• Working with governments in:

• Leadership development of senior Government officials to integrate ICT in policy-making and implementation for Knowledge Societies development

• Strategy & implementation for effective ICT Integration in teaching and learning and in youth skills development
African Digital Schools Initiative (ADSI) - a Model for Digital School Development 2016-2020
ADSI
2016 - 2020

Kenya, Tanzania and Cote D’Ivoire

• Tanzania - 40 school heads, 400 STEM teachers & 20,000 students
• Kenya - 80 school heads, 800 STEM teachers, 40,000 students
• Cote d’Ivoire - 20 school heads, 200 STEM teachers, 10,000 students.

• Outreach General - 140 school heads, 1,400 STEM teachers, 70,000 students.
• Additional – 140 School Boards, 2,800 teachers of other subjects, outreach of up to 140,000 other students
What is the innovation package in the ADSI model?

What are the package elements that makes it different?
ADSI INNOVATION PACKAGE
15 ELEMENTS

1. Whole school involvement
3. Communication and telephony
4. Teaching and learning resources
5. Online repository of materials
6. School head and teacher professional development
7. Community network for peer-to-peer support

SIPSE/ADSI Concept Note – Phase II Master Card
SCALE SIPSE INNOVATION

PACKAGE ELEMENTS

8. Sustaining motivation for ICT integration and school improvement
9. Seeking accreditation towards certification
10. The Digital School Award
11. Support from commerce and enterprise
12. Collaboration with national institutions
13. Policy dialogue
14. Planning and costing
15. Monitoring and evaluation and learning

SIPSE/ADSI Concept Note – Phase II Master Card
What is the fundamental and core element of innovation in ADSI?
Phased Approach: Digital School Development

UNESCO ICT competencies

- Technology Literacy
- Knowledge Deepening
- Knowledge Creation
- Teacher ICT Competency Certification

Phased Approach:
Initial - Year 1
E-Enabled - Year 2
E-Confident - Year 3
E-Mature - Year 4

Progressive Pathway to whole-School
ICT Integration

ADSI Digital Schools of Excellence and Awards Framework
Resource development: for whole school development & ICT integration across the curriculum…

Open education resources

Expert exemplary curriculum materials of ICT enhanced lessons & resources for STEM

Digital schools toolkits for School review, strategy and planning – principal’s manual

Master trainers toolkits – to support online & school visits programmes

Teacher designed lesson plans & resources

Student learning artifacts & products
Access and target levels:
Building ownership/capacity at all levels
<table>
<thead>
<tr>
<th>Participants</th>
<th>Members</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Planning Partners Expert Working Groups</td>
<td>Ministries &amp; Departments, Universities, TEIs, TVEs, Schools, Subject experts, etc.</td>
<td>Needs assessment; curriculum review; module revisions/ development; exemplary curriculum materials/ competency framework contextualization and mainstreaming</td>
</tr>
<tr>
<td>Project coordinators Regional, district &amp; county stakeholders</td>
<td>Champions, Educators TEIs, Subject technical support county Directorates/ DEDs</td>
<td>Online facilitation; school visits programme</td>
</tr>
<tr>
<td>School level 1: Heads</td>
<td>Heads of mainstream and Beacon schools</td>
<td>School ICT Review, Policy and Planning; Digital schools</td>
</tr>
<tr>
<td>School level 2: School Coordinators</td>
<td>ADSI team leads</td>
<td>School based support – school based practice &amp; reflection workshops; video production &amp; review</td>
</tr>
<tr>
<td>School level 3: Teachers</td>
<td>STEM teacher design teams</td>
<td>Lesson planning &amp; resources; peer-to peer observations; school based seminars</td>
</tr>
<tr>
<td>School level 4: Digital schools</td>
<td>School heads-leads</td>
<td>School cluster seminars; benchmark visits</td>
</tr>
<tr>
<td>Strategic partnership</td>
<td>MCF/Govs/UNESCO,/CoL Donors,/Industry/Foundation</td>
<td>Share learnings; inform policy and strategy on emerging best practice</td>
</tr>
</tbody>
</table>
Innovation target – multiple levels of actors – from school communities to national communities affiliated to teacher education to private partner

Access levels – geographical spread of project schools across Kenya, Tanzania & Cote D’Ivoire

Whole school development – digital school award scheme – to incentivize all schools

Implementation
from workshop to online to classroom to whole school development for ICT integration

Innovation
ADSI Model for digital school development

ADSI INNOVATION ELEMENTS
THEORY OF CHANGE
ADSI INTERVENTION & RESULTS FRAMEWORK

Impact – Disseminated Model & Toolkit
The Kenya and Tanzania MoEs and agencies will have a validated blended learning model with concrete tools to improve STEM teaching and learning and inform policy and strategy.

Impact – Rising student learning outcomes
Student learning outcome scores in STEM subjects rise (based on a triangulation of school, national and class assessments).

Outcomes – Teacher ICT competencies
Teachers self-reported & observed competencies for ICT use to support traditional and new pedagogies of problem and project based learning in STEM increases.

Outcomes – Student 21st Century Skills
Students’ capability to engage in higher order thinking, critical thinking, problem solving, teamwork and creativity in STEM subjects improves.

Outputs – ADSI Schools
Whole school development for planning and implementation of ICT use across the curriculum and administration.

Activities – National to Local Engagement
Multi-stakeholder engagement from national to local levels in project activities for content, training and school support.

Activities – Infrastructure Roll-out
Enhanced school infrastructure conditions for school based ICT professional learning and application in STEM.

Inputs
Partners, Experts, Funders, Staff, Model Providers.
**SDG 4 – Quality Education; SDG8 – Decent Work and Economic Growth**

MSE should address four important aspects:

(a) ensure that the skills that MSE promotes contributes significantly to life-long learning – this means ensuring that MSE is promoting relevant transferrable skills for all students

(b) provide skills that enhances access to decent jobs for inclusive and sustainable economic growth, (goal 8) – this means teaching to ensure that more students demonstrate skills required at the more advanced level of competence;
SDG 4 – Quality Education; SDG8 – Decent Work and Economic Growth

© ensure provision of equitable access to quality instruction in science and mathematics to maximise students’ creative and problem-solving skills; - and finally

(d) make sure MSE leads to the development of life skills for all young Africans. In effect, relevant MSE should endow young Africans with skills in interpreting, analysing and manipulating information or data to harness opportunities for sustainable development.