

# 2019 ANNUAL REPORT



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## Foreword

Looking back to 2019, it seems like looking back at a totally different world to the world of today. This is due, almost totally, to the impact (and, indeed, the secondary impacts) of the Covid-19 global pandemic. While finding it almost impossible to see any good developments coming from this pandemic, there may be some secondary benefits, such as an increased global recognition of the importance of people understanding science and, particularly, being willing to listen more (and in a knowledgeable manner) to scientists and medical experts. GeSCI is very committed to supporting the teaching of science, technology, engineering and mathematics (STEM) subjects and, hopefully, in this way, GeSCI can help make an important contribution to raising the level of STEM literacy.

There may also be an increased acceptance of the very important role that Information and Communications Technologies (ICT) can play in delivering high quality education, particularly where it is not possible for students to attend schools. The effective use of ICT in education requires the correct technology, good quality internet access (broadband, where possible), suitable training and support for teachers and high-quality, relevant content delivered through a good curriculum.

GeSCI has been involved in assisting countries in the development and implementation of national ICT for Education strategies since its establishment in 2004. In this Annual Report for 2019, the ongoing important work being done by GeSCI is very clear and it is fortunate that it has an opportunity to work with a range of very committed partners.

On behalf of the Board and on my own behalf, I would like to pay tribute to the staff of GeSCI, under its Chief Executive, Jerome Morrissey, who have consistently delivered to the highest standards, regularly surpassing targets for delivery and doing so under budget. For those who know the people involved, this is not surprise but it is important to pay tribute to all the staff. I would also like to thank my colleague board members and to thank them for their time and commitment.

I also wish to thank our many partners, not least the Mastercard Foundation, with whom we have built a tremendous working relationship that we all hope can continue in future years. Other partners include Ministries of Education in Kenya, Tanzania and Cote d'Ivoire, The African Union, UNHCR, UNESCO, PAUWES, Millenimum@Edu and others whom we have worked with to enhance ICT integration in various sectors. I wish to acknowledge their great contribution to the success of GeSCI in 2019. Collaboration has shown what can be achieved by working together.

We are entering challenging times for the world in the years ahead, not least due to the post-pandemic environment in which we will have to operate. In respect of development aid, we have seen a change in approach from donors and this has the potential to severely curtail the work of organisations, such as GeSCI. It is to be hoped that donors will find a way of continuing to support and work with organisations such as GeSCI, so that we can continue to deliver our programme.

In these challenging times, I would like to leave you with the words of the Irish poet, Derek Mahon:

['Everything is going to be Alright'<sup>1</sup>](#)

*How should I not be glad to contemplate*

*the clouds clearing beyond the dormer window*

*and a high tide reflected on the ceiling?*

*There will be dying, there will be dying,*

*but there is no need to go into that.*

*The poems flow from the hand unbidden*

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<sup>1</sup> [https://twitter.com/rte\\_culture/status/1241334341839568902?s=12](https://twitter.com/rte_culture/status/1241334341839568902?s=12)

*and the hidden source is the watchful heart;  
the sun rises in spite of everything  
and the far cities are beautiful and bright.  
I lie here in a riot of sunlight  
watching the day break and the clouds flying.  
Everything is going to be all right.*

**Brendan Tuohy**

**Chairperson**

**Board of Directors**

**Global eSchools and Communities Initiative**

## Message from the CEO

In 2016 GESCI began the implementation of the African digital Schools Initiative (ADSI) programme designed to create digital schools of distinction through whole school integration of ICTs in teaching and learning in secondary schools in Kenya, Tanzania and Cote d'Ivoire. GESCI strongly believes that a reformed and more equitable education system can be greatly facilitated by the planned integration of digital technologies ICT in teaching and learning.

GESCI has extensive experience in assisting and collaborating with countries across Africa wishing to implement ICT - based strategies for the effective adoption of technology - assisted learning and teaching at all levels of education systems. GESCI's leadership development programme for national social and economic planning, incorporating the increasing role of digital technologies, continue to be available across the African continent.

GESCI is fortunate to have a very wide range of expertise among its staff with wide experience of transforming education systems through collaborative ICT-related policy making, and agreed ICT implementation strategizing.

I wish to thank the Board and members of GESCI for their advice, guidance and support. In particular, I want to thank and pay tribute to my Chairman, Brendan Tuohy, whose vision and drive saw GESCI come into existence, and who continues to enthusiastically provide guidance and support to GESCI and to its ongoing development and growth.

Over the years, our donors, in particular the Mastercard Foundation, have placed their confidence in GESCI. I appreciate their confidence and trust in us to deliver the outcomes and impact that their development strategies demand. We are grateful for their continued support. GESCI will always strive, beyond the norm, to fulfil its mandate.

Jerome Morrissey  
Chief Executive Officer

## Acknowledgement

GESCI's donors, partners and beneficiaries are critical collaborators - without their full support and trust, we would not have been able to achieve our organizational and programmatic objectives in 2019. We are deeply grateful to donors and partners for their guidance, advice, encouragement and financial support which enabled GESCI to operate, grow in capacity and influence, and to implement its programmes in an efficient and effective manner. We also highly appreciate the contributions, enthusiasm, openness, commitment and trust with which our beneficiaries across Kenya, Tanzania and Côte d'Ivoire engaged with and supported us. This can never be taken for granted. We thank Mastercard Foundation for its valuable support and commitment to GESCI's work, particularly to our key programme, the *African Digital Schools Initiative* and its delivery in three African countries – Kenya, Côte d'Ivoire and Tanzania.

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## Acronyms and Abbreviations

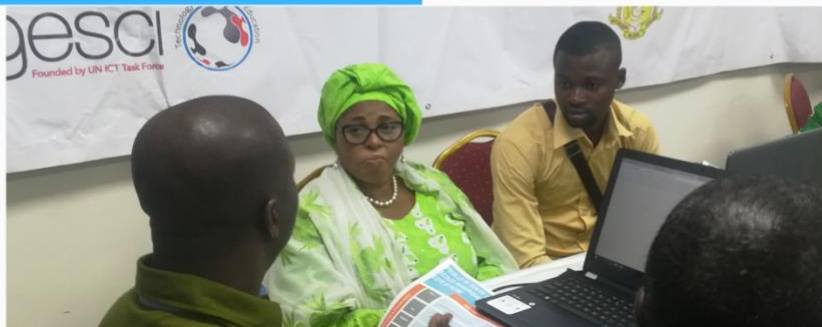
ADEA	Association for the Development of Education in Africa
ADSI	African Digital Schools Initiative
AUC	African Union Commission
CESA	Continental Education Strategy for Africa
DSD	Digital Schools of Distinction
EMIS	Education Management Information Systems
ENEA	Ecole Numérique d'Excellence Africaine
ERNWACA	Educational Research Network for West and Central Africa
EWG	Expert Working Group
EU	European Union
GESCI	Global E-Schools and Communities Initiative
ICT	Information Communication Technologies
IGAD	Intergovernmental Authority for Development
KD	Knowledge Deepening
KC	Knowledge Creation
KCSE	Kenya Certificate of Secondary Education
MCF	Mastercard Foundation
MDE	Mini Grid, Digitalization and Entrepreneurship
MERL	Monitoring, Evaluation, Research and Learning
MOEST	Ministry of Education, Science and Technology (Tanzania)
MTHE	Ministry of Technical and Higher Education
MTR	Mid Term Review
OER	Open Education Resources
PAUWES	Pan African University of Water and Energy Sciences
PAVEU	Pan African Virtual E-University
PPG	Programme Partners Group
PSIPSE	Partnership to Strengthen Innovation and Practice in Secondary Education
PTA	Parent Teacher Association
RELI	Regional Education and Learning Initiative
SBC	School-Based Coordinator
SST	School Support Team
SADC	Southern African Development Community
STEM	Science, Technology, English and Mathematics
TEA-LP	Transforming Energy Access Learning Partnership
TL	Technology Literacy
TVET	Technical, Vocational Education and Training
UNHCR	United Nations High Commissioner for Refugees
UNESCO	United Nations Educational, Scientific and Cultural Organization
YSK	Young Scientists Kenya

## 1. Overview



### Overview: 2019 Activities

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In implementing its Strategic Plan 2017 – 2020, GESCI focused on two main operational streams, viz. programme implementation and strategic partnership building for sustainability and scale, while exploring new initiatives and opportunities to raise resources for new programmes.

#### **GESCI Strategic Plan 2017 – 2020, “From Vision to Action –Delivering What We Promise”,**

GESCI envisages a world where the widespread use and integration of digital technologies will transform learning and realise higher levels of equality and inclusiveness. It is a world where ICTs are efficiently used to support governments and communities for inter alia: equitable access to a high quality education in formal and informal learning environments; ICT competency skills for better teaching and learning to improve student achievement and acquisition of 21st century skills; digital skills development for youth employment and entrepreneurship to equip young people with the technology-driven skills and capabilities required for self-employment and the job market; securing gender equality in participation and achievement in education and training; Multi-level leadership competencies at Government levels for planning inclusive and sustainable social and economic development; and scaling-up learning opportunities in community- based settings for social transformation.



2019 was dominated by the continued implementation of its African Digital Schools Initiative (ADSI) programme with Ministries of Education and their decentralised structures in Kenya, Tanzania and Côte d'Ivoire. The key strategic thematic focus areas were whole school ICT integration and development, teacher professional development in ICT competencies and learner skills for the world of work.

This year GESCI won a tender with the Pan-African University of Water and Energy Sciences (PAUWES) and began developing a post-graduate online programme in Entrepreneurship in renewable energies, with a focus on the smart mini-grid sector.

GESCI continued its relationship with the European Union's support to the Ministries of Education in Sierra Leone in strengthening education system management in order to improve equity and quality; EMIS as well as learning outcomes.

Strategies for partnership building for sustainability and scale initiatives were sought to extend GESCI's reach and impact to more regions, countries and beneficiaries, and to become more influential in agenda setting on the African continent for educational transformation and development. GESCI continues to align its activities and support to the implementation of [continental Education Strategy for Africa \(CESA 16-25\)](#) to deliver better education standards and learner achievement through the incorporation of effective IT integration; increase higher levels of quality employment and scale up entrepreneurship and innovation. In doing so, GESCI will continue to fulfil its vision, mission and organisational objectives and remain relevant to its partners and beneficiaries.

A significant proportion of the year's activities were taken up by monitoring and evaluation activities. First half of the year on an internal midline review of ADSI using the original baseline studies as the benchmark and latterly, by an external independent mid-term review of ADSI's implementation in the three countries, Kenya, Tanzania and Cote D'Ivoire. There was high congruence between the findings of both. The independent review recognized GESCI as having *"impressively established the organisational architecture and financial framework to enable mandate implementation and achievement of the expected results that are well-suited to the priorities and policies of the target groups in each of the three countries."* The conclusion of the review was that the key challenge now is ensuring that there is sufficient space to progress further and to assess as clearly as possible to what degree the current approach and resource allocation is aligned with the teacher professional development and ICT priorities of the respective country governments, both educationally and financially. The independent review gave impetus to GESCI to improve its communication practices, review its institutionalization strategies with added emphasis on learning from monitoring and evaluating its impact on multiple levels.



*Students at Loreto Girls Kiambu following through a lesson.*

GESCI, in common with many other development actors, is facing a serious funding challenge for its activities, particularly as its major programme, the Mastercard Foundation funded African Digital Schools Initiative (ADSI), ends in early 2021. There is increasing competition for the donor dollar in a progressively more competitive and globalized marketplace. GESCI needs a renewed effort to raise funding from both traditional and alternative funding sources and invest in generating more income from the private sector and foundations. During 2019, GESCI refined and crystallised its thematic focus areas and streamlined and aligned its operations for improved efficiency and better outcomes and impact.

In executing its initiatives and plans in 2019, GESCI was guided by its principles and core values of inclusivity, accountability, democratic participation, equal opportunities, non-discrimination, transparency, empowerment and sustainability. In all its operations GESCI has continued to strive to carry out its work ethically, with integrity and with passion and commitment.

## 2. GESCI Programmes

This 2019 annual report will reflect on the achieved outputs of its major programmes - the ongoing five- year ADSI programme, as well as two new programmes that were implemented during the year.

### 2.1 PAUWES/GESCI Mini Grid, Digitalization and Entrepreneurship programme

A new programme of GESCI's initiated in June 2019 is the PAUWES/GESCI Mini Grid, Digitalization and Entrepreneurship programme (PAUWES-MDE). This is an online post-graduate programme implemented in the frame of the Transforming Energy Access Learning Partnership (TEA-LP) which supports 8 African universities to develop multidisciplinary and well-rounded curricula for postgraduate students with a view to bridging existing skills gaps in the Sub-Saharan Africa energy access sector.

PAUWES-MDE is being developed in collaboration with the Pan African University of Water and Energy Sciences (PAUWES) hosted at the University of Tlemcen, Algeria<sup>2</sup>. The institute is part of the Pan African University – a project initiated by the African Union to revitalize higher education and research in Africa.

The course aims to strengthen students' capacities with innovative business ideas in the mini-grid sector in Africa. It integrates actors, stakeholders and specificities of innovation and entrepreneurship ecosystems in the continent (Tech-Hubs, Fab-Labs/Makerspace, Mentoring and Business Angels, Pitch, Competition, etc.) with strengths of higher education systems geared toward skills and competences for the setup of start-up in a flexible and agile manner. GESCI is responsible for the entrepreneurial dimension of the post-graduate programme, focusing on implementing entrepreneurial ideas in business start-ups.

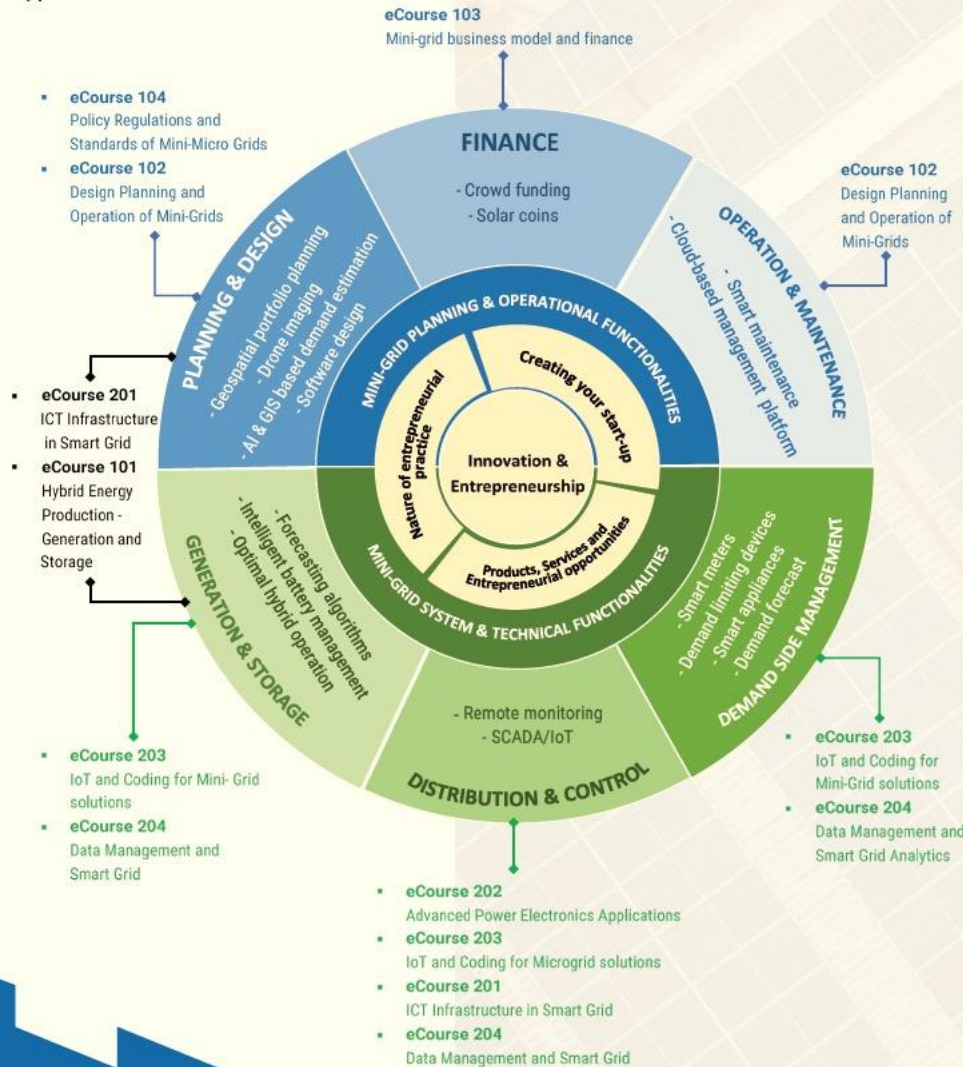
In late 2019, GESCI signed a project management agreement with University of Cape Town, South Africa who is coordinating the TEA-LP project across universities in Africa. Since the project started, GESCI has collaborated in the programme design, the draft curriculum structure and co-produced the Employers Needs Assessment Report. The development of the course will be completed by December 2020 with the registration of students early 2021.

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<sup>2</sup> For more information please visit [www.pauwes.dz](http://www.pauwes.dz).

# Programme Structure

The programme is built around three layers represented in the diagram below. The first layer in the center which is transversal, provides innovation and entrepreneurship skills and knowledge and is built around three core courses. The second layer highlights the main functionalities of mini-grid clustered in Operation & Maintenance and System & Technical functionalities together with the respective applications of digital technologies to these functionalities. Finally, the third layer presenting the different courses offered by the programme aiming at developing specific digital-based capacity and skills applicable to a specific functionality of mini-grid, in which the students would develop their entrepreneurial business case and prototypes.





## 2.2 Strengthening education system management in Sierra Leone

In late 2018, GESCI was contracted as a technical advisor to the Ministries of Basic and Higher Education in Sierra Leone to design a joint sector EMIS strategy for Sierra Leone under an European Union Financing Agreement (12/2016) which seeks to improve the capacity of the National institutions (here the Ministries of Education) to collect and use data for informed decision making.

Regular GESCI missions in 2019 have supported the assessment of the current systems including ICT equipment needs, the design of a joint EMIS system, a Costed Capacity Development Plan, draft policy, information standards and MOUs with Statistics Sierra Leone as well as an agreement proposal on regional EMIS Partnership in the pipeline between South Africa Department of Higher Education, TVET, Science and Information (DHET) and Ministry of Technical and Higher Education, Sierra Leone.

There is a need for holistic approach and therefore an EMIS Strategy and implementation Plan for the whole education sector, encompassing all education fields including Non-Formal Education, a Teacher Management Information Systems and even a Labor Market Information System. The Minister for Basic and Senior Secondary Education has requested the GESCI EMIS to schedule a mission to Sierra Leone in the very near future for first consultations. The overall timeline is that such a Sector Wide Strategy would be finalised by the end of 2020.

## 2.3 African Digital Schools Initiative (ADSI)



*Teachers in Tanzania display certificates after the Knowledge Deepening Certification ceremony.*

GESCI's key implementing programme remains The African Digital Schools Initiative (ADSI) which is a planned programme of activities and resources to turn secondary schools into Digital Schools of Distinction with pedagogically skilled ICT competent teachers, the details of which will be elaborated below.

The ADSI, is a consolidated model presents a portfolio of ICT-assisted innovative elements in schools that can lead to the generation of policy coherence for whole-school ICT integration to enhance teaching and enrich the learning experience. This is accomplished through a blended-learning teacher progressive development in the pedagogical integration of ICT through three phases up to professional skills in content development and creation. It also includes the progressive transformation of schools to *Digital School* status, which is driven through concurrent

actions in five key thematic areas – *school leadership development for whole-school ICT strategy development, teacher professional development in ICT integration, ICT school culture, ICT in the curriculum and ICT infrastructure*. In addition, a system of digital school awards, accreditation and certification to incentivize ICT integration and progression and to encourage the acquisition of 21st century skills by students which are embedded in teacher lesson plans and facilitated through project-based learning methodologies. Additionally, new Technology Entrepreneurship Clubs have been introduced for learners to use ICT technology (coding skills that improve their algorithmic knowledge) for applications to community-identified challenge and needs in the form of small start-up businesses.

All of the elements of the ADSI programme implementation are supported by building the capacity of relevant stakeholder groups. At the national level, the “Expert Working Group”, consisting of experts drawn from curriculum development, teacher training institutions and ministerial representatives, work on customizing the teacher ICT-based professional development and various digital platforms. The “School Support Team”, consisting of Local Government Authority officials and education officers, support schools and teachers in the teacher in their professional practice, in assessing lesson plans, classroom observations participating in peer-to-peer discussions. Each school has a School-Based Coordinator (SBC), a champion teacher who facilitates support for the teachers and receives specialized training. Finally, the “Community support Committee” representatives (including local private sector) support the Technology Entrepreneurship Clubs as well as solving learner related problems arising within the school, in particular advice on student retention and removing barriers for access.

### 3. Programme Implementation

#### [3.1 PAUWES/GESCI Mini Grid, Digitalization and Entrepreneurship programme](#)

TEA-LP, funded by the UK Department for International Development, aims to support universities to develop multidisciplinary Masters level curricula with a view to bridge existing skills gaps in Sub-Saharan Africa’s rapidly-growing renewable energy access sector, held their first partner workshop in Nairobi, Kenya in August 2019. Its objectives were: to develop a better understanding of the energy access sector and its capacity needs; to develop a shared understanding of an outcomes driven curriculum design and Teaching- Learning-Assessment Plan; to offer an opportunity for the partners to refine their initial curriculum development plans; to start building a community of practice for capacity building in clean energy access; to discuss other funding opportunities and to contribute to the research agenda of the project.

Subsequent to that workshop, GESCI supported the development of a stakeholder/employer survey to assess the market needs of the mini-grid sector in terms of entrepreneurship, gender opportunities and course curricula addressing the “smart” or ICT dimension of the mini-grid sector. A draft curriculum structure and a draft Stakeholder/Employer Report was developed collaboratively with PAUWES.

#### [3.2 Strengthening Education Management systems in Sierra Leone](#)

Under the European Union Sector support to the Ministry of Education, Sierra Leone, GESCI is providing ongoing technical support to the Ministry’s Planning and Policy Unit on developing the capacity of staff, policy and strategic plans. In February - May, GESCI PPP Manager assisted in the development of a draft EMIS policy, School Registry



and School Report Card system. Additionally, GESCI explored blended learning options with the teacher development units of the Ministry of Technical and Higher Education with a proposition of a new ICT integrated model for teacher training.

In September, GESCI facilitated the training of government officials from the Ministries of Basic and Senior Secondary Education and Technical and Higher Education over a two-week period in Cape Town South Africa. The first week focused on EMIS and the second week the group split between GIS and M&E training with a focus on applications for their sector contexts.

In November, GESCI facilitated a study tour by representatives of the Ministry of Technical and Higher Education (MTHE) Sierra Leone Visit to South Africa's Department of Higher Education and Training (DHET) and institutions in Pretoria, South Africa. The purpose was knowledge sharing in establishing a Higher Education and Training EMIS and Quality Assurance systems. Participants included MTHE, DHET, Quality Assurance Councils, Higher Education Institutions (4 universities and polytechnics), NEPAD, Microsoft South Africa, Skills for Africa Initiative (SIFA) and Adapt IT. An outcome of the meeting is a commitment by the two Ministries to have a regional partnership agreement; by NEPAD to prioritize its involvement in Sierra Leone and Microsoft to partner the Ministry on an *Educational Transformation Journey*. MTHE agreed to write to the AU requesting it becomes a beneficiary of SIFA support. GESCI has received a request (via the EU) to extend its contract for another 60 days in 2020 to finalize its support in developing a joint Ministerial EMIS Strategy.

### [3.3 African Digital Schools Initiative \(ADSI\)](#)

Over the past year, ADSI project implementation followed the expected outputs despite some deviations from the project plan. In the year 2019, the ADSI programme reached out to 139,861 students with 50% boys and 50% girls.

- (1) Cumulatively, GESCI trained 2,696 Teachers as against the originally agreed target of 1,400 teachers - an additional outreach of 92%. Similarly, a total of 185 principals and Heads of Schools were trained as against 140 planned - a 32% increase.
- (2) In Côte d'Ivoire, a teacher strike lasting 4 months pushed back the Knowledge Deepening cycle by another term hence, *Ecole Numérique d'Excellence Africaine (ENEA)* project is extended up to April 2020.
- (3) In Tanzania, with the launch of the Government's Teacher Education Strategy Plan (TESP) in 2017, funded by Canadian International Development Agency (CIDA), the ADSI Country team was asked for collaboration and the ADSI learning model was incorporated in the pre-service training programme under the "Teacher Education Support Programme". In addition to ADSI programme implementation, three Teacher Training Colleges were selected in consultation with MOHEST and TESP to launch an ADSI Colleges Initiative by involving 12 educators per college in teaching the ICT integration approaches of ADSI.
- (4) In Kenya, 522 STEM teachers successfully completed all 3 cycles of the ICT-based Teacher Professional Development and are being considered for diploma accreditation by a local university.
- (5) By the end of 2019, 85% of schools achieved *e-confident* status and 50% of them have introduced technology and coding clubs with the support of ADSI.

The following tables provides a summary of engagement with stakeholders;

Country	No. of Schools	No. of Students		Principals / Heads of Schools*		Teachers (includes SBCs)*		Officials (EWG/SST)	PTA Rep/ School Board Chair
		Boys	Girls	Male	Fem	Male	Fem		
Kenya	80	22,194	21,753	68	47	1,173	773	39	320
Tanzania	40	14,563	16,376	36	11	370	136	18	160
Côte d'Ivoire	20	33,181	31,794	13	10	212	32	12	80
Total	140	69,938	69,923	117	68	1,755	941	69	560

### 3.3.1 Kenya ADSI



*Students at St. Paul's Gekano Boys, Nyamira County, Kenya collaborating during a Physics lesson.*

ADSI is being implemented in 80 secondary schools located in the counties of Nyamira, Narok, Taita Taveta and Kiambu in Kenya, and directly impacts 1,142 STEM and other subject teachers. In addition, with the assistance of GESCI trained school-based coordinators (SBCs) and teachers, in school training programmes were conducted for 804 Teachers, Cumulatively, 1,946 Teachers were trained. A total of 115 Principals were provided with trained and the total number of student beneficiaries was 43,947 with 51% of boys and 49% of Girls.

By the end of 2019, among 80 Schools, 522 STEM teachers had successfully completed all three cycles of the ADSI Teacher Professional Development programme. In the Digital Schools of Distinction initiative, 68 (85%) out of 80 schools have reached *e-confident* status and continue to progress towards the *e-mature* status during 2020.

**KD cycle certification:** By January 2019, a total of 756 of 800 ADSI teachers were certified as having successfully completed the Knowledge Deepening (KD) cycle, the second of the three TPD cycles.

**Face to Face training for Teachers and School Based Coordinators:** A face to face training programme on “Knowledge Creation” (KC - the final TPD cycle) was held with 800 teachers of Science, Technology English, Mathematics and other subjects. This training focused on the integration of 21<sup>st</sup> Century skills in teaching, in particular innovation and creativity as well as hard to teach concepts.

**Online tutoring;** GESCI’s Country team facilitated the delivery of Modules 1 and 2 online for the KC cycle. As part of online tutoring, the key concepts and competencies such as Information Literacy, search of educational content through readily available Open Educational Resources were highlighted.

**School visits and classroom observations:** The Expert Working Group (EWG) and the School Support Team (SST) from the Government system, facilitated by the GESCI team, visited 80 secondary schools during the online delivery of Module 1 and 2 to monitor the ICT integration process in the classroom. Overall, 812 lessons were observed. Teachers at schools were also encouraged to participate in peer review sessions on these class observations. Increased peer learning among SBCs, teachers and schools has raised the quality of outputs in the teachers’ portfolios and enhanced ICT integration in teaching and learning at the classrooms. Ministry officials, members of The Regional Secretariat of pilot counties, were invited to participate in the school visits and classroom observations. An average of 10 lessons per school was achieved compared to 6 lessons per school during the year 2018.

**ADSI Schools participation in Young Scientists Kenya:** In June 2019, out of the many Kenyan schools which applied, ten ADSI Secondary Schools were short-listed to present their projects at the national Young Scientists Kenya (YSK) event from 6<sup>th</sup> – 9<sup>th</sup> August, 2019. Four of the ADSI school projects selected were in the field of Technology, five in Science and one in Social Awareness. The YSK is a unique platform in East Africa, for young people from across Kenyan counties to demonstrate their innovation and showcase their scientific talents. In this highly competitive event, Joytown School from Kiambu county, an ADSI school won the second prize at the national level.

**Digital Schools of Distinction Graduation:** In 2019, 68 schools (85%) across four counties qualified and were awarded with e-Confident status of the DSD Roadmap. The school principals received certification and plaques in recognition of their lead roles in contributing and achieving their teachers to utilise and integrate digital technologies in their teaching. Subsequently, face to face training was provided to Principals, School Board Chair, Parent-Teacher Association representatives, and School Based Coordinators (SBCs) on the requirements and strategies for reaching the final e-mature stage of DSD roadmap.

**Sustainability Training for Heads of Departments in Secondary Schools:** Between September – November 2019, over 300 Heads of Departments and 80 School Based Coordinators from all ADSI secondary schools were trained to support teachers to integrate new levels of ICTs in their teaching and learning as well as strategies to promote whole school development using the Digital Schools of Distinction (DSD) roadmap.

**Coding clubs in Schools:** In Q3 of 2019, GESCI introduced coding clubs in 40 schools in order to further promote ICT enabled learning among learners, with an emphasis on teaching algorithmic principles and 21<sup>st</sup> Century skills. Ensuring integration into the government’s national strategy on coding clubs, ADSI school coding clubs are being supported by I-EARN and Industry experts - providers used by the Ministry of Education. The coding clubs shall be supported in a structured approach during 2020 to develop various projects as well as the schools will be guided to set up entrepreneurship clubs to explore start-opportunities.



### 3.3.2 Tanzania ADSI



*A group photo of participants at the Tanzania PPG meeting held in Morogoro, Tanzania*

ADSI in Tanzania is being implemented in 40 schools covering Pwani and Morogoro regions. It reached out to 506 STEM and other subject Teachers, 47 Heads of Schools and 30,939 Students in 2019.

The second cycle of Teacher Professional Development was completed for all 40 schools and 393 Teachers received the certification. A total of 506 Teachers (including new joiners as transfers - an increase of 27%) and 15% more Principals of Schools were trained.

On the progress towards Digital Schools of Distinction (DSD), all 40 schools achieved the *e-enabled* status. Assessments are in progress for schools that have completed the *e-confident* stage of DSD.

**Teacher's certification;** In January 2019, a total of 393 out of 400 STEM teachers were certified as having successfully completed the Technology Literacy cycle, the first cycle of the TPD. As part of the event, feedback was collected from Teachers and inputs considered for the following cycle implementation and from this learning notes / sessions were developed.

**ICT Infrastructure:** In a bid to accelerate ICT integration in schools, the second instalment of 80 new laptops were distributed - two to each of each of the 40 schools. Cumulatively, each school has received 5 laptops, 2 LCD projectors and 1 router.

**ADSI Impact in Schools – Morogoro, Pwani, Tanzania:** In March, project coordinators were trained at four ADSI supported secondary schools in the different regions in Tanzania on monitoring and tracking key activities and changes that can be attributed to the GESCI intervention.

**Face to face training programme for SBCs and Teachers:** During January and February 2019, 400 Teachers and 40 School Based Coordinators (SBCs) were trained face to face on the Knowledge Deepening (KD) Cycle. The training focused on project based learning strategies and activities.

**Expert Working Group:** The Expert Working Group (EWG) meeting was held in June 2019 to validate the modules for the Knowledge Creation cycle. They also identified new Digital Learning Resources which teachers could use to integrate in their classroom practices.

**Online tutoring;** From February to September 2019, the GESCI Country team facilitated the online delivery of Modules 1 and 2 online for this same cycle, reinforcing the knowledge and skills gained during contact training.

**School visits and classroom observations:** Running concurrently with the online training, starting February to September, the Expert Working Group and School Support Team from the Government system, facilitated by the GESCI team, visited 40 secondary schools during the online delivery of Module 1 and 2 to monitor the ICT integration process in the classroom. Overall, 469 lessons were observed. Increased peer learning among SBCs, teachers and schools has raised the quality of outputs in the teachers' portfolios and enhanced ICT integration in teaching and learning at the classrooms.

**Digital Schools of Distinction Graduation:** In 2019, all 40 schools in Tanzania graduated at *e-enabled* status. Subsequently training was provided to School Head Teachers, PTA, School Board and SBCs for the *e-confident* phase of deeper ICT integration.

**Annual Joint Education Sector Review meeting:** In September 2019, The Ministry of Education Science and Technology in Tanzania organized a three-day review of the education sector with various partners, including GESCI, on implementing education programmes in Tanzania. In this meeting, the President's Office, Regional Administration and Local Government (PORALG) and the Ministry of Education, Science and technology (MoEST) have agreed to look at the key elements of ADSI for scaling up this programme in Tanzania.

**African Digital Colleges Initiative and Teacher Education Support Project (TESP):** In November 2019, GESCI participated in a meeting with officials from the Ministry and partners on TESP which agreed to collaborate with our African Digital Colleges Initiative and apply the learnings in pre-service Teacher Training Institutions. GESCI visited three Teacher Training Colleges where 36 staff members were identified to participate in the training and school visits for classroom observations during 2020. As part of the Knowledge Creation cycle training programme in Jan 2020, the identified faculty members have joined the training programmes along with the SBCs and Teachers.

**Partners Group Meeting:** In November, GESCI held a Project Partners Group meeting with education ministries, universities and other educational institutions in Morogoro. The purpose was to review project progress and to address the sustainability and scaling up aspects of the project. Some of the key recommendations are greater engagement with government on a sustainability strategy, sharing of ADSI resources, expanding the project to other schools (PORALG is planning to roll out ICT infrastructure for 1,500 schools from 2020-21) and the integration of our TPD programme in the preservice Teacher Training Colleges.



### 3.3.3 Côte D'Ivoire ENEA



*Heads of Schools display the e-Enabled Plaques received during the Digital Schools of Distinction Award ceremony in Abidjan, Côte d'Ivoire.*

In Côte D'Ivoire, ADSI programme is called Ecole Numérique d'Excellence Africaine (ENEA). The ENEA programme is being implemented in 20 schools in Abidjan and Yamoussoukro regions and reached 244 STEM Teachers, 23 Heads of Schools and 64,975 students.

The ENEA initiative, which started during the second half of 2017, differs from the other two countries in programming, school resources and structure and language of delivery (in French). Cote'D'Ivoirean secondary schools have very large class sizes, high pupil/teacher ratios as well as additional grades as compared to secondary schools in East Africa. The ENEA has a Francophone academic calendar of September to June. It is a pre-pilot with just two of the three ADSI TPD cycles planned. It is due to end in April 2020.

**Teachers certification;** By January 2019, some 166 out of 200 teachers were certified as having successfully completed the Technology Literacy (TL) cycle, first of the three cycles, by the Ministry's Director of Cabinet, Mr.Kabran Assoumou, who remarked: "Teachers must embrace the comprehensive opportunities that the ENEA provides to become digitally-enabled teachers and more professionally competent to enrich the learning experience of their students".

**Online tutoring;** From January to May 2019, the GESCI Country team facilitated the delivery of Modules 1 and 2 online for the TL cycle. As part of online tutoring, the key concepts of information literacy, powerpoint presentation and ICT integration in classrooms were learnt.

**Face to face Teacher training and online tutoring:** In September, ENEA held a face to face training workshop and all 200 teachers and SBCs were trained on the second cycle of TPD, the Knowledge Deepening cycle which focused on project based learning strategies and activities.

**Expert Working Group:** The Expert Working Group representatives drawn from the Ministry and line agencies in teacher development, met during January and September 2019 and reviewed/validated/approved the content modules for the Knowledge Deepening and Knowledge Creation cycles.

**School Support Teams:** Following orientation for classroom observation and peer review, the SST team from the Regional Education Department offices joined the GESCI staff for the school visits and classroom observations and peer review meetings.

**School visits and classroom observations:** The Expert Working Group and School Support Team comprising of officials from; Directorate of Pedagogy, Regional Education Department, Inspectorate, Ministry of National Education and TVET joined the GESCI team, visited 20 secondary schools during the online delivery of TL cycle and KD cycle. Overall, 112 STEM lessons were observed and peer reviewed using the tools and methodologies customized by the ENEA programme.

**Digital Schools of Distinction Graduation:** In May 2019, all 20 schools graduated as having achieved e-enabled digital status. The schools were awarded plaques and Heads of Schools certificates in recognition of their lead roles in promoting whole school development on a range of standards, in particular in promoting the integration of digital technologies in teaching. Subsequently, training was provided to School Head Teachers, PTA, School Boards and SBCs on the standards, strategies needed to achieve the *e-confident* digital stage of DSD roadmap.

**Programme Partners Group meeting;** The PPG meeting scheduled for 29th Jan 2020 is to bring all the stakeholders together to discuss the institutionalization, sustainability of ENEA projects in CIV. A key consideration will be whether there is sufficient support to extend ENEA to the final phase of the TPD programme - the Knowledge Creation cycle.

**Transition of ENEA programme in Côte D'Ivoire:** The ENEA programme transition is planned to end during the first 4 months of 2020. This includes; consolidation and certification for 2 cycles of TPD and 2 stages of DSD, comprehensive survey feedback and analysis from the Heads of Schools/SBCs and Teachers, recommendations from PPG/EWG meetings and the external MTR review. The Ministry of National Education has expressed keen interest to continue the pilot into a pre-scale model.

## 4. Monitoring and Evaluation of Learning (MERL)

During 2019, GESCI finalized the report for its internal midline review of ADSI in Kenya as well as participated in an external Mid-Term Review by independent researchers, Education Development Trust, commissioned by Mastercard Foundation. There was high congruence among the key findings and reflections of both the reviews.

### 4.1 Internal Midline Review

The internal review, begun in 2018 and finished early 2019, largely focused on the Kenya project because it was into its third year of implementation unlike the other pilot countries. The review provided an assessment of the ADSI programme in terms of the relevance, effectiveness, efficiency of project implementation and level of ownership by project beneficiaries and other actors; the degree to which resources and sustainability benefits have been optimized, lessons learnt and action-able recommendations that can be implemented by the project actors in the remaining phase of the project.

Some of the key highlights are

- 90% of schools were actively participating in the Digital Schools of Distinction roadmap with high buy-in and support by school leaders with schools showing a better resourcing for ICT infrastructure and equipment, as well as improvements in the schools' ICT culture.
- Nearly all teachers confirmed that their skills and confidence in ICT integration as well as modern teaching pedagogies had improved.
- Evidence demonstrated increasing collaboration among teachers and peer engagement on knowledge sharing.
- Students indicated improved skills, confidence and frequency of using computers for personal and school-related tasks. In 2019, MERL continued to track learners' performance on STEM subjects among the ADSI schools despite difficulties in accessing data.
- Government stakeholder reported satisfaction that ADSI is well aligned to national goals and initiatives and appreciated the close collaboration and approach in implementation.

MERL continued to strengthen internal feedback loops by mining, collating, analysing project data and producing 'learning notes' for reflections and continuous improvement of the project and sharing of knowledge across the three countries.

## 4.2 External Mid-Term Review

An external independent ADSI Mid Term Review (MTR) by Education Development Trust, was commissioned by Mastercard Foundation. This external review was conducted from June to December of 2019 and covered ADSI implementation in all three countries. The review criteria were informed by the OECD DAC criteria as well as looking at the issue of sustainability and scaling up.

In June 2019, The Education Development Trust (EDT) began the mid-term review of the African Digital Schools Initiative (ADSI) by conducting field visits across all the project regions in Kenya and Tanzania. Interviews were held with Government officials, school leaders, teachers, parents' representatives and students to collect data and feedback on progress achieved by the African Digital Schools Initiative in these countries. The missions also involved visits to partner organizations namely; Morogoro Teachers training college in Tanzania; The Centre teacher training colleges, The Centre for Mathematics, Science and Technology Education in Africa (CEMASTE), University of Nairobi, College of Information and communication Technology, University of Dar es Salaam. The focus was not only on the relevance, effectiveness, sustainability and impact of this innovation but also on processes that need to be in place for greater sustainability and scaling up the initiative more widely.

## Impact of ADSI

After the first three years, the African Digital Schools Initiative can demonstrate:

- National examination performance increases in English 21%; Biology 20%, Chemistry 26% and Physics 11% in ADSI school averages between 2016 and 2018
- Close to 100 % participation by the teachers, school heads and school management boards
- Teachers have become competent in managing and using effective technological configurations such as laptops and digital projectors
- 140 schools are satisfactorily progressing through the phases of pedagogical competency in ICT integration and most have achieved the e-enabled stage,
- Many schools have been successful in attracting external funders to fund their own ICT laboratories, wireless network and servers
- Teachers have become skilled to build, source and re-purpose relevant open source materials and other freely available online content, videos and simulations relevant to meeting curricular learning objectives. Where textbook are still the primary and often the sole teaching and learning resource, teacher – produced materials augment textbooks and enrich learning in STEM subjects and across the curriculum.
- Greatly increased access and use of ICT among students both in and out of school, with improved the skills, confidence and frequency of using computers for personal and school-related tasks

The following very brief summaries indicate some of the findings from the independent Medium Term Review:

### **Relevance**

There are very good structures and mechanisms in place that support the implementation of the ADSI framework for cross-cutting issues and the operating model and management of the human and financial resources support relevance and agility.

### **Effectiveness.**

ADSI has consistently shown that its focus is on key operational functions (e.g. human resources, resource generation and programming) and that these functions are continuously geared to support strategic direction and deliver results. The challenge is now to ensure it is strategically aligned with the continuous professional development and ICT priorities of the respective country governments.

### **Impact.**

ICT-based professional development was effectively delivered and an additional 39% teachers were included. A significant reason assisting ADSI to achieve its stated objectives is due to the extensive advocacy and dissemination across the different tiers of government. The ADSI team successfully and concurrently managed the programme implementation across three countries. The ADSI team maintains a very comprehensive management structure.

### **Assessment.**

The ADSI programme is being delivered effectively through high quality leadership and management. The programme is deploying and developing a high quality, multi-disciplinary team with each member possessing the appropriate skills and mindsets to deliver the programme objectives. The data and evidence demonstrate that the programme is achieving some impact.

A challenge which has faced ADSI in all three countries has been the difficulty to obtain accurate comprehensive learner data on performance both academically and in improvements of 21<sup>st</sup> Century skills.

### **Sustainability.**

GESCI formalized a systemic Sustainability Plan for ADSI. The Plan considered not only Sustainability (ADSI to continue beyond the life of the project) but also Institutionalization (incorporation of ADSI in national policies, plans and structures) as well as Scale-up (operate ADSI at a wider scale) and Enabling environment and infrastructure (the conditions needed for all three above mentioned dimensions). GESCI is currently developing its ADSI Institutionalization Strategy for 2020 for each of the host countries.

Notably the MTR review concluded the following:

*“ADSI has shown that its solutions are informed by evidence about the key drivers of rapid educational improvement and they have been tailored to offer innovative approaches across very different local contexts. Further these solutions are based on system analysis and local diagnostics and they are explicitly building on local strengths although to what degree these solutions are embedded and will endure is less clear”.*

The MTR also noted that critical to promoting ADSI going to scale is an increasing emphasis on MERL, with a strong focus on gathering quantitative data on learner and teacher performance changes and qualitative research on



learnings from the field. These not only provide the basis for sharing of impact and outcomes to potential new recipients but allow ADSI to continuously review its implementation strategy and refine its business model.



*A teacher at Precious Blood Kagwe Girls, Kiambu County, Kenya assisting his students.*

## 5 . Partnership Building and Networking for Sustainability and Scale

In 2019 GESCI re-evaluated its strategy on strategic partnership building and networking, particularly as its attempts to create new funded grants or resourcing streams continued to prove difficult, particularly in accessing new target markets in the areas of refugee education and in and outside of Africa.

### 5.1 Global Engagements

GESCI continued to promote its approach and models of ICT integration in education and training by playing leadership roles in high-level meetings in education fora globally.

#### ICTs in Education and Training

- These included a presentation at the *15th World Conference on "Intellectual Capital for Communities"* in Paris, France. Organized by the European Chair on Intellectual Capital, the University of Paris-Sud and UNESCO's Intergovernmental Information for All Programme (IFAP), the conference theme was: **Artificial intelligence and the next generation of skills: What will be the impact of digital and artificial intelligence on jobs and professional qualifications?**
- GESCI's is a member of the mEducation Alliance steering committee whose *2019 Mobiles for Education Alliance Symposium* held in Washington D.C, USA themed **"Digital Literacy and Skills for Education and Development"** provided GESCI opportunities to network and moderate sessions on *Equity, Inclusion, and Digital Literacy*. The Mobiles for Education Alliance is currently composed of 24 steering committee organizations that are all committed to reducing barriers to access appropriate, scalable, and low-cost technologies in order to help improve learning outcomes in formal and non-formal education across all levels, especially in low-resource and developing country contexts.



## 5.2 Continental Engagements in Africa

### African Union partnerships

GESCI, as coordinator of the AU CESA Cluster on ICT integration in education and training, is a member of the **AU Innovating Education in Africa Expo** planning team for its second year since its inception. At the 2019 Innovating Education in Africa Expo held in Botswana GESCI's Country Manager, Kenya presented the **Future Teacher in African Digital Schools Initiative (ADSI)** and the CEO moderated sessions and was a member of the judging panel assessing the innovations.

The PAUWES-GESCI online postgraduates program on **Micro-Mini Grid, Digitalisation and Entrepreneurship** was presented during the parallel session on *Enhancing Access and Inclusion*. GESCI, a member of the Steering Committee for the implementation of the **Pan African Virtual e-University (PAVEU)** participated in a number of meeting in Yaounde, Cameroon in March and in Addis in November.

The Commissioner of HSRT, AU has accepted GESCI's offer of the online masters programmes in ICT Leadership, as well as collaboration on a Teaching and Learning diploma in ICTs.

### World Bank Partnership

Early in the year, GESCI was contracted by the World Bank to provide technical support to customize international ECD tools, **ECD Quality Learning Measurement**, developed by World Bank, UNESCO and Brookings Institute, to the Malawi ECD context for the Ministry of Gender, Children, Disability and Social Welfare. The purpose of the **Measuring Early Learning Environment (MELE)** Classroom Observation Tool is to provide an objective snapshot of the quality of the environment and experiences of children within a pre-primary program classroom on the day observed.

In January World Bank Education Practice Manager, Eastern Africa staff met with GESCI's Tanzania ADSI Manager and later with GESCI's head office staff in Kenya with a view to seeing alignment of ADSI with their Secondary Education Quality Improvement Project (SEQUIP) being implemented in multiple countries including Kenya. Based on GESCI's restructured Web-based costing tool **Total Cost of Ownership** analysis, GESCI was invited to support the Bank's "**Digital Skills Country Action Plan**". This includes co-facilitation of workshops with the World Bank Team along with Global Team of consultants in 5 countries and virtual support to 15 African countries on skills development and higher education support, likely to extend into 2020.

### Teacher Development Fora

Internationally, GESCI was also invited to present at **the 9th Pan-Commonwealth Forum on Open Learning** in Edinburgh, Scotland on implementing ADSI GESCI is exploring a partnership with COL on supporting a Teacher Futures project alongside the other three teacher training institutions that it supports in Tanzania under ADSI.

GESCI, as the co-coordinator of the UNESCO Working Group on ICTs for Teachers, participated in the *Teacher Development Workshop in Africa*, held in Addis, where it highlighted its Digital Schools Development Programme during the sessions on Secondary Education in Africa with a focus on preparing youth for the future of work. GESCI's ADSI Kenya coordinator, moderated a session on **African Regional Focal Points of the International Teacher Taskforce on Teachers for Education 2030**.

In July, GESCI moderated the session on **"Can innovation in education technology help to deliver at scale more flexible secondary education?"** at The Association for the Development of Education in Africa (ADEA) and

the Ministry of Basic Education of South Africa, with the support of the MasterCard Foundation, co-hosted this **High-Level Annual Policy Dialogue Forum on Secondary Education in Africa**, in Johannesburg, South Africa. At a pre-event GESCI CEO sat on a Ministers panel at Mastercard's "**Harnessing the Power of ICT to Transform Education Systems**", which brought together Ministers of Education and 30 other agencies and partners.

### 5.3 Regional Engagements

#### SADC

GESCI developed an "**e-Readiness Assessment Framework**" using the Digital Schools of Distinction elements and extending it to cover all levels of education upon the request of SADC to align with its Regional Indicative Development Strategy and the Digital Strategy 2040 under which this new framework could fit.

#### IGAD

GESCI as an expert member participated in the 5<sup>th</sup> meeting of experts of member states in charge of education on the implementation of the **Djibouti Declaration on Education for Refugees, Returnees and Host Communities** organized by IGAD in Addis, Ethiopia. GESCI made a presentation on **Digital skills**, which sparked interest from the Ministry of Education Uganda who wish to explore the Digital Schools of Distinction Model. Numerous discussions happened with focal points in Uganda subsequent to the meeting but there was not sufficient finance for its Ministry officials to visit ADSI schools in Kenya.

Mid-September, IGAD Secretariat requested that GESCI draft a **Memorandum of Agreement (MOA)** with themselves to concretize the relationship between them, with a particular focus on implementing the ADSI model in refugee communities among member states.

#### Regional Learning initiatives

GESCI participated in numerous meetings organized by **The Regional Education Learning Initiative (RELI)** a network of 70 organizations. At the **RELI summit** held in Uganda where members met to review progress made by different organizations, GESCI was elected as the Country Lead for the Values and Life-skills thematic cluster and the lead for mainland Tanzania (alongside Milele Zanzibar) in the upcoming design and testing of the first 21<sup>st</sup> century skills Assessment pilot in East Africa. There were various follow-up meetings of this group including a **Values and Life Skills Clusters** meeting of Cluster leads at a Leadership and Donors Meeting in Nairobi, Kenya Subsequent **RELI Tanzania Learn-Share and RELI Kenya Learn-Share workshops** were held in respective countries for organizations to: provide updates on their progress since the regional convening: showcase their work and share new learning.

### 5.4 National Engagements

#### Botswana

In January, GESCI was invited by **Ministry of Education, Botswana** to showcase an **African Digital Schools Initiative (ADSI)** model for implementation in Botswana. However, lack of funding meant this proposal did not materialize.

#### Kenya

GESCI has had numerous engagements with UNHCR, Kenya this year. In January, **UNHCR** requested GESCI to develop a concept note on creative digital media skills development for refugee youth in as well as a version of ADSI for Kakuma and Kalobeyi settlements. The note included a Mobile Phones/Laptops skills proposal as well. These were formally endorsed by UNHCR and later, by the IGAD Secretariat.

In April, at the request of UNHCR, Kenya, GESCI has developed a framework on **ICT/Digital Learning Strategic Framework for Refugees**, an ICT/Digital Learning Implementation for partners wishing to engage in programmes supporting refugee education. Later during the year, GESCI participated in various **UNHCR Coordination Meetings on Education for Refugees**

**The Partnership to Strengthen Innovation and Practice in Secondary Education (PSIPSE)** requested a visit to a secondary school in Kiambu County, to document experiences and efforts taken to ensure successful implementation of ICT in education initiatives.

GESCI as a member of the **National Primary Teacher ICT Competition** Advisory Board supported the Ministry of Education, Kenya, ICT Authority Kenya and partners to organise the National ICT Competition for teachers using ICTs in primary schools.

In August, GESCI's Salvation Army Joytown Secondary School, an ADSI school, won 2<sup>nd</sup> place in this prestigious competition, **Young Scientists Kenya Science and Technology (YSK) Exhibition** under the category of Biological and Ecological Sciences with their project on *"Extracting Limonene from Orange Peels."* Additionally **10 secondary schools implementing GESCI's African Digital Schools Initiative (ADSI) Programme were shortlisted from over 300 applications who presented their projects for the Young Scientists Kenya competition**, a unique platform in East Africa, for young people to demonstrate their innovation and showcase their scientific talents, and to develop projects that seek practical solutions to the problems we face within the society.

In November, GESCI was invited to participate in The **Teacher Futures Initiative Workshop** in Kenya involving key national stakeholders in identifying resources to integrate Inclusive Education Pedagogies in secondary schools, and a Teacher Futures program for the Commonwealth of Learning. Soon after GESCI agreed to partner with the Commonwealth of Learning to implement the **Teacher Futures Programme** in 20 secondary schools drawn from the Morogoro region in Tanzania. The programme is expected to kick off early in 2020. The goal is to provide an effective, sustainable and replicable model of School-based Teacher Development that can contribute to addressing the issues of pedagogical integration of ICTs, declining quality, inadequate teacher supply, and very limited or non-existent integration of ICT in secondary level education in Tanzania. The GESCI contract of agreement was drafted and submitted to COL.

### Developing partnerships

GESCI reached out to a number of partners for collaboration on bids and partnerships. In August, in Johannesburg, South Africa, GESCI met with the **Joint Education Trust (JET)**, an innovative education NGO active in many policy arenas to discuss possible research collaboration on ICT integration in education. During this year GESCI engaged with **Microsoft** South Africa with respect to knowledge sharing and resource mobilization on a number of engagements, in particular EMIS engagements.



*GESCI CEO Jerome Morrissey (Far Right) during a Ministerial round table session at the 2019 Innovating Education in Africa Expo in Gaborone, Botswana.*

## 6. Advocacy and Communication

### 6.1 Communication Strategy

GESCI reviewed and disseminated its revised communication strategy in the fourth quarter of 2019. The strategy seeks to:

- i. **Strengthen the GESCI image globally** as organization as a global player in ICT integration in Education and Training sector, as an innovative and catalytic organization promoting cutting edge models and tools and active in implementation and research in the sector (internal capacities)
- ii. **Raise the organization's profile nationally** for fund-raising, new partnerships and winning support from local and national stakeholders for its activities
- iii. **Promote internal institutional knowledge to achieve better understanding of GESCI activities** by staff, board and partners, dissemination of programme implementation and reporting on outputs and outcomes against institutional goals

The communication plan will focus on collecting, curating, packaging and disseminating information on ADSI impact and successes to critical stakeholders to;

- Strengthen institutionalization
- Support stakeholder buy-in and support
- Highlight ADSI's resonance with National Education policies and plans
- Highlight ADSI's scalable components to key stakeholders
- Support the generation of sustainability initiatives for the project

New proposed Advocacy and communications in 2020 will include strategies to **recognize and award Young Entrepreneurs, teachers, schools, best practices** to promote ICT integration.

Media relations will be improved through media alerts and press releases, a blog supporting promotional materials from partners, Media Cafe promotions, radio features and supporting the national documentary education channels (where they exist in pilot countries) with materials.

## 6.2 Media Relations

Our teacher training workshops, graduations and activities in the three countries were covered by Kenya Broadcasting Corporation TV, K24 TV, Ebru Africa TV, Tanzania Broadcasting Corporation, Independent TV, RTI TV, Abidjan News, The Star Newspaper, Mwananchi Paper and several national/regional radio stations.

In 2020, the strategy is to promote communication networking and coalition building which will include linking with continental Education Journalists Network (the AU's CAFOR), the Elimu Yetu Coalition (Kenya), Mtandao wa Elimu Tanzania - TENMET (Tanzania), local Education Development Partners Coordination group as well as regional networks such as Regional Education and Learning Initiative (RELI).

## 6.3 Social Media

Our Facebook page was instrumental in sharing longer detailed posts containing photos, videos, infographics and newsletters on our activities. Twitter played a key role in live tweeting during events as well as short - captioned photos from trainings and workshops. Our Newsletters and collaborative activities with partners were shared via LinkedIn. Our YouTube channel provides space for all our audiovisual content from our project, videos from school visits, media coverage were uploaded and shared on the channel.

## 6.4 Newsletter

GESCI's quarterly newsletter, champions a format and content to both illustrate its own activities as well as provide policy makers, development partners and education practitioners and managers in the sector with the latest information on forthcoming events, resources and opportunities related to ICT integration in education and training. Currently, GESCI has increased its distribution network to under 3000 readers.

## 6.5 Publications

GESCI's programme in creating digital schools of distinction and its innovative African Digital Schools Initiative were published in journals, reports and newspapers. They include: The Commonwealth Education Report 2019, The Continental Education Strategy for Africa (CESA) Journals (Volume 4 & 5), The Star Newspaper Kenya, The Education News Magazine Kenya, Habari Leo Newspaper in Tanzania, and Abidjan News in Côte d'Ivoire.

## 6.6 Web Site

The GESCI main website is a repository tool for all our resource materials; such as e-videos, publications, press cuttings and news releases, research papers and policy briefs

In 2019, it underwent a number of revisions in terms of access and new features. The site's resources were reorganized and relevant historical content was uploaded in the respective categories on Skills & Start-ups, Technology enabled teaching and learning, African Leadership for Knowledge Societies and GESCI Research. Additionally, new features on allowing users to donate funding was added.



GESCI shared its experience on the implementation and development of the model on the Youth Skills Development Programme dubbed African Knowledge Exchange on the **African Skills Portal for Youth Employment and Entrepreneurship (ASPYEE)**. The online platform ASPYEE forms part of Skills Initiative for Africa (SIFA) and serves as a knowledge repository to share and replicate these nationally-tried and –tested approaches throughout the continent. SIFA aims to promote and replicate successful practices and African solutions that contribute to decent employment, skills development and youth participation in entrepreneurship. It does this by providing financial and technical support to innovative vocational training initiatives in African countries.



*Narok High School Students during a lesson.*

## 6.7 GESCI Platforms

GESCI has three main platforms it uses for programme implementation.

**ADSI Learning Management Platform** <https://adsiteachers.gesci.org>. This platform is partitioned into two country specific platforms for Kenya and Tanzania allowing each to be customized to the specific needs of the hosted ADSI country projects. CIV have their own platform <https://fr.adsi.gesci.org> which is in French supporting 275 teachers. Up to 1,530 participating teachers (Kenya & Tanzania) and 275 in Cote D'Ivoire access the learning materials, the scheduled discussion forums, chats, webquests facilitated by the GESCI Country managers and Education Specialist according to which one of the three TPD phases in which teachers are participating.

**Digital Schools Platform** <https://dsd.gesci.org>. All 140 schools are individually registered on the platform and provide information requirements online to expected thematic standards associated with each of the four phases of e-initial, e-enabled, e-confident, and e-mature levels of achievement. Each school (and local education office) can easily access an assessment of its progress on these standards which allows the final validation and accreditation of the school's digital status by the local office.

**Open Education Resources (OERs) Platform** <https://oer.gesci.org> Participating ADSI teachers are required to upload lesson plans on a global OER platform which meet qualifying criteria. These lesson plans, requirements of which are TPD cycle dependent, in varying degrees, ought to demonstrate the integration of digital technology,

internet-enriched content, 21st Century learning strategies and a problem/project based approach to knowledge. Lesson plans assessed as at 80% and above are shared globally with other teachers.

**Community of Practice (COP) platform.** GESCI widened the participant base of its platforms, [www.leadership4sd.org](http://www.leadership4sd.org) to be used for the ADSI CoP. Approximately 1000 ADSI Teachers, in country specific groups, registered on the COP in the latter half of 2019. Including African Leadership in ICTs alumni and ADSI, there are already 1,518 members in the portal. The ADSI country teams and Education Specialist posts and moderates relevant themes / topics for discussions and webinars. There is a schedule guiding activities strategically placed in the portal at log -in phase for every teacher to interact with it and every resource is linked to it.

## 6.8 Videos

In 2019, a strategy was refined to include increasing use of infographics, videos and blogs. This included the filming of best practice classroom teaching in schools and sharing videos on websites as a resource. In May, June and July best practice lessons were filmed and uploaded on the ADSI ***Open Educational Resources online Portal*** to be accessed by other teachers in Kenya and within the region.



*The Education Director, Kiambu County, Victoria Mulili hands over an e-Confident Award plaque to Muthiga Girls.*

## 7. Organizational Development

### GESCI organization

GESCI is a global South organization with its headquarters in Nairobi, Kenya with 4 small offices located in four countries outside Nairobi, a Tanzania country office in Dar Es Salaam supported by two district offices and a country office in Abidjan, Côte D'Ivoire. Fifty percentage of GESCI staff are female and the vast majority of staff are African.

## 8. Financial Overview

As a non-profit organization, GESCI manages its expenditure prudently within its available resources. We are proud of our financial efficiency and accountability. In GESCI we ensure effective financial control and transparency of the financial data of our projects and reaping the trust and confidence from all those whom we work with.

### 8.2 Future funding of GESCI

The funding landscape for INGOS has changed significantly in the last three years. There is increased competition for funds and new trends are emerging which are quite challenging. The share of ODA funding targeting organizations headquartered in Africa declined over past decade. Overall, more than 50% of grants are spent on health, followed by international development and relief (32%) followed by education (3%). This figure of 3% includes grants to organizations with headquarters based outside of Africa as well as within Africa. Only 0,4% of this 3% is spent on primary and secondary school focused projects.

Of funds targeted to African headquartered organizations (like GESCI), international development remains the top priority for overseas development aid by share (23%) but is followed closely by education (20 %) but just over half of this funding for education is focused on higher and graduate education. Now, with MCF's substantial funding for education and skills in Africa, Gates Foundation activities in education and some small Asian interventions (Korea, China), there is a discernible shift towards secondary education.

The criteria for programme funding have quickly changed to prioritise fixed grants on payment for results achieved. The focus is on demonstrating impact on very large numbers of beneficiaries over a short period of time. Core organisational funding is not provided for in this new funding model.

GESCI is actively identifying new funding partners and is emphasizing its expertise and very successful global experience in delivering ICT-based programmes of excellence in secondary education and skills training and in leadership development for digitally-driven social and economic development.

### GESCI's Board of Directors



**Chairperson**

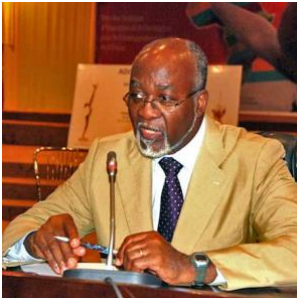
**Brendan Tuohy**



**Hendrina Doroba**



**John Muthangya**

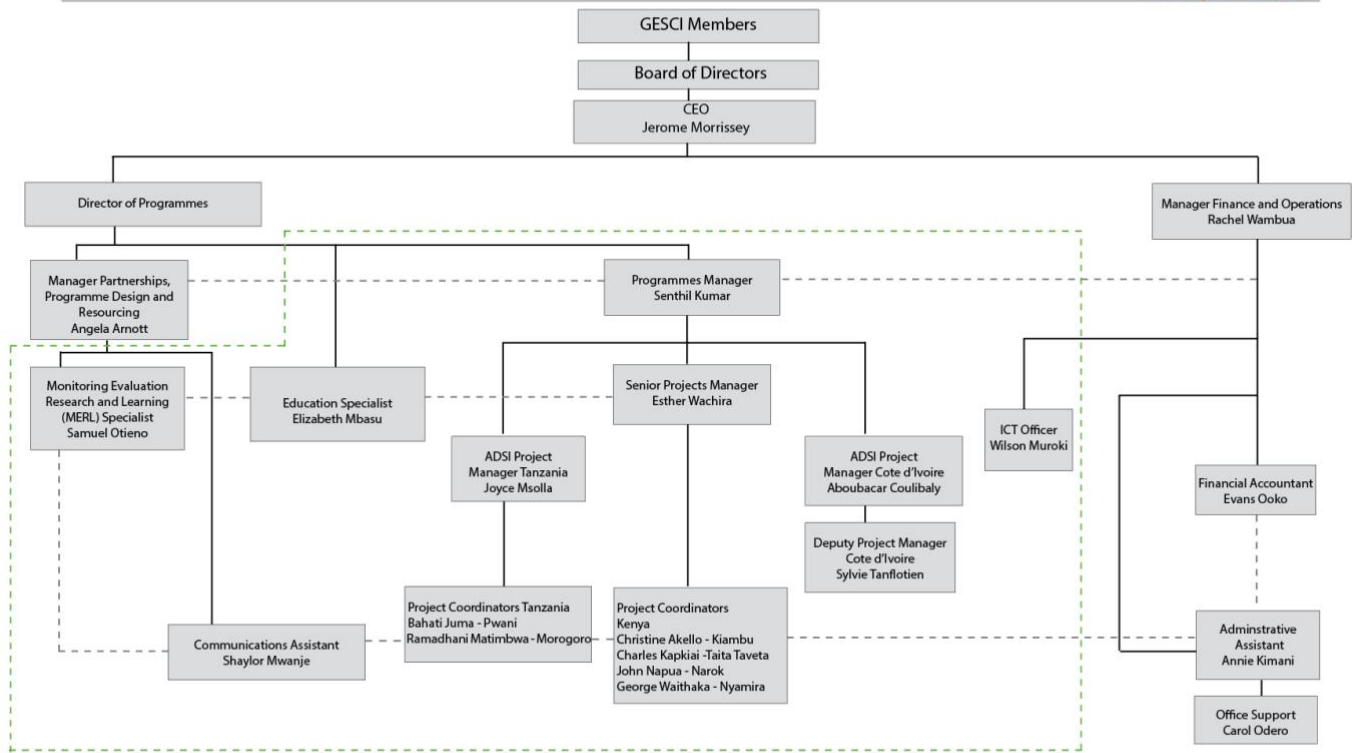


**Ahlin Byll Cataria**



**Mary Kang'ethe**





Notes:  
Black lines: Reporting relationship  
Green broken squares: Programme docket  
Grey broken lines: Professional inputs

September 2019