .

## Strengthened GESCI internal capacity

We successfully recruited, appointed and inducted nine new staff members for ADSI, viz. Programme Manager, Tanzania Country Project Manager, four Project Coordinator, Tanzania Country Project Manager, four Project Coordinators, a Project Accountant and a Communications Assistant.

We promoted a staff member to the position of Kenya Country Project Manager and together with the Ministry of Education in Cote d'Ivoire identified a suitable Country Project Manager. These new staff members strengthened GESCI capacity for project management and implementation, teacher professional development, communications and public relations, and online learning.

We established a *GESCI Tanzania office in the Ministry of Education, Science and Technology (MoEST) in Dar-es-Salaam and four county field offices in Kiambu, Narok, Nyamira and Taita Taveta counties in Kenya*.

To ensure that the new staff understand and subscribe to the GESCI strategy, vision, mission, core values and approaches, we conducted a team building exercise in August 2016. New staff benefitted from in-house staff training enabling them to become more confident, skilled, efficient and productive.

## Research and knowledge products

Core funding enabled GESCI to re-purpose and use the knowledge products in its programme and project design and in its advocacy work at regional and global levels. In 2016, we started to pilot the Knowledge Management System and strategy developed in 2015. We reviewed and revised some of the knowledge products produced in previous years for dissemination and advocacy at the 2nd Ministerial Forum for ICT in Education in Abidjan in June 2016.

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## Global advocacy and strategic partnerships

GESCI focused on strategic partnership building in 2016. We forged 10 new partnerships: two international (MIllenium@Edu, mEducation Alliance), three continental (AUC, FAWE, ADEA) and five national (MoE, Cote d'Ivoire; St Mary's University, Ethiopia; Kenya Education Management Institute; University of Nairobi; Kenya Institute of Special education [KISE] ).

We co-organised the 2 Ministerial Forum for ICT in Education which ADEA and other global and regional partners which increased our continental visibility and provided an excellent platform for advocacy for using technology to help address inequity, access and youth skills development for the underserved. We continued with the further development of the website to more dynamically position and promote the organisation as an expert knowledge organisation.

GESCI forged a relationship with the Reach Out To Asia (ROTA)/Qatar Foundation and has submitted a funding proposal to design and deliver an ICT-enabled teaching and learning programme for refugees.

# Part 2

# Programme Outcomes:

# Building a Knowledge Society for All

GESCI's programme activities are geared towards closing the digital divide through increasing the use and integration of digital technologies to realize higher levels of equality and inclusiveness – in particular the use of ICTs to support governments, communities and citizens for: (i) greater access to quality learning opportunities in education, whether formal, informal and technical; (ii) skills development, i.e. leadership skills in ICT4E for policy makers and TVSD skills for youth employment; (iii) leadership development for inclusive and sustainable development (See GESCI Strategy 2013-2016 and GESCI RAF 2013-2016).

In implementing its programmatic activities, GESCI's was guided by the strategic objectives spelled out in its 2013 2016  strategy and pertaining to four broad areas: (i) Leadership capacity development; (ii) Technical and vocational skills development (TVSD) reform; (iii) Teacher professional development (TPD); and (iv) Closing the digital divide. The strategic objectives are featured in Box 2 below.

## BOX 2:GESCI Strategic Objectives 2013-2016

### AREA 1. Leadership Capacity Development

• Engage in distributed leadership capacity development for coherent policy development and implementation.

• Work with leaders at every level of the education and training system – government, institutions, schools and communities – to equip them with new leadership skills required for the advancement of knowledge societies.

### AREA 2. Technical and Vocational Skills Development (TVSD) Reform

• Provide technical assistance and policy advice to Ministries of Higher Education on the upgrading of technical training and skills development institutions (both pedagogically and technologically) so that they might absorb greater numbers of unemployed youth and equip them with relevant technology-driven skills to gain employment.

### AREA 3. Teacher Professional Development (TPD)

• Provide technical assistance and policy advice to governments on the holistic integration of ICT in curricula (and especially in science, technology, English and maths) through enhanced teacher professional development, from basic ICT skill acquisition to ICT immersion in the classroom; whole school leadership and school ICT policy supports; content development strategies and equipment configurations.

### AREA 4. Closing the Digital Divide

• Advocate for the equalisation of access to a quality education for the rural and urban poor. Through technical assistance programmes GESCI, with the support of governments, will continue to create low-cost ICT4E educational models that widen access to education, and can be delivered at scale by governments.

*GESCI CEO Jerome Morrissey, ALICT Programme Manager Senthil Kumar and ALICT alumni During Handover of DCU Certificates in Addis Ababa , Ethiopia*

# Building the capacities of leaders

## African Leadership in ICT (ALICT) Programme

The year 2016 was the final year for Phase 2 of the ALICT programme and focused on the sustainability dimensions of the programme: comprehensive revamp of the course content modules; upgrading the learning platform; building sustainable course delivery through the wider access model; providing final opportunity for the participants who haven't previously completed the course; launching and bringing together all Alumni under the Leadership Network for Sustainable Development (LN4SD); Impact Evaluation of the programme; advocacy and communication and building and implementing the Knowledge Management System (KMS).

Our request and proposal for a non-cost- extension until 30 June 2017 was approved by the Ministry of Foreign Affairs, Finland (MFAF).

## BOX 3: ALICT 2016-Major Highlights

• The Impact Assessment Study which captured the impact, experiences, and challenges of the course and made recommendations on strengthening future offerings. Overall at the personal (micro) level it was found that the "ALICT-LATIC course has had profound and demonstrated impacts and effects on participants' attitudes, knowledge, skills, and behaviour, changing participants' understandings, outlooks and general ways of working." It also showed that the course had achieved its objectives "in terms of developing appreciation of key elements of knowledge societies and building their capacities to be agents of change in their fields." Participants reported evidence of achieving change at the organisational (meso) level by creating new ways of working and new thinking, whilst those who have more decision-making power or who are in top positions have been better able to achieve change and create an impact at the macro level (national and regional levels). The pertinent findings and conclusions will be appropriately packaged and used for advocacy and fundraising purposes.

• The re-conceptualised Leadership Network for Sustainable Development (LN4SD) was launched at the 2nd Ministerial ICT in Education Forum in Abidjan in June 2016 as a major vehicle for sustaining and further building the skills of the ALICT/LATIC public sector leaders.

• Significant research and analysis of evaluations done across course cohorts from 2012 was done in preparation for the comprehensive course package enhancement to ensure an attractive state-of-the art course offering that would draw academic partners and further ensure sustainability of the course.

• Signing of partnership agreement with St. Mary's University in Ethiopia for the delivery of the course at Graduate Diploma and also with additional requirements at Master's degree level. A Memorandum of Understanding(MoU) was also signed with the Forum for African Women Educationalists (FAWE) for joint proposals for capacity building of African Women Leaders in the area of Gender and STEM.

• Considerable contribution to organising and convening of the 2nd Ministerial ICT in Education Forum in Abidjan in June 2016 which resulted in significant visibility, exposure and advocacy for the ALICT programme and its leadership capacity building model.

## Main Activities and Achievements

### SUMMARY OF MAIN ACTIVITIES AND ACHIEVEMENTS OF ALICT/LATIC

1) High quality learning resources disseminated through the wider access partnership model nationally, regionally and globally: An intensive review, update and enhancement of the course package for a high quality learning package and resources for delivery of the wider access model of ALICT and LATIC course was carried out.The state-of-the art content package will be shared with delivery partners in 2017 and will also attract more partners to deliver the wider access model to build a critical mass of Knowledge Society Leaders in African to contribute to Sustainable Development.

2) Upgraded Moodle learning platform integrated with learning management tools: The Moodle learning platform was upgraded to version 3 along with the integration of tools such as: Turnitin for plagiarism check, Fedena for Student Management Information System and Mahara and Zoom for virtual collaboration. With exposure to the advanced learning platform, the course participants can learn and adopt similar strategies for blended learning capacity building within their country and regional contexts.

3) Graduates significantly contribute to enhanced policies and strategies for KS advancement in their countries and Region: The Impact Assessment Study Report findings clearly reported the positive impact of the course on graduates across the 16 participating counties in terms of change of mindset, changed behaviour and practice at the workplace and heightened leadership capacity and skills enabling better informed policies, strategies and plans.

4) Trained leaders actively engaged in Communities of Practice (CoPs) and influencing the Knowledge Society Advancement agenda in Africa: A complete reconceptualisation and revamp of the Leadership Network was done based on member needs, emergent trends and latest developments. The Leadership Network for Sustainable Development (LN4SD) was launched at the 2nd Ministerial ICT in Education Forum in June 2016 in Abidjan, Cote d'Ivoire (http://www.leadership4sd.org/ ). The LN4SD is an important vehicle for sustainability and growth to build on the knowledge and skills acquired through the ALICT/LATIC course providing for continuous and peer learning of the Alumni supported by experts and partners.

5) Monitoring, Evaluation and Learning: The internal MEL quarterly reviews were used for course correction as required to manage and implement the programme effectively and efficiently. The Impact Assessment Study, conducted by independent consultants, concluded very positive results overall regarding e.g. attainment of objectives; increased skills and abilities; relevance to work and professional needs; relevance of content; contribution to career advancement/promotions. The report will be disseminated widely and shall be used by the donors, stakeholders and partners for advocacy of the Knowledge Society Development in Africa.

6) ALICT research and knowledge products developed had been consolidated and shared at the 2nd Ministerial Forum on ICT in Education and Training on 8th and 9th June 2016 at Abidjan. The knowledge products, services and key learnings emanating from   activities and the comprehensive state-of-the-art course package enhancement will be packaged and shared in key strategic forums for advocacy and promotion of ALICT course and for influencing the policy agendas related ICT, Education and STI to accelerate cohesive efforts for Knowledge Society Development in Africa.

7) ALICT KMS implemented, functional and contributing to knowledge building, storage   and sharing to position GESCI as knowledge organisation: The KMS piloted by ALICT programme to systematically organize, store and retrieve the ALICT phase 1 and 2 programme implementation and its comprehensive documentation.  The KMS pilot model will be leveraged to contribute to holistic Knowledge Management System in GESCI.

The total number of participants completing the ALICT programme Phases 1 and 2 is **497 across 16 African countries, 4 regions including officials from AUC and 2 language groups**. Table 1 and Figure 1 below respectively provide the total number and percentage respectively of participants per country.

## Table 1: Total number of participants capacitated in each country

## Figure 1: Percentage of  participants per country

| Overal graduates Cohort 1-5, Name of the country and number of participants | |
|---|---|
| Kenya | 74 |
| Mauritius | 46 |
| Uganda | 39 |
| Rwanda | 36 |
| Malawi | 39 |
| Tanzania | 35 |
| Zambia | 31 |
| Botswana | 30 |
| Morocco | 23 |
| Namibia | 23 |
| AUC | 24 |
| Ethiopia | 20 |
| Senegal | 22 |
| Ghana | 17 |
| South Africa | 16 |
| Mozambique | 13 |
| Cote d'Ivoire | 9 |
| MFA/DCU | 2 |
| **TOTAL** | 497 |
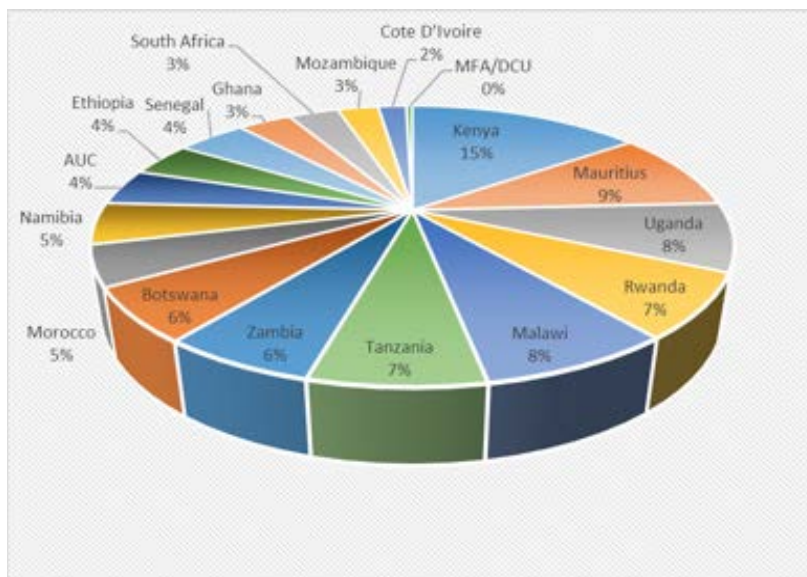
## Table 2: Total cohorts with the gender wise details

| Total participants By Gender for Cohort 1-5 | | |
|---|---|---|
| Cohorts | Female | Male |
| C1 | 24 | 59 |
| C2 | 41 | 89 |
| C3 | 72 | 151 |
| C4 | 18 | 33 |
| C5 | 2 | 8 |
| | 157 | 340 |

Across the five cohorts 32% of successful graduates are women leaders. We managed to maintain the target of training at least 30% of women across all cohorts - not withstanding recruitment difficulty associated with the smaller numbers of women working as mid -to -senior level government officials.

## Challenges, opportunities and lessons learned

● The content module enhancement process took longer than originally planned.  The initial advertisement did not result in a crop of consultants with the requite expertise and experience for the task, resulting in further advertisement and a consequent delay. Also considering the significance of the enhancement for sustainability, it exacted thorough review and analysis of existing modules, several rounds of discussions and feedback to achieve clarity and expanding the modules from 6 to 8.

● The course (both English and French) for non-completed participants was concluded in December 2016. We encountered a higher dropout percentage during this cohort, despite more support and other mitigating efforts. The lessons learned from this cohort as well as the solutions employed are particularly pertinent for future course offerings and will be used to strengthen the capacity building model. To retain the participants, the course delivery incorporated   webinar tools which worked out extremely well.  Hence these features have been included in the course delivery model for the future.

● Developing the wider access model partnerships was progressing slower than expected.The multi-stage bureaucratic process at the universities have delayed approval.  In addition, the potential partners were keen to consider the partnership with the enhanced course content modules together with the upgraded Moodle Learning platform which were still under development.

● The membership enrolment into the Leadership for Sustainable Development Network was progressing slower than expected.  Out of 497 Alumni, 206 of them had been enrolled into the network.  In 2017 the focus will be on bringing in the remaining 291 ALICT / LATIC Alumni into the Leadership Network.  The strategies include KS/SD key themes facilitated by expert bloggers/experts on KS/SD.  This would motivate and engage the Alumni to actively participate in the Community of Practice.

## Lessons learned

● In the 2nd chance cohort course delivery the integration of "ZOOM" webinar tool in online chats had significantly enhanced participant-tutor learning experiences and relationships resulting in deeper engagement from those who persevered.  The tool greatly facilitated participant active engagement in module activities but, it unfortunately did not translate into higher levels of assignment submission owing to what participants cited as work pressure. The webinar tool is now incorporated into all the revised modules together with other mechanisms to encourage timely submission of assignments.

● The Alumni expressed the need for opportunities for continued learning through peer learning, consistent sharing of key resources and knowledge products and technology tools. Hence, a comprehensive strategy was developed with monthly themes connecting with KS and Sustainable Development issues.

• While it was not possible to sign as many university partnerships for the wider access leadership capacity building model as planned for, the partnerships that were built are solid and robust and can lead not only to a continuation of the ALICT-LATIC course, but lead on to higher course offerings (e.g. Master's and Doctoral degrees in Leadership) and diversified and customised offerings which eventually may have greater impact than having many partnerships.

*GESCI CEO,Jerome Morrissey, Ministry of Education,Science and Technology,Kenya Rep John Opiyo, MasterCard Foundation Rep Ivy Mwai during the national launch of ADSI , November 11, 2016 Nairobi Kenya.*

# Building Digital Schools of Distinction

## African Digital Schools Initiative(ADSI)

The first year of implementation of the African Digital Schools Initiative (ADSI) began in 2016 with the focus of activities in Kenya. Kenya is at a more advanced stage of implementation and therefore provides the testing ground for programme blue prints, models, frameworks, approaches and templates for contextualisation and replication in the other two countries. Preparatory activities for implementation started in Tanzania and planning for Cote d'Ivoire has just begun. Impact and sustainability are the main ADSI drivers and inform all strategies and plans.

The main mechanisms for achieving impact are thorough and rigorous planning involving stakeholders, collaboration with partners and stakeholders and integrated and on-going monitoring adjustment and learning. We value building and nurturing of relationships at national (macro/Ministry), subnational (meso/county) and local (micro/school) levels as critical to leadership development for the transformation of education and programme sustainability going forward. Consequently, we invested considerable time, effort and financial resources in establishing and nurturing them across the three countries and will continue to so during the life of the programme to ensure sustainability. We also paid particular attention to women and girls and rural communities in the selection of counties, schools and STEM teachers in Kenya our commitment to improve the social conditions for such groups. Our planning for and initiating these processes in Tanzania and Cote d'Ivoire will be informed from our learnings in Kenya this regard.

- Showcasing of ADSI at key international for a, e.g. Ministerial Forum on ICT in Education in Abidjan in June 2016 and the CESA Cluster for ICT in Education meeting in Nairobi in November 2016.

- Well-publicised and successful national launch of ADSI in Kenya in November 2016 in conjunction with the MoEST following successful county launches in September and October 2016 (http://gesci.org/news-room/news/single/news/detail/News/african-digital-schools-
initiative-national-launch-in-nairobi-kenya/ ).

- The African Union's Continental Education Strategy for Africa (CESA) Cluster for ICT in Education meeting in November 2016 in Nairobi lauding ADSI, chosen as a model for coherent ICT integration in STEM teaching and learning in secondary education.

- Enlightening and successful partnership meeting with the MasterCard Foundation (MCF) Programme Manager in November 2016.

- Signing of Memorandum of Understanding (MoU) with Ministry of Education in Cote d'Ivoire in June 2016

- Successful initial engagement with the Tanzanian Ministries, Ministry of Education, Science and Technology (MoEST) and President's Office Regional Administration and Local Government (PORALG) and identification of key institutions for collaboration.

# Main Activities of ADSI in 2016

Willingness to collaborate and cooperation from partners (MoEs and associated agencies across all 3 countries and universities in Kenya) e.g. in data collection, digitisation and consolidation and national launch in Kenya; finalising MoU in Tanzania; and assigning of MOE official in Cote d'Ivoire as project manager enhanced development and implementation greatly.

The support from the newly established Expert Working Group (EWG) was excellent in the conceptualisation and collection of field data because the team we worked with had the right expertise in these areas. This team provided a good backup and added value to the GESCI Team.

Systematic relationship building and involvement in planning and implementation of key stakeholders at all levels guided our activities and contributed to positive outputs and results. The high attendance at the Training of Trainers (ToT) and school leader workshops is a clear indication of commitment and ownership and support at county levels. The placement of Project Coordinators in the respective counties closer to the schools they serve, made a significant impact on programme implementation in providing better understanding and more clarity on the part of the programme team regarding the realities on the ground.

Testing of frameworks, toolkits and modules presented opportunities to verify the relevance and clarity of the materials for school and classroom context – and also to provide a test run for the Project Coordinators to try out their facilitation skills.

The proactive and thoughtful advice from and prompt response to requests by the MasterCard Foundation (MCF) Programme Team in Toronto, Canada, facilitated our work.

- Establishment of Expert Working Groups (EWGs) drawn from key partner institutions in Kenya and joint conceptualization of frameworks and strategies at the national level and with the School Support Teams (SSTs) at the county level.

- Successful recruitment, induction and deployment of Kenya project team and Tanzania Project Manager, and establishment of project offices in four counties.

- Identification and selection of 80 schools and 800 STEM teachers in Kenya in close collaboration with Ministry of Education, Science and Technology  (MoEST) and county officials using the school selection toolkit and criteria.

- Successful selection and training of 79 School Based Coordinators (SBCs) in Kenya - a major step in preparation for the training of teachers in Year 2.

- Sensitisation and orientation of 383 school principals, school board and PTA members who produced the draft five year ICT strategic plans for their schools

- Baseline data collection in 66 (out of 80) Kenyan schools leveraging university partnerships.

- National and county launches in Kenya which provided platforms for interaction, visibility and clarification of expectations to a wide group of stakeholders from national to local levels and clearly demonstrated government support for the programme.

- Establishment of  initial engagement with the Tanzanian Ministries, Ministry of Education,Science and Technology (MoEST) and President's Office Regional Administration and Local Government (PORALG) and identification of key institutions for collaboration.

- Signing of MoU with Cote d'Ivoire MoE in June 2016 and identification and orientation of Cote d'Ivoire Project Manager in December 2016.

**ADSI targets to increase the number of female secondary level students taking science and technology subjects. The baseline in Table 3 for the schools selected shows the following distribution of science students across the 4 counties and will aim to increase the 5 of female students especially in the rural schools.**

### Table 3: Overall participation in the ADSI Project: Kenya

| ADSI Kenya | | | |
|---|---|---|---|
| Students | | Science Teachers | |
| Male | Female | Male | Female |
| 17,399 | 16,438 | 441 | 219 |
| 51% | 49% | 67% | 33% |

**NB**: *Please note that the figures do not include English and Math teachers. These reflect only the science teachers and students in the ADSI schools. English and Math are compulsory subjects whereas the Sciences are electives.*

# Challenges and lessons learned

ADSI is a new and innovative model for secondary whole school development using technology as an enabler and tool. It brings together a unique blend of frameworks such as the GESCI Digital Schools of Distinction (DSD) framework, the UNESCO ICT Competence Framework for Teachers (ICT-CFT) and the Technological, Pedagogical, and Content Knowledge (TPACK) framework. As such, we are testing and trying out new theses, approaches and tools which present opportunities and challenges and as a consequence requires constant review, reflection, finding of solutions and rich learning.

The table below highlights some of the challenges experienced:

| Challenge | Lesson learned/Strategy |
|---|---|
| Working with MoE officials and EWG members who had to juggle between different competing priorities | Early and continuous involvement of EWG, national Ministry and county education officials in the implementation of the project garnered significant levels of goodwill and cooperation as evidenced in high participation in project activities. |
| Unexpected changes in MoE and school calendars affecting scheduling and timing of project activities | As we operate in an environment where calendars could change at any time, we have learned to have contingency plans, especially for the school-based activities so as to respond quickly and effectively to such changes, e.g. we reviewed work plans, rescheduled non-urgent activities and successfully adjusted and fitted the activities in Kenya in Q4 into a very narrow time window |
| Dropping schools not meeting the essential conditions for project implementation. There were many hopeful schools wanting to become part of the project | The criteria for school selection was approved by the MoEST and selection of schools was done through the County Education offices. It was more transparent and easier to communicate the lack of compliance/non-selection through the same office as opposed to having to communicate directly with the hopeful schools. |
| Some assumptions about realities and constraints on the ground were not well-informed since requirements and costs (e.g. finding and setting up offices in the counties and equipping them with the essentials to facilitate the work of the PCs) were higher than anticipated and settling in took more effort. | By establishing GESCI county offices and placing the PCs close to the county offices and schools they serve, the incorrect assumptions and the realities became clear and effective strategies could be developed and implemented. PCs received more handholding and support. |
| Connectivity becomes weak in Kenya as one moves away from the major cities. Internet connectivity in the counties in general and during the training sessions was a problem | We bought more mobile internet boxes to carry to workshop venues and schools and will be working with other partners (e.g. telco companies) and raise more funds to address this issue holistically |

*AKE Participants training at the GESCI Media Lab in October 2016.*

## Skilling the youth for entrepreneurship and employment

### African Knowledge Exchange (AKE) Creative Media Venture

In 2016, AKE program sought to develop a new innovative training model which would combine high level skilling to commercial – and the actual formation of start-ups in the digitally – driven creative and cultural arena. The eventual model would incorporate various supports needed for the creation of start-ups.

Crucially, the model would be applicable to traditional employments in service areas and to new and emerging ICT-based service opportunities for start-ups and self-employment.

In 2016 we sought to increase the participation of young women in skills development in the Digital Creative Media (DCM) project. Of the 20 students 40% (8 of 20) were young women.

### BOX 5: AKE 2016-Major Highlights

• 20 students enrolled and graduated at the end of the year having been upskilled and trained to DCM industry standards.

• Set up of a Digital portal (https://gesciakemediaventure.net/) to support both the AKE Living Lab (LL)  research and the DCM community.

• AKE presentation and showcasing at Banjul+10 event in Gambia held on May 10th-11th 2016 in Banjul, Gambia. A start-up from AKE was showcased as a key item on the main agenda during the youth charter event. The Creative Media venture was presented at both a side meeting and a plenary session.

• GESCI's –AKE lessons learned and recommendations contributed to the development of the New African Youth Charter and was endorsed as part of AUC's youth programme for the next three years 2017-2020 as a result of the Gambia  event  (http://gesci.org/news-room/news/single/news/detail/News/gesci-presents-its-african-knowledge-exchange-ake-creative-media-venture-programme-at-auc-banjul/ ).

• 29 DCM industry experts offered their expertise and skills  in-put on course development  and design, market trends, industry constraints and industry best practices during the Roundtable and Solution Design workshop.

• 7 Start-ups were organically formed and legalised and set up for business.

## Main Activities and Achievements in 2016

In 2016 the AKE Creative Media Venture focused on five central objectives of the project:

• Provision of access to the full range of digital media equipment, software and tools in GESCI's digital media production studio to allow participants to improve their creative media skills in an inter-related and collaborative environment involving Animation, Games Design and Apps and Music and Sound Design

•The identification, selection and development of multi-media projects which have promising commercial potential in themselves and also have blueprinting or replicable potential in the marketplace

• Provision of professional advice and external mentoring on the processes of start-up formation

• A professionally- designed Living Lab action research was adopted throughout the project with the objective of developing a new, unique and scalable training and enterprise model which integrates creative digital media skills development, product identification and their development to commercial standards. This was carried out in conjunction with the University of Aalto Media Lab, Finland, an expert centre on the Living Lab model.

• Formation of a number of start-ups with already -commissioned project work.

The objectives were achieved in the following ways:

## Training and Skilling

Twenty artists were enrolled in the programme in 2016, coming from the Mobile Games and Apps, Animation and Music Production and Sound industries. Animation, Games and Apps participants were taught hands on skills on visual development, camera movement, character rigging and asset creation, colour and styling, layout production and Animation while Music Production and Sound design participants were equipped with first class knowledge on melody and instrumentation, composing and production, recording and production techniques.

The cross-cutting resource for Music/Sound, Animation, Games and Apps development has been the story line-The story is told through Music and Song, through Animation and played interactively in real time through Games and

Apps. At the end of the year, all twenty artists graduated. The greatest change was seen on the students who acquired industry standard skills using high tech technology that they had not been exposed to before.

## Training of trainers and curriculum enhancement

In 2016, 2 Irish Master Tutors from the leading Irish Media College, Ballyfermot College of Further Education, who previously worked with the Kenyan tutors to conceptualise the AKE model of tutoring/mentoring of inter-disciplinary and collaborative learning and skills development technology-driven commercial enterprise: Animation, Games and Mobile Apps development, music and sound production returned to Kenya to work with the Kenyan tutors to consolidate and enhance the curriculum.

They enhanced the AKE's one year integrated training and enterprise programme to provide:

(1) ICT-based skills, singly or in cluster, to a standard that was commercially relevant using a modernized training curriculum fused with appropriate digital tools and software;

(2) Training with clear emphasis on guidance and direction together with technical, advisory, mentoring and consultative supports at every phase;

(3) opportunities for the trainees to experience team-working and collaborative project design and development to simulate real-world employment environments and market-place standards;

(4) a platform for practical entrepreneurial advice, guidance and mentoring followed by the establishment of small-start-ups which would have marketable products or services to offer and which,ideally,already would have commissioned work in hand.

The ToT concluded with a roundtable and solution design workshop well attended by industry experts who helped with creative ideas with commercial potential, review of student portfolios and artifacts, provided mentoring and enterprise development skills, and commissioned some work.

## LL research

In 2016 the purpose of the research was to continue the study of a previous GESCI-AKE research (2014-2015) that sought to pinpoint core content elements of innovation in the space of creative-entrepreneurial education. The aim was to examine how the innovative practices in the demonstration project can be consolidated and enhanced through the Creative Media Venture LL intervention, linking training and digital creative industry processes in Kenya, producing innovative products and improving skills development for entrepreneurship and innovation among budding artists, secondary and pre-tertiary youth.

The research brought forth a model that combines innovation and education, and that fosters creativity, skills, as well as leadership qualities and entrepreneurial knowledge.

It includes three core elements:

1) Foundation (incl. Participant-centeredness; Cultural competence; Holistic approach)

2) Process (incl. Flexibility; Teamwork; Networking, partnering and follow up;

3) Structure and Organization (incl., Space, Infrastructure, Coordination and other best practices, Continuity, and Intellectual Property).

The research was extended to continue to March 2017 to capture the challenges experienced, the gap areas identified and the supports required during the start-up incubation period. The final LL research report and emerging model will be presented at the AKE Policy Forum at the end of March 2016.

## Start-up Launch

Seven business start-ups (Artari Kreations, Tripple Touch, Boisch, Ionic Code, Makossirri, KIWO films and Verb House Productions) were launched on the December 2016. These start-ups will be enrolled into an incubation programme for three months beginning of January 2017. They stand a chance of winning Euro € 2,143 seed funding per start-up during the incubation period.

In the incubation phase of the programme start-ups will be guided and mentored by industry/media experts and business practitioners to advise on the media products and services in demand and to assist on the creation of a prototypes and working with marketing agencies/companies for service based jobs and commissioned work.

## Challenges and issues

The challenges experienced by the Creative Media Venture included:

• Internet is a key asset to a media hub such as the AKE Creative Media venture. The initial service provider was unable to provide consistent good bandwidth/speeds and sometimes struggled to go online to get resources required to do their products.

• The start-up incubation phase was new for the students because of the requirements of key pitching exercises, market research and business plan development. Throughout the Creative Media Venture the participants developed many prototypes, e.g. they made educative games targeting the education sector and industry players like Kenya Institute of Curriculum Development (KICD); they produced 30 sec animated advertisements, short films and made African short stories.

Their prototypes were of good quality and generally on a par with market standards. Students found the straight forward critique from the investor and industry community very useful.

## Key outcomes

• New model for digitally –driven skills development and start-ups in the cultural area implemented and researched.

• A model which can be delivered informally or formally within the TVSD sector.

• Curriculum modules and associated resources developed, tested and revised.

• A generic skills delivery model for more traditional areas of employment.

## Programme Contributions to GESCI's results framework

Table 4 below summarises the programmes' contributions to the GESCI's Results Assessment Framework (RAF) result areas.

**Table 4: Programme contributions to GESCI RAF Result Areas - 2016**

| GESCI RAF Result Area | ALICT Programme | ADSI Programme | AKE Project |
|---|---|---|---|
| 1. Policies and strategies for inclusive Knowledge Society development | Built leadership capacities for coherent and strategic policy development across ICT, Education and STI sectors of 497 mid-level to senior public sector leaders across 16 African countries | Worked with stakeholders at national, county and local levels to facilitate ICT integration for improved teaching and learning in designing models, frameworks and practices that inform policies and strategies. | Convened round table, showcase and policy forum events to bring together key stakeholders and partners for policy dialogue on youth skills and enterprise development to inform policy formulation |
| 2. ICT integration and reform in formal education | Module 5 Education in the Knowledge Age provided knowledge and skills for contextualized ICT based models, toolkits and new approaches for informing innovative practice and reform in education | Developed GESCI Digital Schools of Distinction (DSD) model for whole school improvement and use of technology for school transformation including improved leadership and classroom practice and student learning at technology literacy, knowledge deepening and knowledge creation levels. | Successful multi-disciplinary team work and integrated nature of learning providing lessons that are also relevant for and transferrable to formal education |
| 3. Technical Vocational Skills Development | | | Consolidated innovative model for youth digital skills and enterprise development in DCM industry in Kenya with potential to scale up to other sectors and industries |
| 4. ICT infrastructure and internet deployment | Built capacities of 497 mid- to senior level public sector leaders for appropriate technology policies, applications, use and configurations for ICT deployment in formal and informal education | Enhanced school infrastructure conditions for whole school based ICT professional learning applied in STEM and other subject teaching and learning in 80 schools in Kenya. Deployed laptops, modems and projectors to 80 Kenyan schools | Tested and developed model for effective use of digital media and the internet for youth skills and enterprise development and informal learning. The model can be replicated and applied across different TVSD sectors. |

| | | | |
|---|---|---|---|
| 5. Communities of Practice | Continent-wide ,Network bringing together leaders, policy makers, experts, and practitioners to build and share knowledge, do collaborative research and projects and to stay informed of emerging trends and best practice in KS and sustainable development.<br><br>Sharing and publication of knowledge products as inputs for policies, strategies and practice for KS advancement | Teacher peer learning through online and school-based teacher groups working collaboratively in lesson planning, classroom observation and evaluation. Teacher portals and platforms for sharing lessons, resources and for collaborative work on projects. Student collaboration through problem- and project based learning activities. | Active communities of practice of tutors, industry experts, researchers and students for sharing and learning facilitated through Aalto University researchers using a variety of digital tools, including live blogs and live streaming during events. See https://gesciakemedi-aventure.net |
| 6. Human resource development and training | Enhanced capacities of 497 policy makers, practitioners and researchers across 16 countries for improved planning, policy coherence and inclusive knowledge society development. Tested model of leadership capacity building | Improved school leader teacher and classroom practice and student learning using ICT as a tool for teaching and learning and increased student achievement in STEM and other subjects.<br><br>Innovative whole school development and teacher training model with ICT as enabler. | 20 unemployed selected youth equipped with industry standard skills for DCM industries in animation, music and sound production and game and apps development with 7 small start-up companies formed and registered with seed funding obtained.<br><br>Innovative youth skills and enterprise development model |
| 7. Management and Information Systems | Contributed to capacity development and understanding of ICT use, systems and tools to provide efficiency and effectiveness of strategic decision making | Collected baseline data from 66 out of 80 Kenyan secondary schools.<br><br>Developed database of participating counties, schools, School Support Teams, School-Based Coordinators, STEM teachers, and materials | Developed database of tutors, students, industry partners, course materials |
| 8. Educational portals and training materials | Updated, enhanced and accredited state-of-the art executive leadership course package and platform to ensure quality and relevance and for use by university partners in implementing the wider access model and topping up to Master's degree level | Quality online training modules, DSD, OER and e-learning platforms for school leaders, STEM and other teachers.<br><br>Innovative DSD whole school development package | Quality skills development package in animation, games and apps development and music production which resulted in students acquiring relevant skills to create/find employment |

**Part 3**

# Advocacy and Strategic Partnerships

During 2016 GESCI built key strategic partnerships and signed MoUs with:

• ADEA – GESCI became the technical lead of ADEA ICT Task Force and ADEA's official trusted ICT in education advisor

• FAWE – for developing a joint programme targeting African women leaders from ministries of education.

• AUC – GESCI (MoU not signed yet – to be signed soon) but already GESCI was entrusted the technical leadership and co-chairmanship of the AUC CESA ICT in Education Cluster, an alliance composed of representatives of Ministries of Education, international organizations (UNESCO, UNICEF, ECOWAS, IICBA, etc.), IT private sector (Intel, Microsoft, JP-IK, Orange)

• Cote d'Ivoire Ministry of Education and Technical education – implementation of ADSI and Leadership capacity building joint proposal development

Other partnership agreements such as with ECOWAS, IGAD, the AUC, the Democratic Republic of the Congo (DRC) and Guinea Conakry were initiated but yet to be concluded and will be finalised and signed in 2017.

GESCI also successfully co-organised the 2nd Ministerial Forum on ICT in Education and Training on June 8-9, 2016 in Abidjan in partnership with ADEA, UNESCO, Microsoft and Intel.  The overall theme of the Ministerial Forum was Knowledge Society development wherein ALICT/ LATIC, AKE and ADSI programmes shared experiences and lessons learned and able to do advocacy with the participants and stakeholders. In this regard GESCI significantly raised its visibility as a leading organisation in the ICT, Knowledge Society, leadership development and digital skills for youth enterprise development fields.

GESCI presented at the AUC's African Youth Charter commemoration +10 in the Gambia in May 2016.

The ALICT programme presented the paper "The Role of Private Higher Education Institutions in Sustainable Development: The case of the African Leadership in ICT and Knowledge Society Advancement program" at 14th conference on the role of Private Higher Educational Institutions in Knowledge Society Development in Africa. The conference was organised by St Mary's University – Ethiopia in partnership with AUC, UNESCO and the AAU.

The ALICT programme also presented its capacity building model and related knowledge tools at the African Innovation Summit 2016 organised by "AfricanBrains" in September 2016 in Nairobi.  The session was jointly organised and facilitated by GESCI and UNESCO.  In this continent wide event, Ministers and senior bureaucrats from 35 countries participated in the event.  GESCI and UNESCO jointly leveraged this event to share inputs on "How to Budget for ICT in Education" and how ALICT programmes help the Educational Planners in planning and budgeting for   implementing large scale ICT in Education programmes.

GESCI participated in the AUC CESA technical group meeting in June 2016 and co-organised and chaired the CESA inaugural cluster meeting on ICT in Education on 10 and 11 November 2016. We also participated in the ADEA Triennale programme committee meeting on 15-16 September 2016 in preparation for the ADEA Triennale in March 2017.GESCI developed several proposals to respective donors and development partners. We used social media, our website, press releases, brochures, newsletters and other media to keep stakeholders abreast of our programmes and their progress.

**Part 4**

# Financial Summary

During 2016, GESCI earned income from the governments of Finland and Sweden, by the MasterCard Foundation and fees earned in implementation of programmes and provision of expert services.

## Financial results for the year

Income for the 12 months to December 31st 2016 was €1,133,889. Expenditure for the same 12 months was €2, 413,295  and closing funds as  at 31st December 2016 (Cash at Bank) was €2,496,436.

As a non-profit organization, GESCI manages its expenditure prudently within its available resources.

In summary, as with any non-profit organisation, GESCI depends on the on-going support of its donors and partners in order to continue its activities and achieve its objectives. GESCI will continue its efforts to broaden and diversify the income base and will continue to monitor income and expenditure closely to ensure the on-going success and stability of the organisation.

Below is a summary of the income exclusively received within the 12 months period ending on 31st December 2016. (See Table 2: Summary of contributions received by GESCI in 2016).

### Table 5: Summary of contributions received by GESCI in 2016

| Donor | Amount in Euros |
|---|---|
| Swedish International Development Cooperation Agency (Sida) | 508,900 |
| Ministry of Foreign Affairs of Finland – ALICT 2 | 641,000 |
| Miscellaneous (Small Projects) | 5,676 |
| **Total** | **1,155,576** |

Part 5

Future Prospects

The GESCI Board of Directors provided their final feedback on the *GESCI Strategy for 2017 – 2020: From Vision to Action – Delivering What We Promise* for approval early in 2017.

Once approved the Strategy will be implemented. The Strategy identified 7 thematic focus areas and 2 cross-cutting areas on which GESCI will focus its work in 2017-2020:

• GESCI Digital Schools of Distinction for whole school ICT integration and Development
• Teacher professional development and ICT competencies
• ICTs for 21st century learning with a focus on STEM subjects
• Technical and Vocational Skills Development (TVSD) - digital skills and youth entrepreneurship
• Leadership Development to realize the Sustainable Development Goals (SDGs)
• ICT-enabled education for children and youth in crisis environments
• Scaling up learning opportunities in community-based settings

## The 2 cross-cutting activities are:

• GESCI organisational supports and activities
• Consultancy and expert services

To operationalise the Strategy GESCI will further research and strengthen its existing programmes, and will conceptualise and design new programmes aligned to our strategic focus areas and for the provision of expert services.

GESCI will pay particular attention to three underpinning principles embedded in this strategy:

1. The primacy of gender equality issues in its programmes, projects, advocacy, promotions and publications

2. Expansion of its global reach and implementation of its focus areas in different arenas of i.e. Africa, Middle East, Asia and South America.

3. Expansion and diversification of its donor base.

We are confident that, together with its donor partners, GESCI's experience and maturity, as well as its profound understanding of the roles that leadership, technology, pedagogy and innovation play in the cultivation of knowledge societies will equip it to successfully meet its strategic objectives set for 2017 – 2020.

# Annexes

**Annex 1.**
**Summary of Achievements against GESCI RAF Outcome and Output Indicators and Targets – 2016**

**Annex 2.**
**GESCI- Research and Products on ICT 4E/ICT4D and KS Development 2013 - 2016**

**Annex 3.**
**GESCI Organogram 2016**

# Annex 1

Summary of Achievements against GESCI RAF Outcome
Indicators and Targets- 2016

**Table 6: Summary of Achievements against GESCI RAF Outcome and output indicators**

| Goal, Outcomes and Outputs | GESCI RAF Indicators | Achievements |
|---|---|---|
| **Goal for GESCI RAF 2013- 2016:** To increase the use and integration of digital technologies in every strand of society to realize higher levels of equality and inclusiveness and in particular the use of ICTs to support governments, communities and citizens for:<br><br>• Greater access to quality learning opportunities in education (formal, informal and technical)<br><br>• Skills development (i.e. Leadership skills in ITC4E for policy makers, TVSD skills for youth employment)<br><br>• Informed and participative citizenry thereby contributing to the acceleration of socio-economic development towards knowledge societies for all | **Overall goal indicator:** No. of countries with improved education (in terms of access, quality, relevance and efficiency) as a result of successful integration of ICT in the education system in-part attributable to GESCI's engagement with those countries | **Target: 16 countries 2013 - 2016** GESCI delivered its programmes across 16 African countries thereby meeting the overall RAF target for the entire strategy period (4 countries per annum). GESCI achieved these outcomes through its core and programme activities. Across the 16 countries there are now a cadre of 497 mid-level to senior leaders in public ministries, primarily Ministries of Education, who are better equipped with policy formulation, planning and implementation skills in the pillar areas of Education, ICT and Science, Technology and Innovation. Through the SIPSE Project 120 teachers in Kenya and Tanzania received training in teaching STEM subjects using ICT. The AKE Project provided digital skills training to 60 unemployed youth in Kenya with many finding employment and creating their own small enterprises. Implementation of the 5-year African Digital Schools Initiative of transforming teaching and learning in secondary schools in STEM and other subjects through the innovative use of ICTs and whole school development approach in 80 schools in Kenya and 40 in Tanzania., and will start in 2017 in Cote d'Ivoire. |

| GESCI Organisational outcomes | Overall outcome indicator: | Target: 4 agreements in 2016 |
|---|---|---|
| • Policies and strategies for KS development, <br> • ICT integration and reform of formal education <br> • Technical Vocational and Skills Development (TVSD) for youth skills development and employment <br> • Deployment of ICT infrastructure and the internet <br> • Communities of practice <br> • Human resource development and training <br> • Facilitating development of information systems, tools and frameworks for improved decision making <br> • Educational portals and training materials. <br><br> GESCI's programmes all contributed towards achieving these outcomes and these have been separately reported on in the Annual Report under the individual programmes | No. of agreements, MoUs and engagements with boundary part-ners addressing each of the desired outcomes. | **(for at least 20 cumulatively from 2013- 2016):** <br> GESCI exceeded the target with 10 partnership agreements or MoUs in 2016 and achieved 26 overall for the period 2013-2016: <br><br> • 1 new country engagement (with MoU) with Cote d'Ivoire on the African Digital Schools Initiative (ADSI) <br> • MOU with the Forum for African Women In Education (FAWE) <br> • Millennium @Edu to work together in areas of mutual interest (e.g. women and girls' education) <br> • mEducation Alliance – USAID appointed GESCI member of the Steering Committee of mEducation Alliance which examines the application of mobile technologies in teaching and learning in the developing world <br> • AUC appointed GESCI as co-chair of CESA 2016-2025 cluster for ICT in Education <br> • ADEA appointed GESCI as co-organiser of 2nd Ministerial Forum and leader of Task Force on ICT <br> • MOU with St Mary's University, Addis Ababa, Ethiopia to offer GESCI's graduate diploma in ICT and Knowledge Society development in Africa and a Master's to-up to ALICT graduates <br> • MoU University of Nairobi, Kenya to collaborate on research on relation to GESCI's Digital Schools of Distinction programme. <br> • MoU with Kenya Education Management Institute for training of secondary school leaders <br> • MOU with Kenya Institute of Special Education on ADSI to ensure equitable ICT access and learning for students with disabilities |

| Core organisational outputs | Core organisational output indicator | Achievements |
|---|---|---|
| Output 1: GESCI Functional Departments Strengthened | Output indicator 1.1: Comprehensive marketing, communication & networking campaign enabling Donor Partnerships (No. of partnerships agreed with current and new donors | Target: At least 6 MoUs signed (cumulatively from 2013): 1 for 2016 GESCI did not meet the target for 2016 and achieved 5 out of 6 cumulatively from 2013 - 2016.GESCI put considerable effort and several proposals to prospective donors to achieve the target. These include proposals for inter alia: 1) Women leadership development; 2) Education using ICTs for refugee children 3) Action policy model for transforming secondary education focusing on gender equality, marginalization, the enhancement of learning outcomes and the relevance of Secondary Education to employment needs 4) ICT- infused self-sufficiency skills for girls in disadvantages communities. GESCI did obtain 2 short-term assignments from UNESCO East Africa Region on teacher professional development and development of MEL framework and roadmap for teacher development. |
| | Output indicator 1.2: Comprehensive marketing, communication & networking campaign enabling Public Private partnerships (No of PPPs drafted for targeted digital enterprises and organizations) | Target: 1 MoU per annum signed off with PPP (cumulatively 5 from 2013: GESCI met the target with the PPP negotiated and signed St Mary's University in Ethiopia, a private university working with AUC and AAU. SMU will offer |
| | Output indicator 1.3: Board Expansion -Increased Board Membership and Board Involvement in meetings | Target: At least 8 Board members by 2016 with 2 Board meetings annually The target was met In 2014-2015, GESCI had 9 Board members, 2 of whom had since resigned from the Board. GESCI has not filled the vacancies because there is new legislation to govern the NGOs in Kenya that ,when operationalised ,will have far reaching changes in the composition of the Boards in the NGO sector. Gender balance will be a criteria for new membership.The Board met twice in 2016. |

| | Output indicator 1.4: Advisory Reference Group (Advisory Council established | This target does not apply, as the NGO Regulations do not allow for the establishment of Advisory Councils to Boards of Management |
|---|---|---|
| | Output indicator 1.5: Strengthening Management Reporting & Communication (Portfolio management & reporting processes streamlined) | No target set as project was completed in 2013, but GESCI continued internal and consultative review and enhancement of its frameworks, planning, monitoring and reporting processes and tools and finalised the 2017 – 2020 Strategy. |
| | Output indicator 1.6: Strengthening Financial Management (ABC accounting implemented) | No target set as Activity Based Accounting was implemented in 2014, but the systems, processe,work plans and budgets were further streamlined and enhanced in 2016 based on experiences with its implementation and emerging requirements. |
| | Output indicator 1.7: Capacity Development (HR Development Programme established | Target: 1 new staff member joining annually; at least 20 staff trained cumulatively 2013-2016; retention of 80% GESCI exceeded the target in that 10 new staff members joined the organisation: 2 x Programme Managers (AKE and ADSI), Tanzania Country Project Manager, four Project Coordinators, a Project Accountant and a Communications Assistant. All of them were inducted and trained to fulfil their job responsibilities. In addition, GESCI trained all staff members on team work and effective communication.<br><br>GESCI retained 100% of its staff in 2016 and provided external staff development opportunities to individual staff members as required in their skills areas. One staff member obtained a doctoral degree in 2016. |
| | Output indicator 1.8: Country and Regional Programme management (Country and Regional Programme management(Management and Support for country full--engagement, transition & on--demand projects, regional knowledge exchange platforms and capacity building programmes on KS, ICT4D and ICT4E) | Target: 4 engagements :The target was met with 2 country engagements starting in Kenya and Tanzania (ADSI) and 2 short –term on-demand engagements in Uganda through a UNESCO East Africa Region assignment on teacher professional and MEL framework development. A MoU was signed with Cote d'Ivoire on the African Digital Schools Initiative (ADSI). 5 new programme proposals were developed and funding mobilisation is on-going. |

| | | |
|---|---|---|
| Output 2: GESCI internal capacity (organizational design and individual skills) strengthened | Output indicator 2.1: Internal Capacity Strengthening<br>- Communications Management Strategy developed<br>- Programme Management Strategy developed<br>- Knowledge Management Strategy developed<br>- Donor Management strategies developed | No target set for 2016. Knowledge Management Strategy developed and piloting started with ALICT programme. Other strategies reviewed and adjusted as required. |
| Output 3: Research & Knowledge Products Developed | Output indicator 3.1: Research Communication Web portal developed providing focus on GESCI reports, research on status of ICT and KS in Africa | No target set for 2016, but complete revamp of the GESCI website was started in 2016 with finalisation in 2017. The new site has been accessed in 164 countries with 33000 users. GESCI also introduced a quarterly GESCI e-update to highlight organisational and partner news/events and draw attention to new research |
| | Output indicator 3.2: Francophone and Anglophone Outreach<br>French version of GESCI website developed | French version of the website still at the planning stage and will be activated only when the English site has been completed. |
| | Output indicator 3.3: Situational & Needs Analysis No of country studies addressing new countries situational and needs analysis | Target: At least 15 cumulatively by 2016 GESCI exceeded the target already in 2015 by having completed 16 country studies and 1 Regional Scan.The country studies were used as course materials for the ALICT course and are currently been updated and revised for inclusion of SD dimension and for wider dissemination. |
| | Output indicator 3.4:<br>Knowledge Products & Research Papers<br>No. of planning and analytical tools, models and frameworks developed, trialled and shared every year | Target: At least 10 cumulatively by 2016<br>GESCI exceeded the target with 13 knowledge products/tools/ frameworks/articles being developed and shared on website and through conferences<br>(See annex 2 for list) |

| Output 4: Global Advocacy & Fostering of Strategic Partnerships | Output indicator 4.1: Advocacy & Strategic Partnerships No. of strategic partnerships at the global level fostered through global events attendance & advocacy strategies | Target: At least 6 in 2016 GESCI exceeded the target by 1) : Ten strategic partnerships viz. two international (MIllenium@Edu, mEducation Alliance), three continental (AUC, FAWE, ADEA) and five national (MoE, Cote d'Ivoire; St Mary's University, Ethiopia; Kenya Education Management Institute; University of Nairobi; Kenya Institute of Special education [KISE] ) 2) Attendance at 6 global events (e.g. 2nd Ministerial Forum; AUC Banjul +10; AfricanBrains, SMU Private Higher Education) attendance/participation at AU workshops and fora |
| --- | --- | --- |

Annex 2

GESCI- Research and Products on ICT 4E/ICT4D and KS Development 2013 - 2016

# 1. GESCI Research and Product Development 2013 - 2016

## African Leadership in ICT (Anglophone and Francophone) (ALICT-LATIC)

ALICT and LATIC leadership Development Platform at:

- The Anglophone version of Moodle Learning Platform; http://elearning.gesci.org
- The French version of Moodle Learning Platform; http://fr.elearning.gesci.org/
- Leadership Network for Sustainable Development (LN4SD) at: http://www.leadership4sd.org/

**ALICT programme thematic studies**

*Thematic Study Science and Technology and the Knowledge Society in Africa*; http://gesci.org/resources/browse-resources/resource/resource/show/Resource/thematic-study-science-and-technology-and-the-knowledge-society-in-africa/

*ALICT-LATIC Course Module Renewal (2016-2017) (University of Mauritius Consultancy Team) Module renewal completed. Platform renewal in progress.* The link is at; https://www.dropbox.com/sh/s2zqfpshofdc7lq/AAC-nd_sVmnG96plgX4y06Akma?dl=0

GESCI Research Series: Santally, M. (2016) *An Evaluation of the African Leadership in ICT Programme from a Quality Assurance Perspective*, European Journal of Open, Distance and E-Learning at: http://www.eurodl.org/?p=current&sp=full&article=725

GESCI Research Series – Hooker, M. (August, 2015) *ALICT Course Review, Based on an Internal Team Review Survey and External Moderator and Evaluator Reports of the ALICT Course Design and Implementation in 4 Domains: Design, Technical Platforms, Facilitation, MEL-Communications-Knowledge Management System*, available in dropbox at: https://www.dropbox.com/sh/uqrkw65sqjz0s kt/AADJq-MfhSd47-fVTKCy-rAqa?dl=0

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GESCI Research Series: Hoosen, S. and Butcher, N; Wang'ati-Gnagbo, M. and Muhati, P. (2016) *Impact Assessment – ALICT-LATIC Model*, Nairobi, GESCI; https://www.dropbox.com/sh/xs5jg7vmp5kifcj/AAB9jC1b7Xn3oFoN8Se-HtF_aa?dl=0

*GESCI (2013) African leadership in ICT: Model Document 2013*, Nairobi, GESCI; http://gesci.org/our-work/leadership-for-sustainable-development/african-leadership-in-ict-and-knowledge-society-development/

## African Knowledge Exchange (AKE)

*GESCI-AKE Living Lab Research and Model - Policy Forum and Live Blog* at: https://gesciakemediaventure.net/

*GESCI-AKE 7 Step Model for Youth Skills Development* at: http://culturalindustriesafrica.org/akenew/

GESCI Research Series: Horowitz, M. and Botero, A. (2017) *GESCI-AKE Creative Media Venture 2016-2017, Living Lab Research Component: Final Report*. Nairobi, GESCI

GESCI Research Series: Botero, A. & Horowitz, M. A. (2016 - 2017) *GESCI Living Lab Research: 'A Creative Media Venture' – Mid-Term Report* [Online], available at:  https://gesciakemediaventure.net/

GESCI Research Series: Horowitz, M. A. and Saarinen, V. (2015) GESCI-AKE 2014/2015 *Creative Media Skills Course "The Sound of the City" - Living Lab Research Component: Final Report*, Retrieved from: https://thesoundofthecity.wordpress.com/

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GESCI Research Series: *African Knowledge Exchange (AKE) (2013) Developing 21st Century Skills for Innovation and Enterprise: The role of informal learning environments in the development of 21st century skills for innovation and enterprise: A case study of the role of innovation hubs in the development of skills and aptitudes for the digital creative media industries*. Nariobi: GESCI Available at: http://www.gesci.org/ assets/files/AKE%20research%20-%20Full%20Report.pdf

## African Digital Schools Initiative (ADSI)

African Digital Schools Initiative Moodle Platform for Teacher Development modules (Technology Literacy level) and Leadership Development modules (Knowledge Deepening level) at: http://adsiteachers.gesci.org/
GESCI Research Series: Hooker, M. (2016) Cultivating Synergies in Enhancing ICT Competencies: A partnership approach, in UNESCO (2016) Diverse Approaches to Developing and Implementing Competency-based ICT Training for Teachers: A Case Study [Online], available from UNESCO Bangkok at: http://www.unescobkk.org/news/article/diverse-approaches-to-developing-and-implementing-competency-based-ict-training-for-teachers-a-cas/
GESCI Research Series: Hooker, M. (2016) An Analysis of the Development of a Monitoring, Evaluation, Learning and Research Framework for the African Digital Schools Initiative (ADSI), Nairobi, GESCI
GESCI Research Series: Wachira, E. M. (2016) Rationale for the Establishment of a progression path for a 21st Century learning environment in African Schools: Position Paper, Nairobi, GESCI.

## Strengthening Innovative Practice in Secondary Education (SIPSE)

SIPSE teacher professional development platform – with technology literacy and knowledge deepening modules at: http://sipseonline.gesci.org/

GESCI (2015) Partnership to Strengthen Innovation and Practice in Secondary Education: Report on Regional and National Policy Forums - Kenya and Tanzania, May 2015, retrieved from http://sipseonline.gesci.org/GESCI2015/ SIPSE%20Forum/FORUM%20DOCS/SIPSE%20KE%20TZ%20policy%20forums%20full%20report%20%20June%202015.pdf

GESCI Research Series: Hooker, M. and Mwiyeria, E. (October, 2015) Policy Recommendations Dissemination Tanzania and Kenya, available in dropbox at: https://www.dropbox.com/sh/20po9sn8daxu y6t/AAAep-p4822e8W_peR-wqN6lXa?dl=0 And in East Africa UNESCO Colloquium (November, 2015) available in dropbox at: https://www. dropbox.com/sh/d2eqcq9dn41h0wa/AABhBmNDsB0LOZ_6kaxZdK3wa?dl=0

GESCI Research Series - UNESCO-BKK: Hooker, M. (2015) Regional Meeting to "Supporting Competency-Based Teacher Training Reforms to Facilitate ICT-Pedagogy Integration Project", SIPSE Case Study, Tanzania and Kenya, 27-28 October 2015, Bangkok, Thailand at: http://www.unescobkk.org/education/ict/curr

Partnership for Strengthening Innovative Practice in Secondary Education (PSIPSE) Learning Fund M&E project (GESCI Lead in partnership with CSIR) - outputs from the partnership learning can be accessed in dropbox at: https:// www.dropbox.com/sh/3sr7y72qf5sxjql/AAA899oCWOAzy-FHED7XaoPMa?dl=0

GESCI
*New website mapping strategic focus areas 2017 – 2020* at: http://gesci.org/

GESCI Research Series: Swarts, P. (2015) *Technical Brief: Proposed Knowledge Management System (KMS)* for GESCI, Nairobi, GESCI

GESCI Research Series: Roberts, C.S (2016) *GESCI Organizational Knowledge Management Strategy*, Nairobi, GESCI

## 2. GESCI Services – Partnership Studies and Products

GESCI-BC-MoEST Kenya: *African Digital Schools (Badiliko) Evaluation Study Series – Baseline and Midline Evaluations (2014-2015), Baseline, Monitoring Report, Impact Evaluation – Kenya, Tanzania, Uganda, Ethiopia, Nigeria and Ghana,* Nairobi, GESCI, British Council, Microsoft available at: https://www.dropbox.com/work/Badiliko%20British%20Council/1.%20Report%20Set

GESCI-BC-MS-WV-MoEST Kenya: *Education Transformation Research Study Series (2014-2015), Spark a Child's Digital Future (SCDF)*: Kenya, Nairobi, GESCI, INTEL, World Vision, Microsoft & British Council Available at: https://www.dropbox.com/work/INTEL%20M%2BE

GESCI-UNESCO-EAC (2016) *Chinese-Funds-in-Trust Teacher Development Transformation Project Uganda: Active Teaching and Learning Workshop for Teacher ICT Competency Framework*

*Implementation (Primary, Secondary and TVET), Imperial Hotel, Lusaka Uganda, report and workshop outputs* available at: https://www.dropbox.com/sh/r99zv02n2kug80m/AABdjiiguUDMyfznf-v8quaga?dl=0

*GESCI-UNESCO-EAC (2016) Chinese-Funds-in-Trust Teacher Development Transformation Project Uganda: Video Workshop Active for Teacher ICT Competency Framework Implementation (Primary, Secondary and TVET)*, Shimoni Teacher College, Lusaka Uganda, report and workshop outputs available at: https://www.dropbox.com/sh/5opbhzll2hokggg/AAA3iZCD3N-0UDf1rgrtAtUCa?dl=0

*GESCI-UNESCO-EAC (2016) Chinese-Funds-in-Trust Teacher Development Transformation Project Uganda: Development of a Monitoring and Evaluation and Roadmap for Teacher ICT Competency Framework Implementation (Primary, Secondary and TVET),* Lusaka Uganda, M&E report and framework outputs available at: https://www.dropbox.com/sh/odg4juwlh4iogsv/AACfIWZ9mpc73cZNOaPfr58Ia?dl=0

*GESCI-and Aalto University Finland - ICT 'Living Lab' Research (2015 - 2016) -*

• *'The Sound of the City' and its subsequent iteration 'The AKE Creative Media Venture' is a project of GESCI –*
African Knowledge Exchange (AKE), is a Living Lab (LL) project that aims to encapsulate through creative practice in digital arts technology, the vibrancy and currency of the contemporary Hip Hop scene in and around Nairobi. The participant-practitioners will produce a collaborative digital art work, while simultaneously up-skilling in three independent and relevant learning streams.

• The project also entails an academic research component. Its purpose is to gather information and insights for co-creation of a transferable and international LL model, that advocates online tools and enables international stakeholders to participate. The research part of the project is designed to run from late November 2014 to end March 2015.
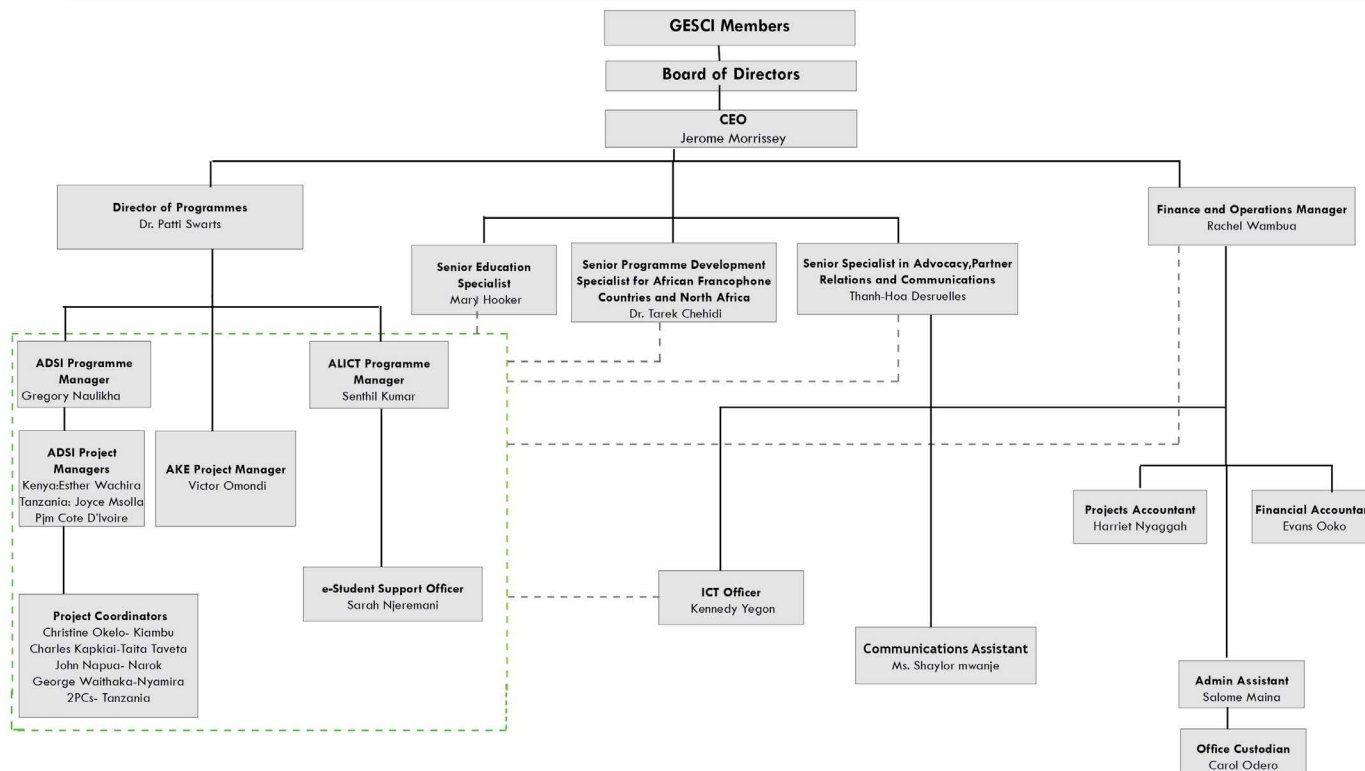
• Research blog available at: https://thesoundofthecity.wordpress.com/

• Research Results – GESCI-Aalto (2015) The AKE Policy Brief, available at: https://thesoundofthecity.wordpress.com/2015/03/09/the-ake-policy-brief/

# Annex 3

## GESCI Organogram 2016

gesci
Founded by UN ICT Task Force

**GESCI Members**

**Board of Directors**

**CEO**
Jerome Morrissey

**Director of Programmes**
Dr. Patti Swarts

**Senior Education Specialist**
Mary Hooker

**Senior Programme Development Specialist for African Francophone Countries and North Africa**
Dr. Tarek Chehidi

**Senior Specialist in Advocacy, Partner Relations and Communications**
Thanh-Hoa Desruelles

**Finance and Operations Manager**
Rachel Wambua

**ADSI Programme Manager**
Gregory Naulikha

**ALICT Programme Manager**
Senthil Kumar

**ADSI Project Managers**
Kenya:Esther Wachira
Tanzania: Joyce Msolla
Pjm Cote D'Ivoire

**AKE Project Manager**
Victor Omondi

**Projects Accountant**
Harriet Nyaggah

**Financial Accountant**
Evans Ooko

**e-Student Support Officer**
Sarah Njeremani

**ICT Officer**
Kennedy Yegon

**Project Coordinators**
Christine Okelo- Kiambu
Charles Kapkiai-Taita Taveta
John Napua- Narok
George Waithaka-Nyamira
2PCs- Tanzania

**Communications Assistant**
Ms. Shaylor mwanje

**Admin Assistant**
Salome Maina

**Office Custodian**
Carol Odero

November 2016

Notes:
Black line: Reporting relationship
Green broken square: Programme docket
Grey broken line: Professional inputs