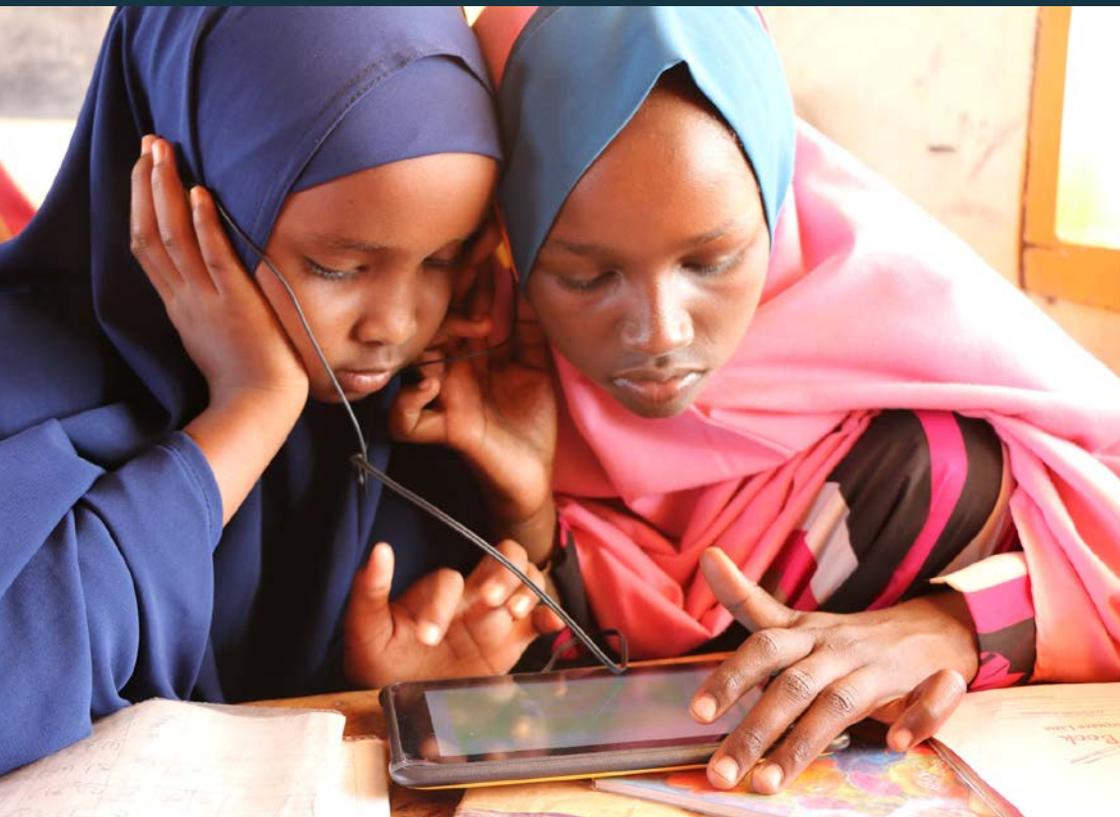


# INEE Mapping Report: Distance Education in Emergencies



Inter-agency  
Network for Education  
in Emergencies

**The Inter-agency Network for Education in Emergencies (INEE)** is a global open network of members who are working together within a humanitarian and development framework to ensure that all individuals have the right to a quality, safe, relevant, and equitable education. INEE's work is founded on the fundamental right to education. For more information and to join INEE, visit [inee.org](http://inee.org).

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EdTech in Kenya, 2018, © Fatuma Abdullahi, NRC

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A photograph of several young children in a classroom, focused on their schoolwork. They are sitting at desks with open books and papers. The children are of various ethnicities and are dressed in school uniforms. The background shows a classroom setting with a whiteboard and other students.

# 1. INTRODUCTION

Students in the third and fourth grade classroom at a Primary School in Lao PDR. 2018 © GPE/Kelley Lynch

INEE commissioned this mapping report in order to gain an understanding of who is doing what, and where, in terms of providing distance education (DE) in emergency and emergency-prone contexts. While organizations have been conducting DE projects for many years, including in crisis contexts, the current global climate has increased the need for and reliance on quality DE activities. COVID-19 has expedited the already urgent need to ensure the provision of equitable quality education on a large scale. Many countries have reacted rapidly to the COVID crisis by providing their national curriculum online, on the radio, and on television. However, countries and organizations should take this opportunity to understand exactly what is needed to ensure that these options will be sustainable when future emergencies again require such a large response.

This mapping is a start in gaining this understanding. Prior to and during the COVID-19 pandemic, many countries have pursued high-, low-, and no-tech modalities. We hope this analysis will be useful in determining which of those interventions have been successful enough to be targeted for scale-up so that the global community will be better prepared for future emergencies.



## 2. METHODOLOGY

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INEE implemented this mapping using a multi-phase, multi-pronged approach to gather relevant information and data. An initial desk review that targeted key websites, repositories, and databases, focused in particular on DE implementation. The desk review generated a preliminary understanding of current DE practices, projects, actors, and tools.

The desk review of these secondary data sources was accompanied by a two-pronged primary data-collection methodology. First, relevant DE-related questions were incorporated into a wider INEE survey and sent to its members.<sup>1</sup> While the response rate was relatively limited (~80 respondents), some key data was extrapolated from this survey, analyzed, and then integrated into this mapping. The survey data was then supplemented with a series of email-based, semi-structured key informant interviews. INEE implemented a purposive snowball sampling approach to generate a list of 74 key informants. These informants were then presented with a series of questions pertaining to their knowledge, understanding, and experiences of providing DE in emergency contexts, with a particular focus on trying to obtain information and project documentation.<sup>2</sup> When necessary, follow-up interviews were conducted over Skype.

The collection methodologies used yielded a total of 101 projects that were reviewed and tagged on DEEP.<sup>3</sup> This was done using a tagging structure determined in coordination with INEE that was aligned with existing taxonomies. Once tagged and cleaned, the data was analyzed, and the results are presented in the Findings section of this report. Specific DE tools and resources mentioned in the projects were also recorded, tagged, and analyzed; a summary table of DE tools and resources can be found in the Summary section.

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1 INEE is a network of more than 16,000 individual members and 130 partner organizations in 190 countries.

2 It should be noted that the focus during all steps of the collection and analysis process, as well as the findings presented in this report, pertain to pre-COVID-19 humanitarian contexts.

3 DEEP is a web-based platform offering a suite of collaborative tools tailored for sourcing, managing, and analyzing secondary data in humanitarian crisis responses. Development of DEEP began in early 2016; it is a collaborative project governed by UN OCHA, UNHCR, UNICEF, ACAPS, IFRC, IDMC, OHCHR, IDMC, and JIPS. Although open source, the data is secure and visible only to users who are granted access.

# 3. FINDINGS



Uganda, 2020 © Emmanuel Museruka (Oxfam)

The findings for this DE mapping report are organized into three main sections: WHERE, WHO, and WHAT. The WHERE and WHO sections contain metadata on the projects reviewed, which provides an overview of the geographic coverage, details on the organizations that are conducting these projects, and the primary beneficiaries they are targeting. The WHAT section analyzes the projects' contents in terms of what types of activities are being conducted, particularly the various hardware, network, and tech-level requirements, and the type of modalities and tools being used. Key examples of DE projects and activities are highlighted in call-out boxes throughout the Findings section.

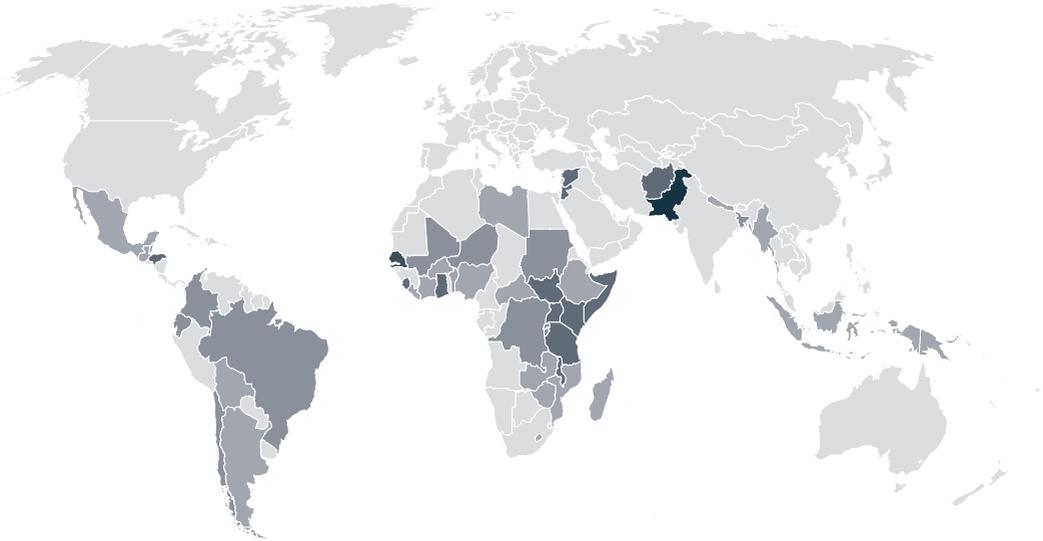
## 3.1. WHERE: Geographic Coverage

The 101 DE-related projects presented in this report span 10 regions of the world and 57 countries. East and Southern Africa, and West Africa contain the highest percentage of the projects reviewed, 29% and 20%, respectively. South Asia hosts 12% of the projects, followed by South America with 10%. The Middle East, Central America, Caribbean, Central Africa, North Africa, and Oceania all had fewer than 10% of the projects.

REGION	% OF PROJECTS
East and Southern Africa	29%
West Africa	20%
South Asia	12%
South America	10%
Middle East	9%
Central America	8%
Caribbean	5%
Central Africa	3%
North Africa	3%
Oceania	2%

While East and Southern Africa had the highest percentage of projects, they were spread across 15 countries. West Africa offers a similar scenario, with projects conducted in 11 countries. South Asia, which has 12% of the projects, is denser; the projects reviewed were in only five countries. The map on the next page shows the project density of the 101 projects reviewed. For a comprehensive list of the geographic breakdown by country, see [Annex A](#).

**Figure 1: Map of DE Project Density**



## 3.2. WHO: Organizations and Beneficiaries

### 3.2.1. Organizations Conducting DE-Related Projects

A total of 36 organizations conduct the 101 DE projects reviewed. The majority (56%) are operated by a UN agency and 26% by an international non-governmental organization (INGO).<sup>4</sup> A breakdown by type of organization is provided in the table below.

TYPE OF ORGANIZATION	% OF PROJECTS*
UN	29%
INGO	20%
Ministry of education (MoE)	12%
Network	10%
Private sector	9%
Academic institution	8%
National non-governmental Organizations	5%

\*Total percentage is more than 100%, due to individual projects being conducted by multiple organizations.

#### POWER 99 IN PAKISTAN

POWER99, a Pakistan-based NGO, implemented a radio-based DE program called “The Broad Class.” The program helped to improve the literacy, numeracy, and health habits of Pakistani youth through student-centered pedagogy. The program also provided professional development to teachers on the effective use of IRI as a teaching modality. POWER99 was awarded the Japanese Award for Most Innovative Development Project, which allowed them to scale-up and develop new content.

Of the UN agencies, UNICEF (34%) and UNESCO (14%) are conducting the most DE-related projects; the Education Development Center (8%) and Save the Children (5%) are the most represented INGOs.<sup>5</sup> The private sector accounted for only 5% of the projects; however, future mappings and studies should attempt to gain more information on private-sector DE projects in emergency contexts, as the nature of private-sector companies is to innovate creative solutions continuously in order to stay competitive. Although national non-governmental organizations accounted for only 2% of the projects reviewed, they provided an innovative look at how they can support DE activities.

<sup>4</sup> It should be noted that this finding, like all findings in this mapping report, have been heavily influenced by the purposive snowball sampling procedures described in the Methodology section and should not be considered representative. Although specific efforts were made to reach out to and receive examples from all types of organizations, including national and local NGOs, the consultants' personal networks are stronger among UN agencies and INGOs, thus information was obtained more easily from these organizations. It also should be noted that the unit of analysis is the “project owner” for the organization receiving funding to conduct the DE-related projects; many of these organizations, however, do sub-contract national and local organizations to support the implementation, which is not reflected in this table.

<sup>5</sup> The Education Development Center has a long history of conducting Interactive Radio Instruction and Interactive Radio Instruction, which may be one reason they have a higher proportion of the reviewed projects.

### 3.2.2. Beneficiaries: Age and Type

Almost all (93%) of the DE projects reviewed targeted children in some way, with the majority (77%) focusing on primary school-age children:

EDUCATION LEVEL	% OF PROJECTS*
Pre-primary	27%
Primary	77%
Secondary	35%

\*Total percentage is more than 100%, due to individual projects targeting multiple age ranges.

The education levels listed above indicate the age range of the children being targeted, rather than formal education levels. Of the projects reviewed, 59% specifically report conducting formal education activities via DE, while 10% were conducting non-formal education activities remotely. In addition, 4% of the projects were implementing accelerated learning, catch-up programs, accelerated education, and remedial programs.

In addition to targeting children, 67% of the programs also targeted adults. The table below shows the types of DE activities conducted with adults:

ADULT DE ACTIVITIES	% OF PROJECTS
Teachers and education personnel/MoE	53%
Parents/Caregivers	18%
Adult education	8%
Tertiary	1%

Projects targeting teachers and education personnel (53%) focused primarily on training staff members to conduct DE activities and DE pedagogical practices. This appears to be a significant need, as several projects noted the availability of DE modalities while also citing the teachers' lack of ability to use these modalities effectively to deliver education to students. Trainings in providing psychosocial support (PSS) and social-emotional learning (SEL) were also conducted. Only one of the projects reviewed targeted ministry of education (MoE) officials, which involved training ministry staff members in the development and production of radio/audio instruction materials, printed materials, and training programs. It was found that the projects that train teachers and education personnel are often using DE modalities. Of the 101 projects reviewed, 17 had some form of training in DE pedagogy that was delivered remotely.

#### TEACHER TRAINING IN GHANA

In an effort to increase teachers' capacity to deliver education remotely, Ghana's MoE embarked on a comprehensive in-service teacher-training program. Teachers were trained to deliver content on a wide variety of platforms, and to use smart devices, online learning platforms, and remote student assessments. In response to the COVID-19 pandemic, additional training was given on inclusion, crisis management, health, psychosocial wellbeing, and child wellbeing.

For the projects targeting parents and caregivers (18%), activities focused on helping them support their children’s continuity of education. A project in Papua New Guinea developed and distributed a parenting pack that included information on providing home-based learning. This parenting pack was adapted to include information about supporting the learning of children with disabilities. In Uganda, guides developed by the National Curriculum Development Center encouraged parents to engage their children in play-based learning.

Interestingly, 8% of the projects focused on education for adults. For example, a project implemented for Afghan women and girls in rural areas of Afghanistan focused on teaching literacy and numeracy skills through audio and video instructions. The program was aligned with the national curriculum and available in both of Afghanistan’s national languages. Only one project, in Niger, focused on tertiary education; this project distributed learning materials to university students and organized a schedule for broadcasting lessons over the radio.

### 3.2.3. Beneficiaries: Specific Vulnerabilities

The majority of projects reviewed (55%) mentioned intentionally targeting vulnerable beneficiaries. The table below shows the breakdown by vulnerability type:

EDUCATION LEVEL	% OF PROJECTS*
Vulnerable (unspecified)	24%
Children with disabilities	23%
Girls	19%
Out-of-school children	9%
Refugee	8%
Limited/No online access	6%
Migrant	2%
Internally displaced persons	2%
Indigenous	2%
Host community	1%

#### DISABILITY INCLUSION IN MALAWI

To reach children with disabilities, educational content developed to be broadcast on television was adapted to include sign language. Teachers were trained in inclusive pedagogies and parents were given guidance on how to encourage their children to participate in home-based learning solutions, which were provided via radio, TV, mobile phones, and online learning.

Children with unspecified vulnerabilities were the targeted beneficiaries in 24% of the projects reviewed, and children with disabilities were the beneficiaries in 23%. Countries are aiming to be inclusive by adapting the program content for children with disabilities. In Côte d’Ivoire, Gambia, Somalia, and Tanzania, the content is being presented in large-print books and braille readers that are distributed to visually impaired children. In Kenya and Ghana, captions and sign language are being included on online platforms and television channels to accommodate those with hearing impairments.

Specific steps were taken to be inclusive of girls in 19% of the projects reviewed. In Libya, for example, the Norwegian Refugee Council opted to use social media for their adolescent girls’ clubs because accounts can be protected using a unique username and pass-

word, whereas WhatsApp is tied to a phone number. This allows girls to have privacy and security in families that share devices.

### 3.3. WHAT: Distance Education Activities

After an initial analysis of the different types of DE activities being conducted in the projects, three distinct categories emerged, based on an activity’s technological level: high-tech, low-tech, and no-tech. These categories are primarily based on the hardware and the internet requirements of a DE activity. The table below summarizes these criteria, based on the DE activities analyzed, and includes the percentage of the projects conducting the various activities at each of the tech levels:

TECH LEVEL	HARDWARE	INTERNET	% OF PROJECTS*
<b>High</b>	Computer (desktop or laptop)	Yes	62%
	Tablet		
	Smartphone		
<b>Low</b>	Radio	No	70%
	Television		
	Basic mobile phone		
	MP3/Audio player		
<b>No</b>	Printed materials	No	33%

\*Total percentage is more than 100%, due to individual projects conducting activities using multiple tech levels.

It should be noted that many of the projects reviewed were conducting multiple types of DE activities with differing tech levels. For example, one project in Dominica was delivering content online via an e-learning platform while simultaneously adapting that same content for delivery via radio and television. In this instance, the project is considered to be implementing both high- and low-tech DE activities.

Of the projects reviewed, 62% were implementing activities considered to be high-tech. Perhaps the most interesting finding was that an incredible 70% of the projects reviewed were implementing low-tech DE interventions and a significant number (33%) were implementing no-tech DE activities (i.e., print based). Each of these categories is discussed in more detail below.

#### 3.3.1. High-Tech

High-tech DE solutions are those that require an internet-enabled device, such as a computer, smartphone, or tablet, and a reliable internet connection. Countries are using high-tech solutions to provide continuity of education to students who are not able to attend school in

person. This is typically being done via an e-learning platform, social media, or from devices with preloaded content and/or content that can be downloaded for later offline use:

MODALITY	% OF PROJECTS
e-Learning platform	59%
Social media	8%
Downloadable/Preloaded	5%
Podcast	1%

### EDUCATIONAL PLATFORM IN JORDAN

Noorspace is an electronic learning management system that Jordan's MoE is using to connect teachers with their students, and with the students' parents. Teachers share activities, assignments, and assessments with the students, who are able to complete the work and then send it back to their teachers.

### Online e-learning platforms

Many of the high-tech interventions seen among the projects reviewed used e-learning platforms. These platforms provide students and teachers with a space where they can share content and send assignments back and forth, which ensures continuity of education. Instead of meeting in regular classrooms, students can access instruction online at either at a set time, such as with synchronous learning, or by a certain date, as with asynchronous learning.

The table in the Summary section contains some examples of the e-learning platforms being used. For example, teachers are using Kasome and ProFuturo to connect with students, share lessons, assign homework, and conduct assessments. Sistema Uno, an e-learning platform being used in eight countries in Central and South America, uses iPads to deliver general instruction across subjects. It integrates a teacher management system and evaluation solutions that provide contextualized feedback on student progress.

The e-learning platforms are sometimes coupled with online video conferencing tools to enable teachers to conduct remote, synchronous classes with their students. This in turn enables students to receive instant feedback and to participate in discussions with their teachers and peers. This is the closest to an in-person, classroom setting that is available in a virtual environment. This level of instruction is somewhat limited, due to the need for reliable, high-speed internet. However, as high-speed internet becomes increasingly ubiquitous, this is becoming a more frequent option in contexts where it once was not possible.<sup>6</sup> Some DE activities in the projects reviewed in Jordan and Pakistan were being conducted via Zoom and Skype (Microsoft Teams).

It should be noted that the high-tech DE activities that are based on implementing e-learning platforms are not exclusive to the one-off projects being implemented by UN agencies or INGOs. One key trend discovered in the project analysis is that MoEs in several countries are developing their own online, e-learning platforms to host educational content and support continuity of education via distance education. Of the projects reviewed, eight countries (Chile, Guatemala, Haiti, Jordan, Kenya, Myanmar, Senegal, and Tanzania) have

<sup>6</sup> Kenya is leveraging the use of special internet balloons to provide the most difficult to reach areas with internet access. For more detail on internet balloons, please see this [link](#).

created their own education platforms to host DE content (see the Summary section for a full list of these platforms by country).

Teachers are also accessing professional development content via e-learning platforms. In Dominica, for example, teachers have access to an accredited teacher development program held entirely online that will enhance their skills in delivering DE during the current crisis and beyond. While not viable in all contexts, accredited teacher education programs like the one in Dominica may provide the influx of trained teachers necessary to conduct DE during emergencies.

Social media

Another high-tech solution discovered during the project review is the use of social media. One of the biggest advantages to using social media for DE activities is that many students already have access to some social media tools, which allows for easy communication and makes it possible to share learning content widely without a specific e-learning platform. Where formal DE platforms fail to meet the needs of students, social media can help fill the void. An INGO staff member in Ecuador said WhatsApp was the most effective way to reach the most vulnerable populations. The Pakistan Reading Project also has used WhatsApp to share multimedia content, COVID-19 prevention messages, stories in local language, and training resources. The analysis also found that Facebook was being used to offer DE activities. UNRWA, for example, has used Facebook to share content developed for an interactive learning program.

### *Downloadable/Preloaded content*

Not all high-tech solutions require a constant internet connection. In some projects, learning content could be downloaded using an internet connection and then accessed later offline. This greatly enhances the accessibility of DE activities, so that students' learning is not hindered by the need for a constant internet connection. In Sudan (see the call-out box), tablets were delivered with preloaded content that made the need for an internet connection negligible. In Myanmar, as part of the COVID-19 response, the MoE delivered tablets with preloaded content to schools and township education offices to accommodate those without a solid internet connection and/or a computer.

### **WhatsApp IN LIBYA**

The Norwegian Refugee Council is providing a non-formal education program that uses WhatsApp to share 5-7-minute video lessons on Arabic, French, English, and math for grades 1-6. These videos are based on Libya's national curriculum. Videos also have been prepared for the migrant community, using the Council's basic literacy and numeracy program materials—a need that has been specifically identified among that population.

### **TABLET-BASED LEARNING FOR OOSC IN SUDAN**

The e-Learning Sudan program implemented by War Child Holland delivered tablets to communities in rural Sudan. These tablets were preloaded with game-based learning based on the national out-of-school math curriculum and other core subjects. The games also incorporated psychosocial wellbeing and life skills training. The intervention leverages community participation to make education available when teachers and formal schooling are not.

## Podcasts

Podcasts are another modality being used for DE activities, although they were not commonly found in this analysis. Podcasts are a series of audio recordings on one or similar topics. They are uploaded to an online podcast hosting site, where they can be streamed or downloaded by the user. In Brazil, UNICEF developed the podcast “Deixa Que Eu Conto.” Since April 23, 2020, 102 episodes have been published, which feature content aimed at children ages 4-10 and their parents and caregivers. Additional discussion and examples of other non-internet-based radio and audio instructional methods are discussed in the next section.

### 3.3.2. Low-Tech

Low-tech interventions are viable alternatives in many parts of the world that do not have ready access to the hardware or the internet connectivity needed for high-tech solutions. Low-tech DE solutions are those that do not require internet access and use slightly lower-tech hardware. This is the most common of the three tech categories, with 70% of the projects reviewed conducting low-tech activities. Of these, radio instruction (49%) and television instruction (39%) were used most often; some projects conducted text-/SMS-based activities (22%) and non-radio audio-based instruction.<sup>7</sup>

MODALITY	% OF PROJECTS*
Radio instruction	49%
Television instruction	39%
Text /SMS	22%
Audio (non-radio) instruction	11%
Secondary	35%

\*Total percentage is higher than 100%, due to individual projects delivering content via multiple modalities.

#### RADIO INSTRUCTION IN BANGLADESH

Save the Children has developed a radio instruction program focused on social-emotional learning that will reach 75,000 refugee children and their parents in the Rohingya refugee camps. The aim of the intervention is to provide refugees with the necessary social and cognitive recovery support and to build resilience in those affected by the ongoing crisis.

#### Radio instruction

One of the most interesting findings of this mapping is that radio-based instruction is one of the modalities the projects used most often for DE activities (almost 50%). In hindsight this is perhaps an unsurprising finding, considering the ubiquity of radios, their accessibility in remote areas, and their relatively low cost. Many MoEs in the countries where projects were reviewed are rapidly adapting a national curriculum to be delivered via radio. In addition to adapting the content, the MoEs are forming partnerships with national, private, and local stations to expand the coverage areas of radio signals and increase the range of the broadcasts. However, it should be noted that, while pervasive, not all students have access to a radio. In light of this, 13% of the projects reviewed were distributing radios to those who did not already have access to one.

<sup>7</sup> Radio and audio were originally grouped in the same category, but to allow for a more nuanced and rich analysis they have been disaggregated.

In this category, the review found multiple examples of interactive radio instruction (IRI). Traditional radio instruction is the broadcasting of educational content, which often occurs several times a day, whereas IRI engages students in the lessons by having them respond to prompts, such as using items in their environment to practice math concepts. IRI also has been used for teacher training. The Improving Education Quality project conducted in the Democratic Republic of the Congo trained teachers on delivering IRI to students. It should be noted that most examples of IRI seen in the projects reviewed were classroom-based initiatives. In the event of prolonged school closures, such as during COVID-19, efforts should be made to train parents and caregivers in delivering effective IRI.

### *Television instruction*

Television is another low-tech solution that can reach a great number of learners. Chile and Kenya are two countries that have set up educational channels specifically for students who can no longer attend school. The EDU TV channel in Kenya covers core subjects in all grades and includes videos of teachers giving lessons in classrooms. To increase the utility of this intervention, the government is covering the cost of having a TV subscription service during the COVID-19 pandemic. In Chile, the #TVEducaChile television channel broadcasts curricular content for primary grades 1-4.

Using captions and sign language makes this modality more accessible for children with hearing impairments. However, for this modality to be fully inclusive and effective, the students with impairments would need to be literate or able to understand sign language.

### *Text-/SMS-based instruction*

Text messages are another low-tech modality used to deliver educational content. While mobile phones are cheap and easily accessible, their utility for DE is limited. There are examples of successful programs that use mobile phones to deliver content, such as a pilot project the Afghan Institute of Learning conducted in Afghanistan. Teachers would send texts to students each day, and the students would respond via text to demonstrate their comprehension and writing skills. A project conducted in the Dadaab refugee camp in Kenya used a tool called Shupavu291, which was aligned with the Kenyan national primary exam. This service gave students access to study materials for all primary subjects. Students would review the mini lessons, submit answers, and then receive corrections to their solutions as needed, along with an explanation.

Mobiles phones also were used to remind students and parents of upcoming lessons. Rising Acade-

#### **SHUPAVU291 IN KENYA**

Shupavu291 is a collaborative effort between UNHCR, Eneza Education, the Lutheran World Federation, and the Xavier Project that was implemented in Dadaab refugee camp. Students can use the SMS service to receive educational content aligned with the Kenyan national curriculum. Students can view mini-lessons and submit answers that are then corrected, if necessary, and accompanied by short explanations to help deepen their understanding of the subject matter.

mies in Sierra Leone and Liberia send parents a text before a lesson to remind them to have their children attend. They also send follow-up messages that suggest ways for caregivers to reinforce each lesson.

Mobile phones are also a simple way for teachers to check in on students and their families. While DE has helped keep children safe during COVID-19, teachers no longer see the students in person and thus are not able to ascertain if a student needs additional educational or psychosocial support due to trauma. To remedy this, teachers in The Gambia have been conducting regular phone check-ins with students during COVID-19 to determine if they need additional psychosocial or educational support.

### *Audio (non-radio) instruction*

Audio instruction can sometimes be delivered on devices other than a radio, such as MP3 players, digital audio players, and mobile phones. While the podcast example (see above) is a high-tech way to distribute audio content via the internet, low-tech options, such as sharing a memory device that contains audio files, can allow those without a radio signal or internet to access audio instruction.

Another form of audio instruction seen in the projects was interactive voice response (IVR). Standard use of IVR requires an individual to listen to a prerecorded audio message and then to respond by speaking or pressing a key. In Niger, IVR was used to complement traditional classes, which enabled learners to practice their literacy and numeracy skills. Zimbabwe has used IVR to respond to COVID-19 by broadcasting educational content and COVID-related prevention messages.

#### **SD CARDS IN ZAMBIA**

In response to the COVID-19 pandemic, Zambia moved to remote-based learning. To ensure that the most disadvantaged and remote learners received support, SD cards that can be used with basic mobile phones were provided. These SD cards contained recorded lessons that could be shared among communities and individuals to avoid excluding those without access to other DE resources.

### **3.3.3. No-Tech.**

For students who do not have access to the hardware and network connections required for the low- and high-tech interventions described above, printed materials and home visits can fill the gap. Of the projects reviewed, 33% were implementing activities that used printed materials to reach the most remote and vulnerable populations, and 34% were working to develop and distribute print-based teaching and learning materials. In Afghanistan, self-learning packages were being developed and delivered to learners in response to the COVID-19 pandemic. The packages included exercises that reflected the formal curricula, and others that promoted awareness of COVID-19 and good hygiene. To engage younger learners and encourage independent creativity, the packages included designs for coloring and sheets for drawing.

While not technically a DE modality, home visits have the potential to reach children when no other viable option exists. One project reviewed had the teachers visit students. In Lamu County, Kenya, 20 primary school teachers were drawn from the community and instructed to use DE where possible. To strengthen the learning process, teachers were visiting students at home at least once per week to ensure continuity of learning. Teachers took safety precautions during their visits to prevent the spread of COVID-19.

In remote and fragile areas, visiting teachers may be the most viable option, particularly when the situation calls for individuals to be separated. However, it should be noted that, in contexts of conflict and instability, visiting homes can expose teachers to considerable risks, which should be taken into account when determining the best method of delivering educational content.

### **EDUCATION BY NEWSPAPER IN BELIZE AND SUDAN**

While delivering printed materials may pose a challenge, Belize and Sudan have used newspapers to ensure that students have access to educational content. Lessons in Arabic and math are being printed in Sudan. In Belize, a special edition newspaper that provides lessons and assignments for students in primary and secondary schools is being printed every two weeks.

# 4. SUMMARY TABLE FOR DISTANCE EDUCATION TOOLS AND RESOURCES

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As discussed in the Methodology section, while the projects were being reviewed and analyzed, special attention was given to the specific tools and resources (platforms, repositories, software, etc.) they were using to implement the DE activities. Many of these have been mentioned in the narrative of this mapping. The table below provides a summary of all 16 tools and resources specifically mentioned in the projects reviewed. Most of the tools described in the table can be used in multiple contexts.

RESOURCE / TOOL	DESCRIPTION	TECH LEVEL	COUNTRY/ IES
<a href="#">Google Classroom</a>	Google Classroom is a free web service for schools, nonprofits, and individuals that aims to simplify creating, distributing, and grading assignments. The primary purpose is to streamline the process of sharing files between teachers and students by integrating other Google functionalities, such as docs, sheets, slides, gmail, and calendar into a cohesive platform to manage student and teacher communication. Teachers can use it to create, distribute, and mark assignments and monitor each student's progress.	High	Jordan
<a href="#">Google Drive</a>	Google Drive is an online platform for storing, sharing, and collaborating on files and folders.	High	Syria
<a href="#">iCampusGhana</a>	iCampusGhana is an eLearning platform that leverages media and technology solutions to create high-quality, affordable, and accessible education for African students.	High	Ghana
<a href="#">Kasome</a>	Kasome is an online platform that allows secondary students to pay for access to a series of tutorial videos (in Swahili) that cover a wide range of secondary subjects.	High	Tanzania

<u>La Aldea</u>	La Aldea is a multi-platform strategy designed for home schooling that also can be used by teachers and educational institutions for distance learning. It is based on the stories of a group of fictional animals that live together and face situations that are metaphors for real life, which act as a springboard that allows children to strengthen their social-emotional, communication, mathematical, and scientific skills, and encourages them to change their environments in a positive way.	High	Colombia
<u>Learning to Read with Bartolo</u>	Learning to Read with Bartolo is an online platform that uses the character of Bartolo, a fictional dog, to help children learn to read using games, music, and stories.	High	Chile
<u>Microsoft Teams</u>	Microsoft Teams via Office 365 Education offers a free subscription for schools, students, and teachers in order to engage students with virtual face-to-face connections and activities, share files and assignments, and track progress and give grades.	High	Jordan
<u>MindZu</u>	MindZu is a smartphone (Android) based e-learning app that uses games to teach quality STEM curriculum for secondary-aged students. Content can be downloaded for use on or offline. Teachers are able to report, monitor, and interact as needed, remotely or in class.	High	Tanzania
<u>ProFuturo</u>	ProFuturo is a digital learning platform/program targeting ECD, primary, and secondary school-age children. The platform contains e-learning lessons in various subjects, such as science, math, language, citizenship, technology, and others.	High	Zimbabwe
<u>Shupavu291</u>	Shupavu291 is an SMS-based solution that provides children with content aligned with the Kenyan primary national examination and provides students with access to study materials for all primary subjects, like English, mathematics, Kiswahili, science, social studies, general knowledge, and religion. It is presented in the form of mini-lessons and subject- and topic-specific quizzes. Children submit their answers via SMS and receive corrections and an explanation of the solution in order to deepen their understanding.	Low	Kenya
<u>Sistema Uno</u>	Sistema Uno offers general instruction across subjects integrated with teacher management and evaluation solutions for contextualized feedback of student progress. Sistema Uno offers 76 different apps covering 20 different subjects. Some of the apps are free and some must be purchased for a fee of up to \$199.	High	Argentina Brazil Colombia Ecuador El Salvador Guatemala Honduras Mexico

<u>Ubongo Kids</u>	Ubongo Kids uses fictional child characters along with video, audio, radio, television, apps, and even print-based materials to provide learning content to children, especially in math, science, and technology.	High	Tanzania
<u>Ustad Mobile Literacy</u>	Ustad Mobile Literacy is a literacy-learning program/ app developed for simple feature phones and offline use that provides literacy and mathematics courses aligned with the Afghan national curriculum. The lessons are primarily audio or video based, and available in both of the Afghan national languages, Dari and Pashto. It takes users from the first letter of the alphabet through grade 3 literacy and numeracy and includes hours of narrated instruction, reading comprehension exercise, quizzes, educational games, and video clips for visual learners. The application contains built-in metrics, which enable a user's learning time and quiz scores to be reported over Bluetooth to his or her teacher's phone. An additional basic monthly data package (approximately \$5 USD per month), allows a teacher's phone to transmit statistics from remote project sites to a secure online database, which enables real-time monitoring of education and training projects.	High	Afghanistan
<u>Viamo</u>	Viamo is a mobile learning platform that uses Interactive Voice Recordings to deliver pre-recorded lessons to learners in emergency contexts. The platform uses cellphone numbers and is compatible with any type of phone. Additionally, the platform is broadcasting COVID-19 messages. The COVID-19 messaging is by both text and audio.	Low	Zimbabwe
<u>YouTube</u>	The projects and platforms highlighted above use YouTube as a repository for uploading and linking to educational videos. YouTube Learning is also partnering with learning creators help parents/caregivers and children have access to more educational content.	High	Rwanda Tanzania Palestine
<u>Zoom</u>	Zoom is an online voice and video communication software that can be used to connect children with teachers, and to provide training and remote capacity-building opportunities for teachers.	High	Jordan Pakistan

Nine of the projects reviewed mentioned specific national online e-learning platforms, which typically are managed by the respective country's MoE. They are described in the table below:<sup>8</sup>

RESOURCE / TOOL	DESCRIPTION	TECH LEVEL	COUNTRY/ IES
<a href="#">Aprendo en Línea</a>	Aprendo en Línea is an online platform that provides pedagogical resources for students from the first grade of primary education to the fourth year of secondary school.	High	Chile
<a href="#">Darsak Learning Platform</a>	The Darsak Learning Platform is the official e-learning portal of Jordan. It offers video lessons for primary and secondary school students	High	Jordan
<a href="#">Noorspace</a>	Noorspace is a unified electronic system that is used to communicate and organize work between schools, teachers, students, and parents through an electronic portal fed by the School Information Management System of Jordan, in cooperation with the educational resource repository for teachers.	High	Jordan
<a href="#">Kenya Education Cloud</a>	Kenya Education Cloud is a portal created by the Kenya Institute of Curriculum Development. It offers a library of digital resources for pre-primary, primary, and secondary school students.	High	Kenya
<a href="#">Mineduc Digital</a>	Mineduc Digital is the first virtual education platform in Central America. It provides third graders, adolescents, and young people in high school with the option to study interactively online from any device.	High	Guatemala
<a href="#">Myanmar Digital Education Platform</a>	The Myanmar Digital Education Platform hosts content from pre-primary through secondary education.	High	Myanmar
<a href="#">PLANETE</a>	PLANETE is a Senegalese national learning platform developed by the Ministère de l'Éducation Nationale that is used to connect students and teachers. Administrators also use it to monitor school progress.	High	Senegal
<a href="#">PR@TIC</a>	PR@TIC is a platform of educational resources and digital learning solutions that was introduced in mid-April [2020]. It contains resources for students, parents, and teachers forced to stay at home during the COVID-19 crisis	High	Haiti
<a href="#">TIE Digital Library</a>	The TIE Digital Library is a repository of textbooks, supplementary readers, and educational videos developed by the Tanzania Institute of Education.	High	Tanzania

<sup>8</sup> For information on national learning platforms for additional countries, see [UNESCO's database of national learning platforms and tools](#).

# ANNEX A: COUNTRIES

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REGION/COUNTRY	# OF PROJECTS
<b>East &amp; Southern Africa</b>	
Burundi	2
Djibouti	1
Ethiopia	1
Kenya	3
Lesotho	1
Madagascar	1
Malawi	3
Mozambique	1
Rwanda	2
Somalia	3
South Sudan	3
Uganda	3
United Republic of Tanzania	3
Zambia	1
Zimbabwe	1
<b>West Africa</b>	
Benin	1
Burkina Faso	1
Gambia	1
Ghana	3
Ivory Coast	1
Liberia	1
Mali	2

**West Africa**

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Niger	2
Nigeria	1
Senegal	4
Sierra Leone	3

**South Asia**

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Afghanistan	3
Bangladesh	2
Myanmar	1
Nepal	1
Pakistan	5

**South America**

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Argentina	1
Bolivia	1
Brazil	2
Chile	2
Colombia	2
Ecuador	2

**Middle East**

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Jordan	3
Lebanon	2
Palestine	1
Syria	3

**Central America**

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Belize	1
El Salvador	1
Guatemala	2
Honduras	3
Mexico	1

**Caribbean**

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Dominica	1
Grenada	1
Haiti	1
Saint Lucia	1
Saint Vincent and the Grenadines	1

**Central Africa**

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Central African Republic	1
Democratic Republic of the Congo	2

**North Africa**

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Libya	1
Sudan	2

**Oceania**

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Indonesia	1
Papua New Guinea	1



**Inter-agency Network for  
Education in Emergencies**