

Webinar on Inclusive Education in Times of Covid-19

#LearningNeverStops

Ensuring Inclusive and Crisis-resilient Education: Tech-enabled Open School Systems

Fengchun Miao

Chief, Unit for ICT in Education

Ensuring Inclusive and Crisis-resilient Education: Multiple readiness

Immediate education response

Months of new daily routine

Post-pandemic new normal

Distance learning solutions

Home based distance learning

Tech-enhanced school systems

Tech and content readiness

Pedagogical and home learning support readiness

Monitoring and evaluation readiness

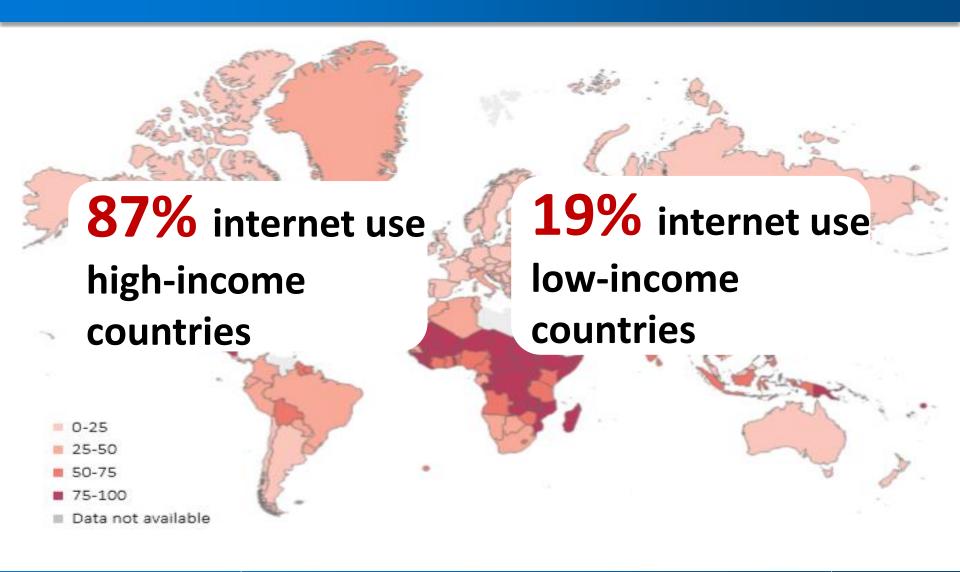
Policy planning and financing readiness

Persistence of exclusion

- 258 million entirely excluded from education poverty
- 10-year old students in middle & high-income countries taught in a language other than their mother tongue scored 34% below native speakers in reading tests
- Children with disabilities to be 19% less likely to achieve minimum proficiency in reading than those without disabilities
- Education segregation: Laws in ¼ countries require children with disabilities to be educated in separate settings, rising to >40% in Latin America, the Caribbean, and Asia.

(UNESCO's 2020 GEM Report: Inclusion and education)

Equity and inclusion: "Do No Harm" principle



Barriers to inclusive Distance learning (COVID-19) & blended learning

Cost barriers – access cost against income

- Mobile data costs vary wildly as a factor of income
- Hardware and commercial software remain expensive

Inherent or functional disabilities:

- Visual or hearing disabilities, Acquired disabilities
- Lack of literacy in mainstream languages used online
- Digital skills

Gender discrimination:

- Women and girls prevented or discouraged to use technology
- Cultural barriers or misbelief:
- Technophobia due to possible negative effects



COVID-19: A new layer to the challenges of education inclusion: efforts to maintain learning continuity through distance learning solutions may exacerbate exclusion.

Equity and inclusion in accessing distance learning

Who is being reached? How?

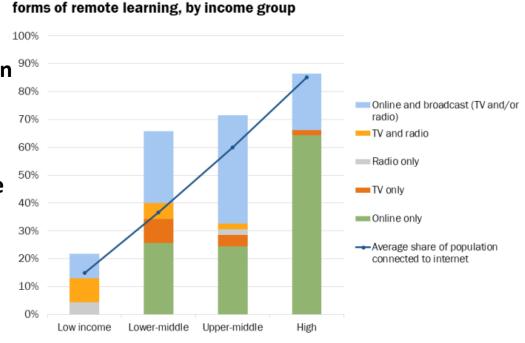
Source: Center for Global Development and the World Bank

O Who is not reached? Why? How can they be reached?

Figure 1. Share of countries responding to school closures with different

<11% Sub-Saharan
 African countries
 ready for online
 opportunities

- <25% low-income countries ready for any type of distance learning
 Over 500 million
 - not accessing to distance learning



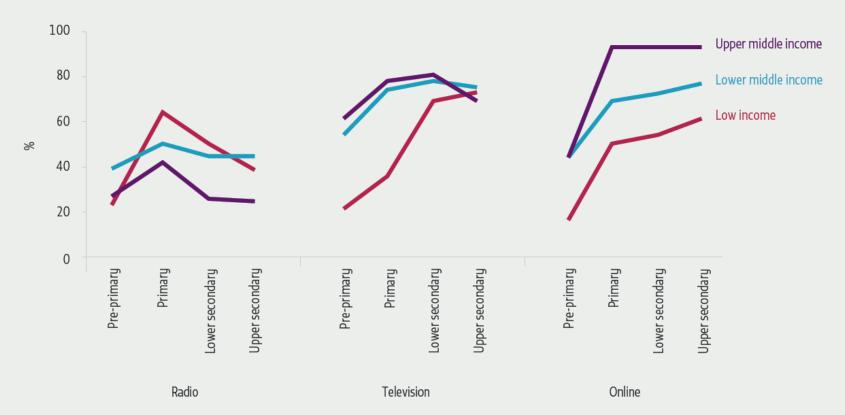
90% high-income countries are using online learning

BROOKINGS

Choice of distance learning solutions (online, TV, radio) by income levels

FIGURE 2.5:
Education level and country income influenced the choice of distance learning solutions during school closures

Percentage of countries using different approaches to distance learning, by education level and country income group, 2020



GEM StatLink: http://bit.ly/GEM2020_fig2_5 Note: Estimates are based on 71 countries.

Source: GEM Report team analysis based on UNESCO-UNICEF-World Bank joint questionnaire.

Distance learning solutions during COVID-19 Pandemic:

- The poorest countries have relied relatively more on radio. For instance, 64% of low-income countries used this approach for primary education, compared to 42% of upper-middle-income countries.
- By contrast, 74% of lower-middle income countries used television programmes in primary education, compared with 36% of low-income countries.
- High-income countries capitalized on recent investments in education technology to mobilize online learning platforms, whether synchronous (real-time) or not.

○ Learners with disabilities are at higher risk of exclusion in such circumstances: many resources are not accessible for blind or deaf students even if the technology exists. Children with mild learning difficulties, such as attention deficit hyperactivity disorder, may struggle with independent work in front of a computer → Universal Design for Learning

- Lack an internet connection at home: Average in OECD countries, almost 1 in 10 of those attending disadvantaged schools; 1 in 4 in Chile, 1 in 2 in Turkey and almost 3 in 4 in Mexico (OECD, 2020).
- Not all internet connections are strong enough to download data or take part in video calls. In Italy, while 95% of households are connected, 1 in 4 have a connection below 30 Mbps, lower than required to download and stream education content (AgCom, 2020).

o The low-technology approaches have little chance of ensuring learning continuity: The share of those who owned a radio was 7% in Ethiopia (2016), 8% in the Democratic Republic of the Congo (2014), 14% in Madagascar (2016) and 30% in Kenya (2014), with none owning a television. The share of the poorest 20% of households owning a television was 5% in Nepal (2016), 10% in Yemen (2013), 13% in Guatemala (2014/5), 14% in Pakistan (2017/8) and 22% in Cambodia (2014) (DHS StatCompiler, 2020).

Inclusive access to distance learning: Good practices

Equitable & inclusive Tech delivery:

- Upgrading bandwidth of online platform (China)
- Solutions for students with special needs (Italy: 89% schools)
- Supporting household devices (<u>Lithuania</u>)
- Zero-rate educational traffic (Indonesia, <u>South</u>
 <u>Africa</u>, Sri Lanka) or Free mobile data (Maldives)

Distance learning solutions

Universal accessibility to curricular courses:

- Self development
- Open Educational Resources
- Language consideration (New Zealand <u>TV channels</u> <u>in English & Māori)</u>
- Home based reading materials: <u>Global Digital</u>
 <u>Library</u>; <u>Translate a story</u>

Effective home based distance learning or school based blended learning: Good practices

- Effective coverage of courses
- Effective engagement of learners
- Effective learning outcomes

Home based distance learning

Monitoring and mitigating 'dropout' and digital disengagement:

- Decentralizing to schools to monitor (France, Italy...); Centralized monitoring and mitigation (Italy: monitoring survey)
- Post-pandemic remedial courses (Summer camps: France)

Pedagogical facilitation and home support to reduce disengagement:

- More frequent formative assessment
- Guidance for teachers (Finland ...) & parents (<u>Armenia</u>); Free-toll hotline (UAE)
- Supporting teachers' peer learning (<u>Estonia</u>)
- Teacher-parent communities (Peru)
- Safe caring spaces or funds to hire private caregivers



UNESCO Flagship on Connectivity (Global Education Coalition)

- 1 Access
- 2 Provision
- **3** Capacities
- 4 Data

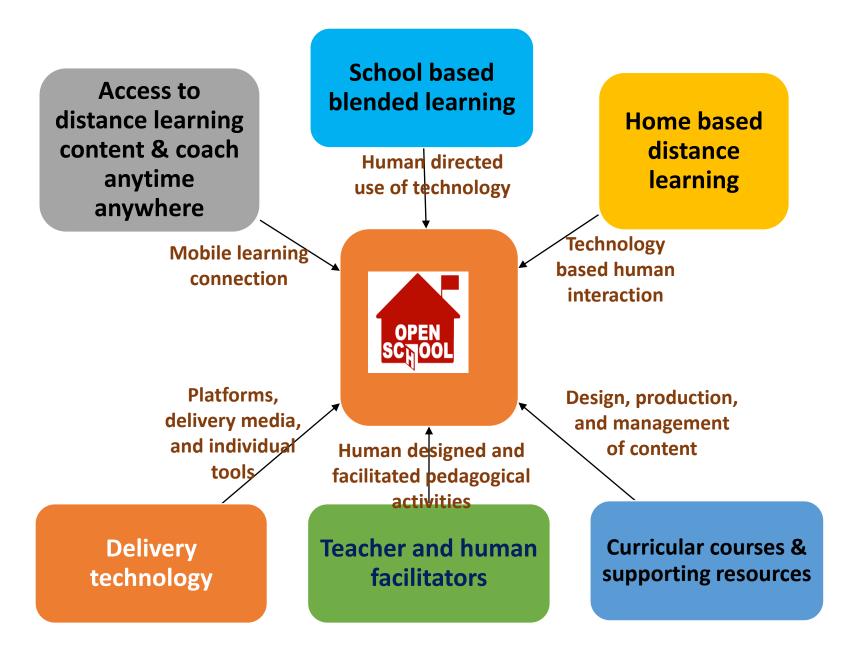
Ensuring Effective Distance Learning under COVID-19 School Closures: Guidance for Teachers

Online distance			TV		Radio		Print	Teachers' pedagogical
learning		programme		programme		material	facilitation	
			ba	ased	base	e d	based	
Platform	Teacher-	Student-	Digital	Analogue	Interactive	One-	Textbooks &	Individual
based	directed	centered	TV	TV	Radio	way	print learning	tools and
online	live	Video lessons				Radio	material	applications
learning	streaming	based flipped					packages	
		learning						

- Live broadcasts
- Pre-recorded broadcasts
- Edutainment programs

- Radio broadcasts
- Interactive radio instruction
- Learning podcasts

Technology-enabled Open School System



A Guiding Framework for Technology-enabled Open School

		Support interconnected access	Extend learning spaces and time	Transform pedagogical practices	
Policy and	Leadership & governance	Basic open school policy	· ·	Ubiquitous learning school policy	
resources	Financing and resource	Results-based financing	Recurring public and private funds	Public & society-wide resources	
enabler	Community & stakeholder engagement	School-home-community connection	School-home- community network	School-home- community partnership	
Technology,	Delivery technology	TV/radio as main technology for all learners	=	Online connecting all learners	
content, and human	Curricular courses and supporting resources	TV/radio content covering all subjects & grade levels	Online courses and OER	System led content and teacher-generated OER	
infrastructure	Teacher and human facilitation	Pre-set programmes facilitators	Collaborative resource designers and facilitators	Resources integrators and co-learners	
Teaching, learning, and	Social interaction and caring	Technology mediated group connection		Personalized social interaction and caring	
assessment	Teaching, learning	Lecture-based teaching and learning	Student-centered teaching and extended learning	Personalized learning	
	Assessment & credentialing of learning outcomes	Continued formative assessment and recording of learning outcomes	auto grading and digital	Personalized learning analytics; lifelong digital credentialing	

Thank you

f.miao@unesco.org

https://en.unesco.org/covid19/educationresponse

https://en.unesco.org/themes/ict-education