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CONFERENCE ON  
**EDUCATION DATA  
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CONFERENCIA SOBRE  
**DATOS Y ESTADÍSTICAS  
DE EDUCACIÓN**

CONFÉRENCE SUR LES  
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UNESCO HEADQUARTERS, PARIS, FRANCE



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**2024 CONFERENCE ON  
EDUCATION DATA AND STATISTICS**

**UNESCO Conference on Education Data  
and Statistics**

Data for the future and best use of technology in education

# How UNSD is leveraging technology for data innovation

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## Data Science Leaders Network

- ▶ Leveraging basic tools of data science for immediate efficiency gains in NSO operations
- ▶ Generating additional insights in response to emerging needs
- ▶ Full transformation of official statistics through digitalization

## Data for Now

- ▶ Mainstream use of innovative sources, technologies and methods for production and dissemination data for sustainable development
- ▶ For Example: *Integrating multiple data sources and geospatial analysis for educational public policy insights in Colombia*



# How UNSD is leveraging technology for data innovation

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- ▶ **UN Global Platform:** Provides access to data, tools, and processing environments that enable the mainstreaming of big data and data science into the production of official statistics
- ▶ **UNGP Regional and Global Hubs:** Facilitate collaboration in innovation for official statistics to further data science through training and coordination activities



# UN Data – powered by Google Data Commons

- ▶ Advanced Natural Language search functionality making it easy for users to access, explore, and utilize the data
- ▶ Access related data across multiple domains using linked open data techniques
- ▶ Enabling the generation of insights by reasoning over complex relationships.

<https://unstats.un.org/UNSDWebsite/undatacommons/sdgs/>

The image shows two screenshots of the UN Data Commons website. The top screenshot displays a search result for the query "How many children are out of school in Latin America?". The page header includes the United Nations logo, "Department of Economic and Social Affairs Statistics", and "Powered by Google's Data Commons". A navigation bar contains "Home", "Countries / Areas", "Goals", and "Search". The search bar contains the query and a magnifying glass icon. Below the search bar, the results are titled "Latin America and the Caribbean • 4: Quality Education". The bottom screenshot shows a search result for the query "How many people go hungry in the World?". The page header is identical to the top screenshot. The search bar contains the query. Below the search bar, the results are titled "Explore UN Data Commons for the SDGs". The page features a large network graph background and a search bar with the query "How many people go hungry in the World?".

# Challenges and opportunities in the use of technology

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- ▶ Making content ready for artificial intelligence
- ▶ Curating semantic mappings between various data sources to enable integration tasks
- ▶ Maintain comprehensive, user-friendly documentation of every step, from data collection to end-user applications, to ensure explainability, replicability and auditability



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