DigiTrans2022 – Building Bridges to Better Decisions

Interoperable Platforms – A UNESCO Perspective

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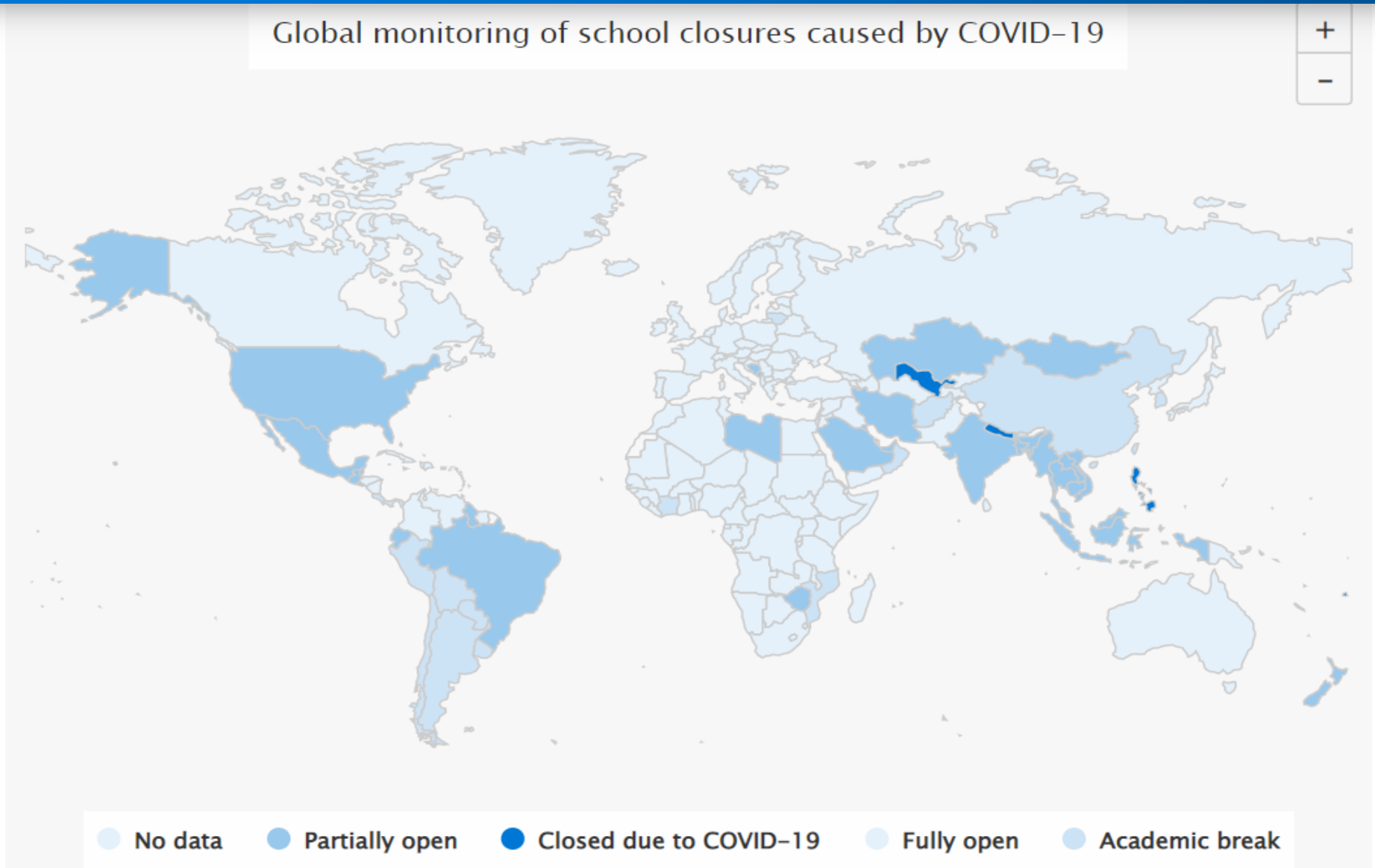
A disrupted Global Education and Training Landscape



43,518,726 affected learners
2.8% of total enrolled learners
6 country-wide closures

Source: https://en.unesco.org/covid19/educationresponse#schoolclosures

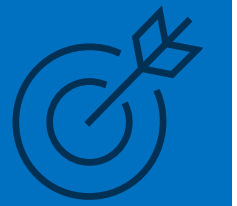
The COVID-19 Crisis has deep impacts on Education

Impact 1 :

Significant learning loss
with significant inequality

Impact 2:

Impact on Lifelong Learning Opportunities



Impact 3:

17 TRILLION $ loss in future earnings of current learners

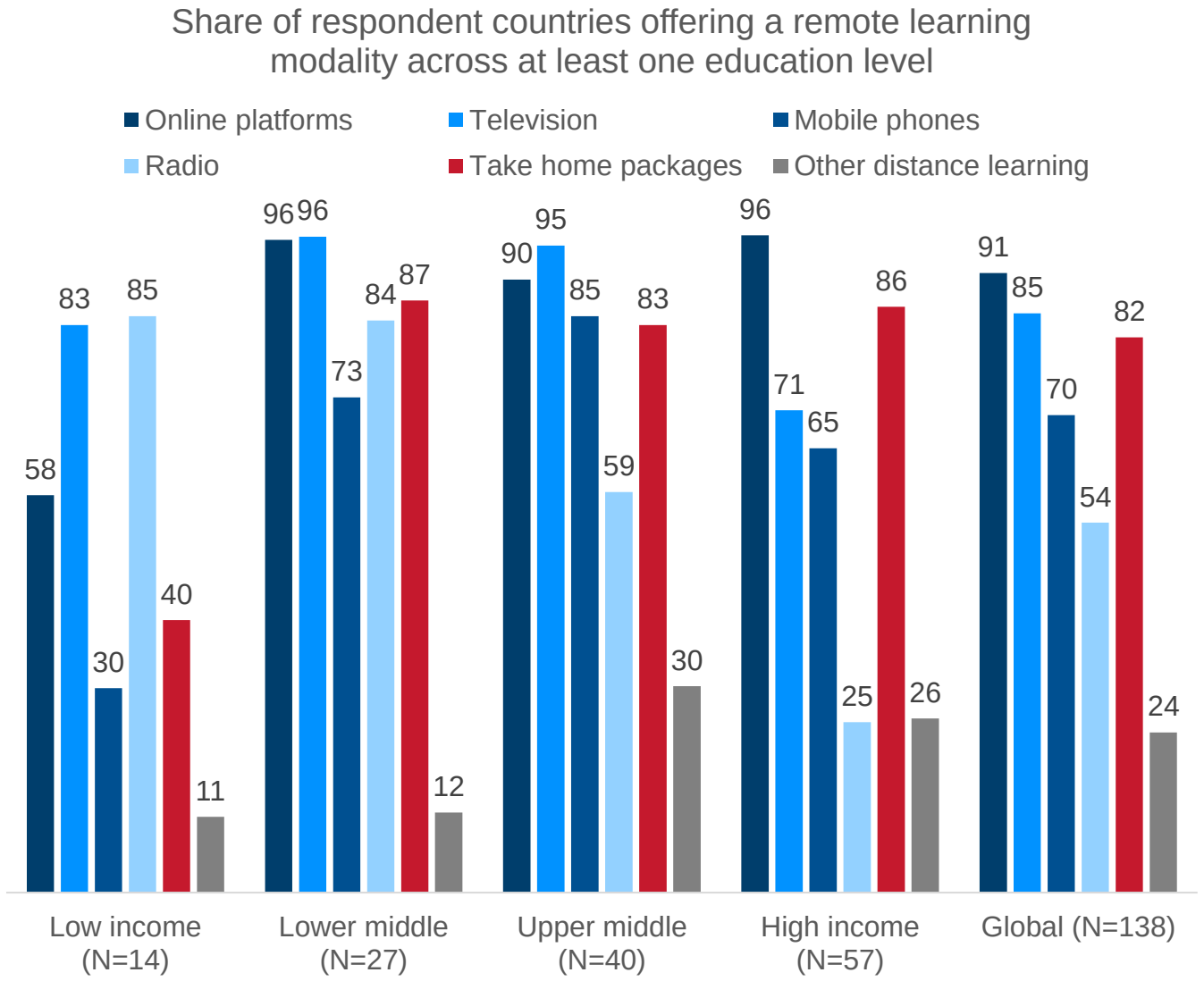
Impact 4:

Increase in anxiety and impact on wellbeing of learners and teachers

Emerging Global Digital Learning Ecosystem

Governments responded to school closures by offering various high- and low-tech remote learning solutions

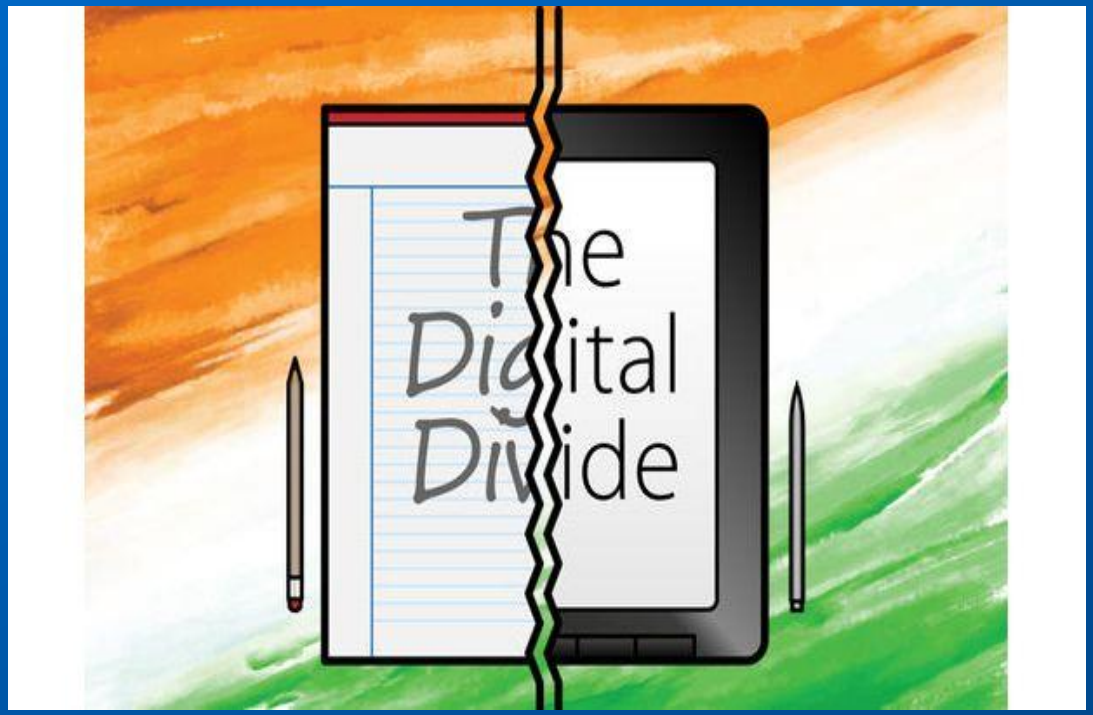
- **TV and radio** were more popular among low-income countries, whereas **online platforms** were the most popular modality in high income countries.
- Most countries provided **multiple modalities** for remote learning across education levels. **More than half** of the countries reported using five or more remote learning modalities.
- **Combining one-way technologies with interactive mobile-based modalities** can allow tailored feedback from teachers to students, and help improve access for marginalized children.



Source: UNESCO-WB-UNICEF-OECD Joint Survey, 2021

The Digital Technology Connects

But also divides

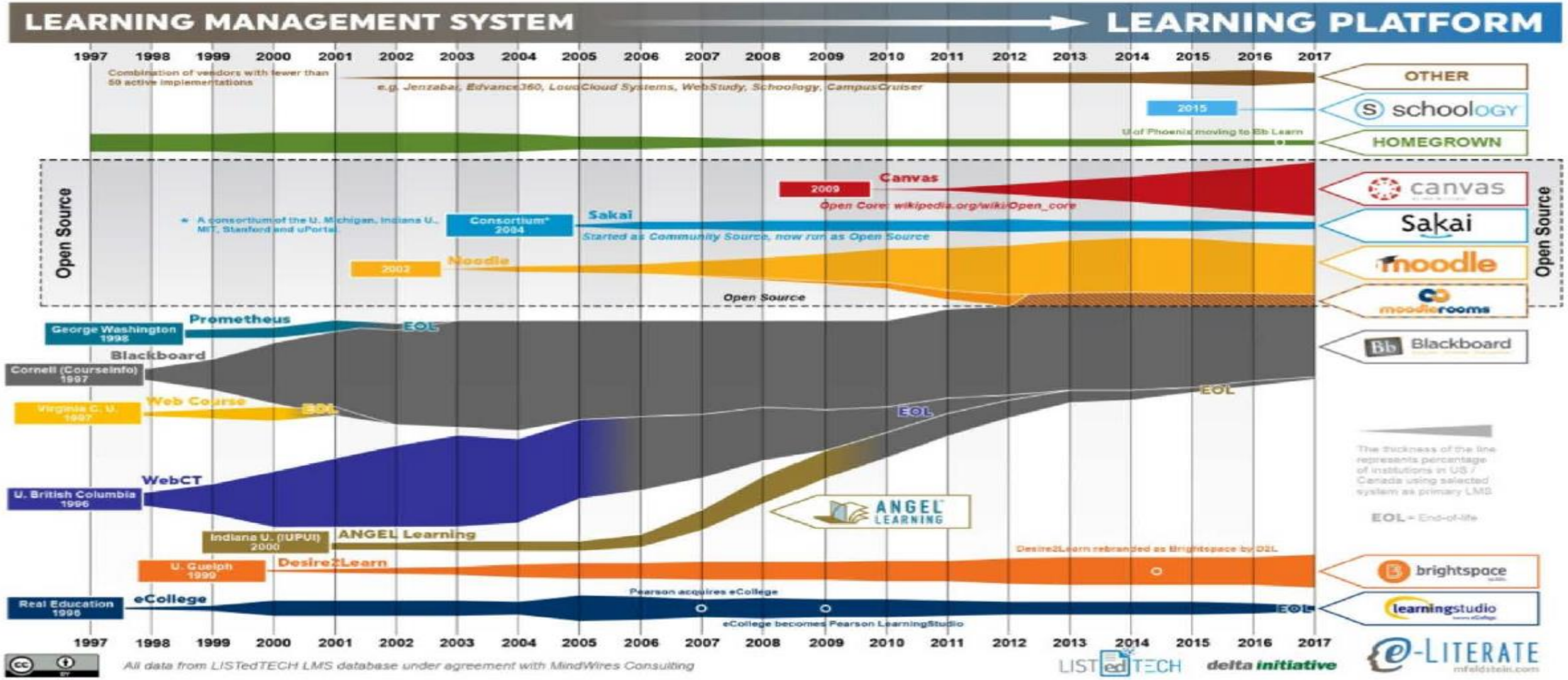


Source: Broad Band Commission Report, 2021

Connectivity Declaration

A Human-Centered Connectivity

1. Centre on most marginalized	Act to address the digital divide to ensure the right to education
2. Steer Digital Transformation	Digital Transformation should be driven primarily by education needs
3. Expand Investment	Invest in in free and high-quality digital education content



Source: e-Literate

Next Generation of Digital Learning Environment

An ecosystem of interconnected and flexible applications that supports learning through 4 key dimensions.

1. Interoperability	Develop processes, leverage technologies, capacitate actors and set norms/standards
2. Personalization	Support all learners and users experience, narrow the digital divide
3. Analytics	Invest in data analytics to support decision making
4. Collaboration and cooperation	Build community of practices, international cooperation, Join international agreements

Source: HolonIQ.com

2 Interconnected Challenges

Responding to

Leverage Technology

Protect Learners

For Lifelong Learning Opportunities for All

Learners Data Protection within a Lifelong Learning Perspective

Where do we go from here?

Do we have a vision for interoperability? A New Social Contract for Education

Future of Learning

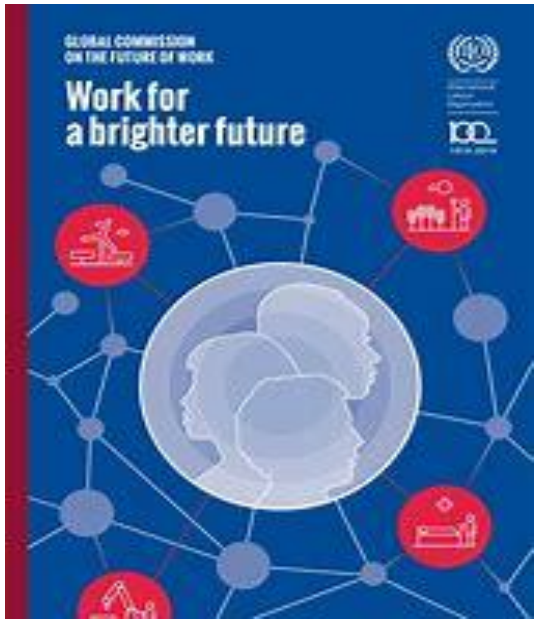
Common Denominators:

- Human-Centered
- Lifelong Learning for all
- Sustainable Economies and Societies

Five Dimensions of Social Contract

1. Pedagogy
2. Curricula
3. Teaching
4. Schools
5. Learning in all areas of life

Future of Work



Lifelong Learning

Lifelong Learning Journey

- Connecting Learning Spaces
- Understand the Learning experience
- Assessing and Recognizing Learning: Micro-credentialing, stacking and interoperability
- Linking learners with relevant learning opportunities

Culture of Lifelong Learning

Key actors

- Learners, teachers, managers
- Social partners
- Governance actors
- Providers

Enabling Multi-layers factors

- Quality assurance and technology-driven standards
- Funding and Partnerships
- Compliance and integration
- Interoperability

Directions for UNESCO's work

1. Data protection as fundamental human right
2. Data for individualized learning experience and identity
3. Privacy by design
4. Privacy as trust
5. Data as driver for better policy in education and training

Directions for UNESCO's work

Data transparency: How do we ensure that data is transparent, open to be analyzed and understood by all, without causing insurmountable ethical issues?

Data fairness: How do we ensure that the data fairly represents all learners equitably?

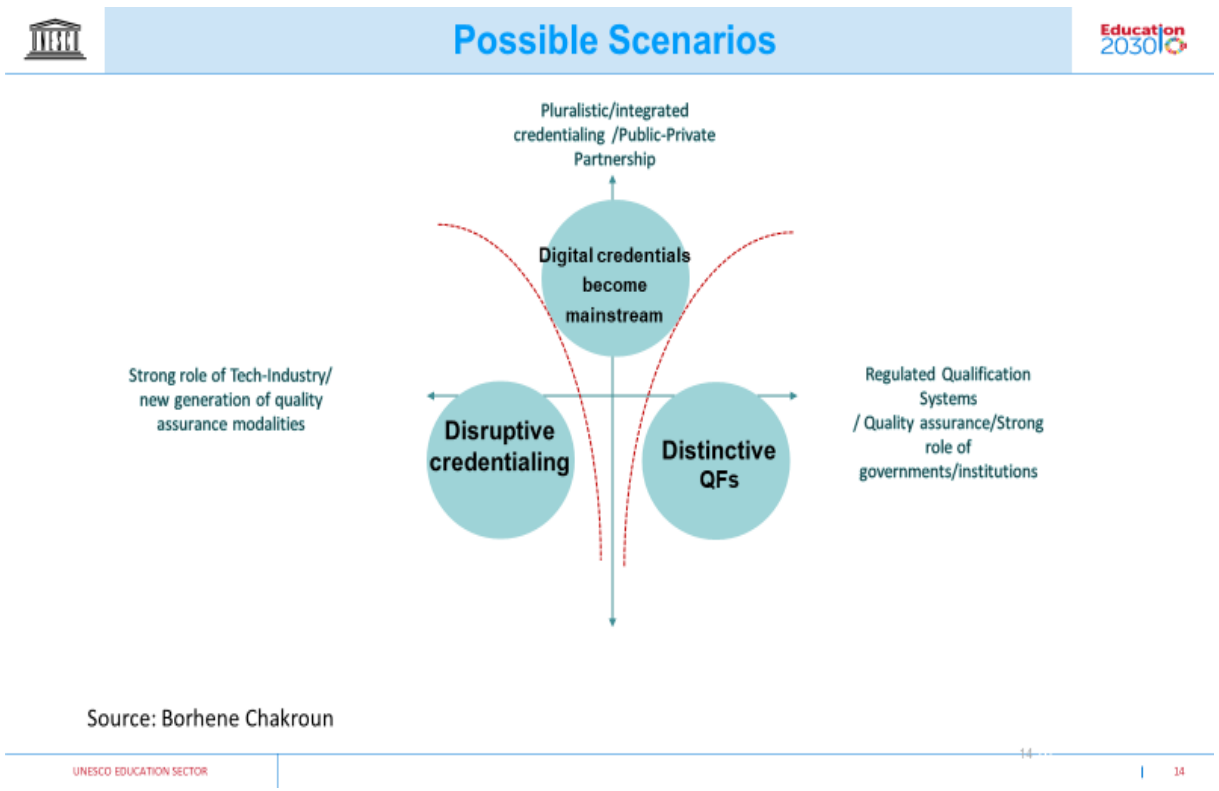
Data equity: What measures are needed to mitigate potential bias by gender, ethnic grouping, religious affiliation, demographic group, socio-economic status, etc., within education planning processes that use advanced analytics against data profiling (or deterministic algorithmic interference)?

Data privacy: How do we ensure data privacy and anonymity when data-mining makes it possible to de-anonymize apparently anonymized data; and how do we prevent and mitigate data breaches and surveillance?

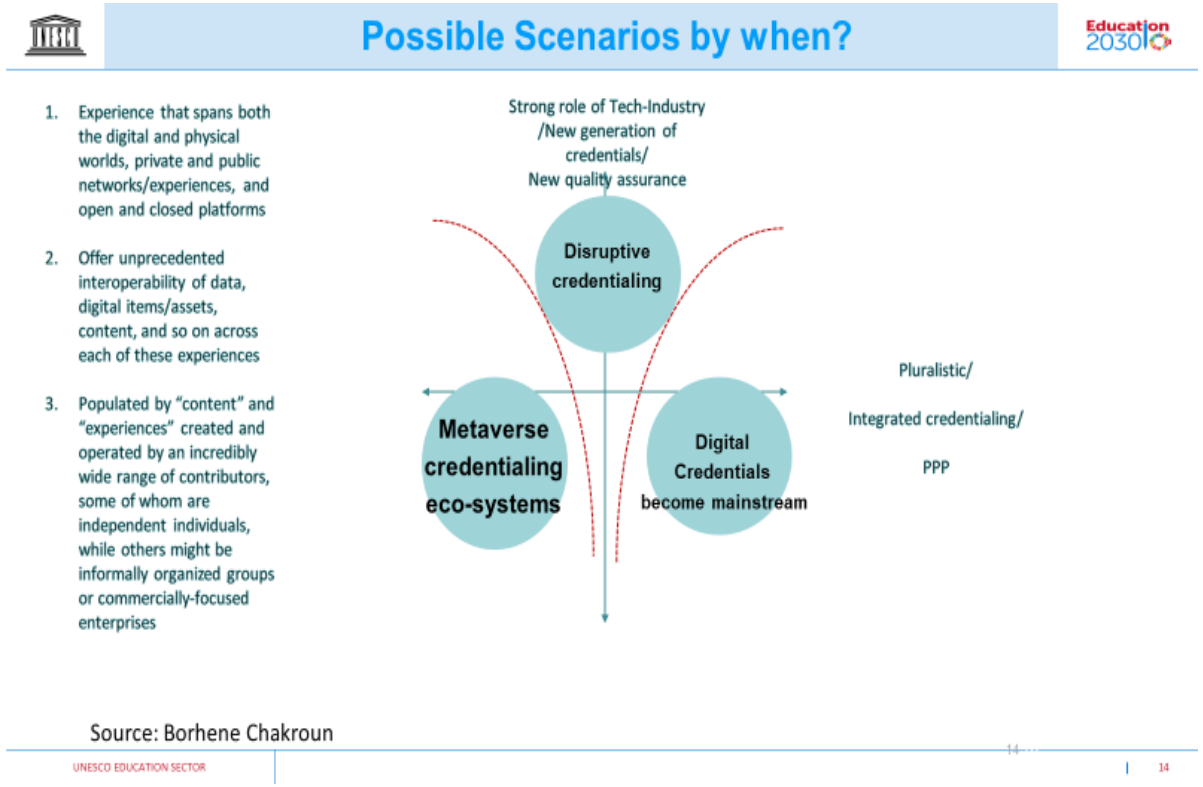
Data ownership: How do we resolve who owns the data IP, the EdTech provider or the learner, especially given that the learner usually owns the IP of anything else that they create, such as a poem or a painting?

Data and the common good: How do we reconcile data captured by commercial players ultimately for profit, with data captured and analyzed for the common good? How can data help to advance SDG4 and the 'right to education'?

"We tend to overestimate the effect of technology in short-run and underestimate the effect in long run"
Roy Amara in in *The Age* 31 October 2006



Pre-Covid thinking



Post-Covid thinking

Thank you

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