

# EDUCATIONAL MANAGEMENT AND INFORMATION SYSTEMS (EMIS) FOR SOCIAL JUSTICE

## Concept note

### Educational Management and Information Systems - EMIS - for Social Justice

#### Context

Education Management Information Systems (EMIS) are increasingly becoming a tool to ensure the right to education by providing data in digital format for decision making in education management, planning and monitoring.

EMIS are systems that collect, integrate and distribute educational information through technology platforms. The availability of high-quality data, the existence of enabling infrastructure, appropriate EMIS design, and their proper use can add value at all levels of an education system. Administrative data collection, including detailed information on schools, infrastructure, teachers, and students, along with interoperability with statistical records, learning assessment results, and financial data, has the potential to inform education policy and planning by the Ministry of Education, as well as to guide work and management in schools.

Of particular importance is the use of the EMIS as instruments that allow us to characterize the progress and pending challenges in relation to the right to education. For **SUMMA**, it is a priority for education systems to move towards systems that offer equal opportunities to all students, reducing learning gaps, especially among vulnerable groups. UNESCO's **Global Education Monitoring Report**, in its Regional Report for Latin America and the Caribbean (2020) entitled "*Inclusion and education: all without exception*", carried out in collaboration with SUMMA, highlights the need to adequately collect data on aspects such as disability, ethnicity, language, migration, deprivation of liberty, sexual orientation and gender identity, with a focus on making students visible rather than stigmatizing them. This in order to identify those students who are left behind and promote inclusion and educational justice.

According to the **Inter-American Development Bank (IDB)** publication entitled "*Educational Information and Management Systems in Latin America and the Caribbean: the road to the digital transformation of educational management*", at the regional level, in Latin America and the Caribbean, there is evidence of the incipient development of EMIS. The results of the diagnostic assessment of 16 countries in the Americas and the Caribbean identify strengths in the countries. However, no country was placed in the established category. Given the above, it is essential to identify the level of

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development of the countries' education management information systems, their strengths and weaknesses, in relation to their intended purpose.

Currently, at the **global and regional** levels, there are several diagnostic approaches to understanding the state and level of development of a country's EMIS. The **World Bank's SABER-EMIS** initiative assesses education information systems in four policy areas related to the quality of data collection and use. **UNESCO**, in the document "*Reinventing the Future of Education Management and Information Systems*," proposes what a modern EMIS should look like and the key areas to achieve it. The **Inter-American Development Bank's (IDB)** "*Educational Management and Information Systems Diagnostic Instrument (EMIS)*" identifies six management processes and two structural conditions for a comprehensive view of educational management processes, classifying them into four categories: latent, incipient, emerging and established.

The **regional and national** perspective is essential. In this regard, organizations such as the **Organization of Eastern Caribbean States (OECS)** are leading efforts to improve the collection and harmonization of education data, with a focus on establishing robust data management systems for decision making. On the other hand, we have national experiences such as that of the **Ministry of Education of Guyana** which enacted in 2021 the *Education Management Information Systems Policy and Education Data Policy*, a pioneering effort in providing a strategic vision, priority areas and a phased approach to establish a dynamic data ecosystem to support education management at all levels. In **Honduras**, progress on the nominalized student registry is one of the first steps in a comprehensive EMIS management system.

As more and more data is collected and accessed, a more complex and sophisticated response is required for its organization, analysis and dissemination. Therefore, it is necessary to strengthen human capacities, data quality and improve systems for an optimal use of data in education. In this context, and in the interest of encouraging and supporting the generation and use of relevant evidence for educational improvement, SUMMA and OECS through KIX LAC with the support of GPE- IDRC, have organized a **cycle of Knowledge Mobilization** and in the framework of this, a **Community of Practice "Use of evidence in education"**, aimed at strengthening capacities for the different actors of the educational ecosystem of the countries that make up KIX LAC.

The primary purpose of this initiative is to address current challenges in the region and promote a data-driven approach to improve educational quality and equity, especially in the post-COVID-19 context. This cycle is structured in three thematic lines, the first one "[Using Evidence for Institutional Change](#)", the second one "*How to use learning assessments for educational improvement*", and the third one "*How to use learning assessments for educational improvement*". The third, which we will work on in

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the following exchange spaces, will focus on the essential question: *How does EMIS contribute to Social Justice?*

## Key questions to be addressed during this thematic line:

Educational management and information systems (known by the acronym SIGED in Spanish or EMIS in English) are complex and multivariable systems.

- What is the purpose of EMIS systems?
- What is the current status of educational information and management systems (EMIS) in the region?
- What are the current challenges in the implementation and effective use of EMIS systems in the region?
- How to strengthen the capacities of the actors involved in the development of EMIS systems?
- How to strengthen the capacities of the actors involved in the use of EMIS systems?
- How can EMIS help close educational gaps and promote equity in access to education?
- What are the main challenges faced by countries in the development and implementation of educational information systems?
- What strategies can be implemented to improve the quality and availability of data collected by EMIS?
- How and why is it relevant to integrate data from different sectors (e.g. poverty, health) with data from the education sector (e.g. infrastructure, costs)?
- How to develop EMIS systems that work in a sustainable way?

## Learning objectives:

- Know the components and design of a developed EMIS: Participants should be able to conceptualize the enabling conditions and the different components of a developed EMIS.
- Understand the importance of EMIS in educational decision-making: Participants should be able to understand how EMIS can influence the formulation and implementation of educational policies and strategies.
- Identify challenges and opportunities in EMIS implementation: Participants should be able to identify common obstacles and best practices in the development and implementation of educational information systems.

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- Explore approaches to assessing and improving EMIS: Participants should be able to explore different tools and approaches used to assess and improve EMIS in the context of social justice.

**Wednesday 17th July, 2024.**

## Schedule:

9:00 - 11:00 hs. | El Salvador | Guatemala | Honduras | Nicaragua.

11:00 a.m. - 14:00 p.m. Eastern Caribbean | Guyana | Haiti | Chile

Format: Free online event with simultaneous interpretation in Spanish, English and French.

[Zoom link](#)

## AGENDA

### Block 1 | Global and Regional Reflections on EMIS

 11:00 - 11:10

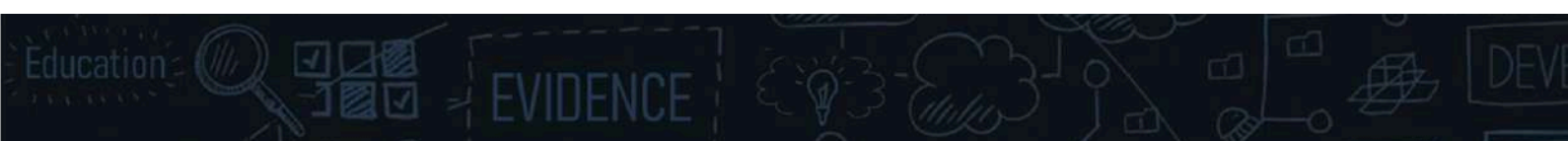
Welcome and opening remarks: Raúl Chacón, director of KIX LAC, SUMMA.

 11:10 - 11:25

*The Role of EMIS in Promoting Social Justice* | María José Sepúlveda, Director of Evaluation, SUMMA.

 11:25 - 11:40

*Perspectives and Challenges of EMIS in Latin America* | Marcelo Perez Alfaro, Lead Education Specialist and Southern Cone Focal Point - Inter-American Development Bank.



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 11:40 - 11:55

*Implementation of EMIS in the OECS Region: Agreements, Priorities and Challenges* | Germain M. Anthony: Technical Specialist Education at the Education Development Management Unit (EDMU) - OECS Commission.

 11:55 - 12:20

Comments and questions

*Interaction with participants to discuss questions and reflections on their presentations.*

 12:20 - 12:30

*Closing Block 1* | Raul Chacón, director of KIX LAC., SUMMA.

 12:30 - 12:40 | BREAK

## Block 2: Implementation of EMIS: National and Subregional Experiences

 12:40 - 12:45

*Introduction of experiences* | KIX LAC, SUMMA.

 12:45 - 13:05

*Implementation of EMIS: Experiences from St. Lucia and Grenada* | OECS country representatives.

 13:05 - 13:20

*Educational Management in Honduras: Students Registration and the SART Module for Vulnerable Populations* | Javier Donaïre, General Coordinator of the National Educational Information System Unit of Honduras (USINIEH), Ministry of Education of Honduras.

 13:20 - 13:35

*Articulating Research and Policy: learnings for Latin America and the Caribbean* | Knut Staring, product manager for DHIS2 for Education at the HISP Centre, University of Oslo.

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 13:35 - 13:50

Comments and questions.

*Interaction with participants to discuss questions and reflections on their presentations.*

 13:50 - 14:00

Closing remarks | Joy Nafungo, Education Specialist, KIX Program Officer, IDRC.

## Organizers:

### SUMMA

SUMMA is the first Educational Research and Innovation Laboratory for Latin America and the Caribbean. It was created in 2016 by the Inter-American Development Bank (IDB), with the support of the ministries of education of Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Uruguay. Since 2018, the ministries of Guatemala, Honduras and Panama have also joined.

Its mission is to contribute to and increase the quality, equity and inclusion of the region's educational systems, improving the decision-making process of educational policies and practices. To fulfill its mission, SUMMA organizes its actions in three strategic pillars that allow it to promote, develop and disseminate (1) cutting-edge research aimed at diagnosing the main challenges of the region and promoting shared work agendas, (2) innovation in educational policies and practices aimed at providing solutions to the main educational problems of the region, and (3) collaborative spaces that allow the exchange between policy makers, ministries of education, researchers, innovators and the school community, based on a shared regional agenda. More information at [www.summaedu.org](http://www.summaedu.org)

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## Organization of Eastern Caribbean States - OECS - Organization of Eastern Caribbean States - OECS - Organization of Eastern Caribbean States - OECS

The Organization of Eastern Caribbean States was created in 1981 as an intergovernmental organization to promote cooperation, harmonization and integration among its member states. OECS has developed a considerable amount of valuable knowledge sharing and direct technical assistance among Ministries of Education. It has also been part of the Regional Education Strategy and has supported participatory planning processes. In this regard, OECS plays a strong leadership role with the Caribbean States and especially in supporting the countries that belong to this territory: Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines. As a current partner of the GPE, the OECS has led the implementation of the Education Sector Plans in these states. More information available [www.oecs.org](http://www.oecs.org)

## KIX LAC

The Knowledge and Innovation Exchange Hub (KIX) in Latin America and the Caribbean (LAC) is a joint initiative of the Global Partnership for Education (GPE) and the International Development Research Centre (IDRC), which brings together various education stakeholders. The regional network is led by SUMMA (Educational Research and Innovation Laboratory for Latin America and the Caribbean) and the Organization of Eastern Caribbean States, and aims to contribute to the strengthening of education systems in partner countries: Dominica, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Nicaragua, St. Vincent and the Grenadines, and St. Lucia.

KIX connects expertise, innovation and knowledge to help developing countries build stronger education systems and move towards SDG 4: quality, inclusive and equitable education for all. [Learn more about KIX LAC](#)

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## References

Abdul-Hamid, H. (2014). *What Matters Most for Education Management Information Systems: A Framework Paper* (No. 7; SABER Working Paper Series). World Bank Group.

[http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting\\_doc/background/emis/framework\\_saber-emis.pdf](http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/background/emis/framework_saber-emis.pdf)

Informe de Seguimiento de la Educación en el Mundo. (2020). *América Latina y el Caribe. Inclusión y educación: Todos y todas sin excepción*. UNESCO.

<https://gem-report-2020.unesco.org/es/america-latina-y-el-caribe/>

Ministry of Education Guyana. (2021) Education Management Information System and Education Data Policy. Georgetown, Guyana

[.https://planipolis.iiep.unesco.org/sites/default/files/ressources/Guyana MOE EMIS and Education Data Policy.pdf](https://planipolis.iiep.unesco.org/sites/default/files/ressources/Guyana_MOE_EMIS_and_Education_Data_Policy.pdf)

Montes, N. (2022). *Usos de los sistemas de información en el planeamiento y gestión de políticas educativas en América Latina: Informe regional—UNESCO Digital Library*. UNESCO IIEP.

<https://unesdoc.unesco.org/ark:/48223/pf0000385439>

Ortiz, E. A., Eusebio, J., Alfaro, M. P., Vásquez, M., & Zoido, P. (2021). Education Management and Information Systems (SIGEDs) in Latin America and the Caribbean: The Road to the Digital Transformation of Education Management. *IDB Publications*. <https://doi.org/10.18235/0003345>

Ortiz, E. A., Zoido, P., Eusebio, J., Alfaro, M. P., & Vásquez, M. (2019). Del papel a la nube: Cómo guiar la transformación digital de los Sistemas de Información y Gestión Educativa (SIGED). *IDB Publications*.

<https://doi.org/10.18235/0001749>

Sitio web UNESCO Institute of Statistics. Educational Management Information System:

<https://emis.uis.unesco.org>

Sitio web UNESCO. LASER for Education Information Ecosystem. <https://tcg.uis.unesco.org/laser/>

Sitio Web OECS: <https://www.oecs.int/en/>

Sitio Web Sistema de Administración de Centros Educativos (SACE) Honduras:

<https://sace.se.gob.hn/>

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UNESCO-UIS (2015). *ED-DATA Quality Assessment Framework (Ed-DQAF) to Evaluate Administrative Routine Data Systems: Manual for the Conduct of an Evaluation by National Technical Team*. UNESCO: <https://emis.uis.unesco.org/wp-content/uploads/sites/5/2020/09/DQAF-Manual-Data-Quality-Assessment-Framework-2017-en.pdf>

UNESCO-UIS (2023). *Data for education: a guide for policymakers to leverage education data*. Canada. <https://unesdoc.unesco.org/ark:/48223/pf0000388634>

Van Wyk & Crouch (2020). *Efficiency and Effectiveness in Choosing and Using an EMIS*. UNESCO. <https://emis.uis.unesco.org/wp-content/uploads/sites/5/2020/09/EMIS-Buyers-Guide-EN-fin-WEB.pdf>

