



Knowledge hub
-
Collection of best practices

Summary of the best practice

1. Title of the best practice (e.g. name of policy, programme, project, etc.) *

Inclusive and Resilient Digital Open Schools

2. Country or countries where the practice is implemented *

Cote d'Ivoire, Egypt, Ethiopia, Ghana, Mongolia, Mozambique, Namibia, Rwanda, Senegal, Uganda, Tanzania, Zimbabwe,

3. Please select the **most relevant** Action Track(s) the best practice applies to *

- Action Track 1. Inclusive, equitable, safe, and healthy schools
- Action Track 2. Learning and skills for life, work, and sustainable development
- Action Track 3. Teachers, teaching and the teaching profession
- Action Track 4. Digital learning and transformation
- Action Track 5. Financing of education

4. Implementation lead/partner organization(s) *

Implementation lead:

UNESCO, Unit for Technology and AI in Education

Partners organizations:

- KOICA (Korean International Cooperation Agency)
- The Huawei technologies

5. Key words (5-15 words): Please add key descriptive words around aims, modalities, target groups etc. *

- Digital transformation of provision of education
- Digital inclusion
- Futures of schooling models
- Digital pedagogical transformation
- Equity, inclusion, gender equality in education
- Resilience of learning systems
- Integrated digital learning systems
- Digital learning platforms and digital learning content
- Digital competencies of teachers

6. What makes it a best practice? *

The Inclusive and Resilient Digital Open Schooling model promotes equitable access for all to quality education, it has received support from national leadership and relevant national or local authorities, and it involves partnerships and collaboration between several education stakeholders, while involving the participation of beneficiary groups and affected communities. The proposed Inclusive and Resilient Digital Open Schooling model addresses priority education challenges, including in relation to education in emergencies, and demonstrates practical solutions and approaches leading to digital transformation. The projects achieved their intended results with a reasonable level of resources and time, are sustained and replicable in other low-income countries of the region or elsewhere.

Description of the best practice

7. Introduction (350-400 words)

This section should ideally provide the context of, and justification for, the practice and address the following issues:

- i) Which population was affected?
- ii) What was the problem that needed to be addressed?
- iii) Which approach was taken and what objectives were achieved? *

The Inclusive and Resilient Digital Open Schools initiative steers countries to take an integrated approach to the digital transformation of provision of school education. It aims to guide countries to set up the following vision: Drawing lessons learned from COVID-19 education disruptions, schools should be transformed into technology-enabled open schools that will make the comprehensive school education programmes (learning of knowledge, teacher-student interaction, and social caring) accessible across multiple physical and distance learning spaces, including homes and alternative safe venues such as community learning centres, libraries, or temporary crisis shelters. The fundamental purpose is to ensure that alternative access to education can be 'switched on' or made available immediately, so that the right to learn is not disrupted during school closures precipitated by crises or emergencies.

The initiative promotes an integrated approach to the planning and implementation of digital transformation of education, including (1) delivery technologies covering universal access to connectivity and digital devices based on society-wide sharing of resources; (2) a one-stop national digital learning platform with digital resources covering all subject areas and grade levels and functionalities to support tutorials and social caring; (3) training and guidance for teachers' digital competencies and the pedagogical use of technologies.

Depending on the ICT in education readiness and forward-looking vision for using digital technologies to transform schooling, countries can choose different levels of objectives to (i) blend ICT with TV and radio to support access to education programmes; (ii) support the online learning model as the main mode for the provision of these programmes; or (iii) integrate frontier technologies to transform pedagogy and enable open education practices.

UNESCO has developed a guiding framework and operational programmes in the framework of the initiative, and has mobilized around USD 12M to support the pilot test of the Resilient Digital Open School model in 5 African countries and Mongolia.

8. Implementation (350-450 words)

Please describe the implementation modalities or processes, where possible in relation to:

- i) What are the main activities carried out?
- ii) When and where the activities were carried out (including the start date and whether it is ongoing)?
- iii) Who were the key implementation actors and collaborators? (civil society organizations, private sector, foundations, coalitions, networks etc.)?
- iv) What were the resources needed (budget and sources) for the implementation?

*

- UNESCO-Korea Funds-in-Trust (KFIT) project Phase I :
 - This project (2016-2019) targeted Mozambique, Rwanda and Zimbabwe, and helped to identify innovative solutions for achieving quality, equity and inclusion in education in Africa. Beneficiaries were teachers and students, primary and secondary public schools, higher education institutions, policy-makers, educational administrators and leaders. The project strengthened capacities for: Individuals, including enhancement of the capacities of teachers, policy-makers, and school managers; Management and administration, ensuring that national implementing actors own the project and coordinate multi-stakeholder participation; Technology use, supporting the leveraging of emerging technologies and media for the improved provision and management of quality education; Institutions, focusing on local key universities, teacher training institutions and schools.
 - Budget: USD6 Million from the Korean government
 - UNESCO HQs in collaboration with the UNESCO National Office for Mozambique in Maputo, the UNESCO Regional Office for Eastern Africa in Nairobi (and the Antenna in Rwanda), and the UNESCO Regional Office for Southern Africa in Harare were responsible for its implementation.
- UNESCO-Korea Funds-in-Trust (KFIT) project, Phase II:
 - The project of phase two (2019-2023) is targeting Côte d'Ivoire, Ghana and Senegal. Phase 2 started in December 2019 and will run until November 2023, i.e. 48 months in total. Phase 2 targeted both the primary and secondary education sub-sectors and aimed at testing scalable resilient digital schooling models for using ICT in education as a mean to contribute to the achievement of Sustainable Development Goal 4.
 - Budget US\$2 M from the Korean Government
- UNESCO-Korea Funds-in-Trust (KFIT) project, Phase III:
 - The project of phase three (2023-) has been tentatively confirmed to target Namibia, Uganda, and Tanzania.
 - Budget US\$ 6 M from the Korean Government
- UNESCO-Huawei Technology-enabled Open Schools for All
 - This ongoing 3-year project (2020-2023), is supporting Egypt, Ethiopia and Ghana to design, pilot test, and scale up Technology-enabled Open School Systems that can connect school-based and home-based learning to ensure the continuity and quality of learning no matter under normal or crises situations. Activities include building national platforms and development of online/distance learning content in the target countries to support school-based blended learning and home-based distance learning; enhancing school and household connectivity; deploying relevant applications, and provision of training on digital skills. Priorities are given to the most vulnerable groups, including female teachers and students, children from rural areas, learners with disabilities.
 - Budget: USD 3 Million from Huawei

- Coordinated by the Unit for Technology and AI in Education of the Education Sector at UNESCO Headquarters. The UNESCO Office in Addis Ababa, the UNESCO Office in Cairo, and the UNESCO Office in Accra were responsible for its implementation.

- Mongolia:

- Budget: USD 1 Million has been tentatively confirmed from Huawei to support the pilot of the initiative in Mongolia.

9. Results – outputs and outcomes (250-350 words)

To the extent possible, please reply to the questions below:

- i) How was the practice identified as transformative? (e.g., impact on policies, impact on management processes, impact on delivery arrangements or education monitoring, impact on teachers, learners and beneficiary communities etc.);
- ii) What were the concrete results achieved with regard to outputs and outcomes?
- iii) Has an assessment of the practice been carried out? If yes, what were the results? *

The pilot projects under the Inclusive and Resilient Digital Open Schools initiative revealed emerging capacities and system changes and they participated in the development of an enabling environment and ecosystem for digital technologies in education. The projects responded to country institutional needs (legislation/coordination/priorities), organisational needs (teacher training institutions, MoEs, agencies, schools), and individual needs (teachers' pedagogical and digital needs and ultimately students' learning needs).

They have proven to be fully relevant to the pandemic context and shifts in educational priorities and modalities of countries during this disrupted time. The KFIT project phase II for example enabled countries to provide some COVID-19 education response as activities were adjusted to take into account the new pandemic context. The project has therefore demonstrated that its ongoing relevance despite circumstances change.

They enabled or contributed to strengthening national coordination mechanisms for digital technologies in education, contributed to structuring the national institutional architectures for supporting the transformation of education through digital technologies, and overall strengthened organizational digital capacities at national level.

The pilot projects under the Initiative contributed to increasing the Ministries of Education's understanding of the key role of digital learning to support learning beyond the pandemic by addressing learning loss and improving learning outcomes, and are at the heart of an emerging shift in terms of learning and teacher training.

The projects respond to global priorities.

First, they address the following SDG4 targets:

- SDG4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes;
- SDG4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
- SDG4.a: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all; and,
- SDG4.c: By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states.

Second, it helps addressing the Incheon call on "promoting quality lifelong learning opportunities for all", which invites countries to harness ICT to "strengthen education systems, knowledge dissemination, information access, quality and effective learning, and more effective service provision". A Top-down approach and strong focus on enhancing the enabling environment for digital learning in beneficiary countries contributes to system strengthening and, as mentioned above, quality learning. The projects also respond to the issue of OER, the integration of basic ICT skills and information literacy into curricula, teacher digital competencies, well-organized online learning courses and issues of certification and recognition of online learning that are core to the Qindao Declaration.

10. Lessons learnt (300 words)

To the extent possible, please reply to the following questions:

- i) What were the key triggers for transformation?
- ii) What worked really well – what facilitated this?
- iii) What did not work – why did it not work? *

The initiative aims to integrate connectivity, national digital learning platforms with digital content, digital competencies of teachers and students, and appropriate pedagogical methodologies to build an inclusive and resilient learning systems. The integrated approach triggers the digital transformation of provision of school education programmes.

Building on lessons from the evaluation of the pilot projects, the initiative works well in terms of integrating key elements of inclusive digital learning and digital transformation of education, building institutional capacities of national policy-makers and the local public educational institutions, and creating conducive policy environment.

The initiative chooses to allocate funds to fundamental aspects such as: learning outcomes, teacher digital pedagogy capacity gaps, digital resources including OER, ICT in education policies and frameworks, and ICT competency frameworks for teachers.

Main lessons learned from pilot tests:

- Importance of a strong and shared national vision for ICT in education, which provides a clear direction, enables country coordination, favours investments, and facilitates donors' support.
- Strong country coordination through multi-stakeholder national teams supports ownership and can lay the foundation and contribute to advocating for a national entity being in charge of ICT in education where it does not exist. Engagement of varied stakeholders, including academia, civil society and the private sector is key from the start.
- Creating or leveraging the technical expertise, leadership and coordination in ICT in the country is critical. This enables greater coordination, national ownership, national capacity development, and sustainability.
- Enabling teachers to create their own learning pathways from the education resources produced by the project, and to create their own teaching resources is an important functionality.
- Project visibility is critical to maintain government commitment throughout implementation and to leverage funds or expertise to either support or expand and scale up project components.
- Embed sustainability from the onset of the project, by way of a project sustainability and a resource mobilization strategies and regular reviews is essential.
- Awareness of contexts and constrains in schools and classroom pedagogical practices is critical to induce a cultural shift amongst teachers and educators. Taking into accounts regional and gender variations is important.

Delays due to the Covid-19 pandemic in particular have led to modest results achieved to date in the transformation of education at school level.

11. Conclusions (250 words)

Please describe why may this intervention be considered a “best practice”. What recommendations can be made for those intending to adopt the documented “best practice” or how can it help people working on the same issue(s)? *

The Inclusive and Resilient Digital Open Schooling model represents one of the strategic direction of digital transformation of education. It features an integrated approach to promote equitable and inclusive access to digital learning. It reflects the need to leverage digital technologies to enhance resilience of learning systems to ensure that the right to education will not be disruption when facing further pandemics or conflicts.

Following the COVID-19 pandemic, it is increasingly clear that all countries need open and crisis-resilient learning systems that can ensure the continuity and quality of learning when facing the more frequent waves of education disruptions. Crisis-resilient systems are impossible without the judicious use of technology. It is important to advocate a culture of openness in connecting and extending learning spaces, managing digital learning resources across platforms, and facilitating learning beyond the school walls. Transforming the provision of school education requires structural changes. For this to work, it is necessary for a policy to consider the links among educational sectors and sub-sectors and different areas of policy, and the need to re-design regulations and programmatic actions. Prioritizing open learning systems and outcomes also leads to requirements for OER and open practices. Policy-makers also need to take a society-wide or intersectoral view of the provision, mobilization, and integration of ICT resources for education. This can be particularly challenging in countries where connecting households and schools is the responsibility of more than one ministry, such as the Ministry of Technology and the Ministry of Finance.

In summary, the Inclusive and Resilient Digital Open Schools initiative the development of an adaptable, flexible and resilient model which can constitute a roadmap for other low-income countries aiming at transitioning to a Digital Educational System.

12. Further reading

Please provide a list and URLs of key reference documents for additional information on the “best practice” for those who may be interested in knowing how the results benefited the beneficiary group/s. *

Provide a list of references and source documents that give additional information on the “best practice” for those who may be interested in knowing how the results benefited the population.