





Canada

DESIGN-BASED IMPLEMENTATION RESEARCH REPORT: CYCLE 1

IMPROVING COLLABORATION THROUGH COMMUNITIES OF PRACTICE TO INFORM FOUNDATIONAL LEARNING POLICIES IN CAMEROON

Date of publication: September 2025

DOI: https://doi.org/10.53832/unlockingdata.1035

Authors: Claude Fotso, Rigobert Pambe, and Nain Mirable Yuh











About this document

Recommended citation

Fotso, C., Pambe, R., & Mirabel Yuh, N. (2025). Design-Based

Implementation Research Report: Cycle 1. Improving collaboration through Communities of Practice to inform foundational learning policies in Cameroon [Collaborative

Evaluation]. Unlocking data.

https://doi.org/10.53832/unlockingdata.1035

Available at https://docs.unlockingdata.africa/lib/JB98ZXEI.

Licence Creative Commons Attribution 4.0 International

https://creativecommons.org/licenses/by/4.0/

You are free to share and adapt this material, even for commercial use, as long as you credit Unlocking Data, link to the license, and note any changes. Do not imply endorsement from the original

creators.

Notes This work was carried out with the aid of a grant from the

International Development Research Centre, Ottawa, Canada (IDRC). The views expressed herein do not necessarily represent

those of IDRC or its Board of Governors.

Reviewers Rashiid Iwiire, Laté Lawson, Nafisa Waziri, and Nariman Moustafa

About the Unlocking Data Initiative

The Unlocking Data Initiative is a community of practice that connects African scholars, NGOs, national statistics offices and policymakers for the purpose of improving access to and use of education data. The **Unlocking Data: Scaling Uses and Users of Education Data** project is a collaborative work led by Zizi Afrique Foundation and supported by Education Sub-Saharan Africa, eBase Africa, and the University of Malawi's Centre for Education Research and Training (CERT). The latter project, which is being implemented in Cameroon, Kenya, and Malawi, aims to scale up uses and users of data to address the knowledge gap of how to adaptively scale up the effective use of existing education data by policymakers and researchers in Africa.

To learn more about us, visit https://unlockingdata.africa/. Our evidence library can be found at https://docs.unlockingdata.africa/lib/

Contents

Abbreviations and acronyms	4	
Executive summary	5	
Context for the design-based implementation research (DBIR)	6	
1.1. Scope of the DBIR	6	
1.1.1. Design of DBIR Cycle 1	6	
1.1.2. Objectives	6	
1.2. Report structure	7	
2. Methodology review	7	
2.1. Activities completed during DBIR Cycle 1	8	
2.2. Data and methods	9	
2.3. Distribution of participants	9	
2.4. Limitations	10	
3. Key findings and insights	11	
3.1. Fragmented data landscape	11	
3.2. Capacity gaps	11	
3.3. Trust deficit	11	
3.4. Data quality	12	
Preliminary outcomes and indicators	13	
5. Conclusion and next steps	14	
Reference	15	
Table		
Table 1. Participants for the DBIR		

Abbreviations and acronyms

CoP Community of Practice

DBIR Design-based implementation research

EMIS/SIGE Education Management Information Systems(Système d'Information et de

Gestion de l'Éducation)

INS National Institute of Statistics

MINEDUB Ministry of Basic Education

PASEC Programme d'Analyse des Systèmes Éducatifs de la CONFEMEN

REAP Responsive Evidence Systems for African Policy Needs

ROSIE Research on Scaling the Impact of Innovations in Education

Executive summary

This report outlines the outcomes of the first cycle of the design-based implementation research (DBIR) process in Cameroon, primarily focusing on the establishment of regional Communities of Practice (CoPs) to enhance the use of foundational learning data. Collaborating with the Ministry of Basic Education (MINEDUB) and other sub-national stakeholders, Cycle 1 activities included a stakeholders workshop in Limbe to formally launch the CoPs and to co-create a manifesto outlining their objectives, roles, and operational guidelines. The initiative addressed challenges such as fragmented data systems, limited analytical capacity, and weak feedback loops, thereby laying a crucial foundation for improved data-driven decision-making in education.

The primary achievement of this cycle was the successful operationalisation of two regional CoPs in the Centre and Northwest Regions led by MINEDUB Regional Delegates. A key outcome of this process was the co-creation of a stakeholder manifesto, which defined the objectives, roles, and operational guidelines for the CoPs. Furthermore, the initiative significantly increased stakeholder awareness of critical gaps in data use, particularly the need for integrated systems and a greater focus on learning attainment. The collaborative workshops and discussions fostered improved engagement among all participants, building a strong foundation for ongoing cooperation. Collectively, these outcomes mark a significant first step toward embedding data-driven decision-making in Cameroon's education sector.

1. Context for the design-based implementation research (DBIR)

Cameroon faces significant challenges in foundational learning, with limited data on literacy and numeracy outcomes (Pambe et al., 2025). Despite the availability of administrative data through Système d'Information et de Gestion de l'Éducation (SIGE), data on learning outcomes remains sparse, and existing datasets are underutilised due to fragmentation, limited analytical capacity, and weak feedback loops between national and sub-national levels.

The DBIR process, under the Unlocking Data Initiative, aims to address these gaps by establishing regional CoPs in the Centre and Northwest Regions. These CoPs are designed as platforms for collaborative data reflection, bringing together MINEDUB officials, researchers, civil society, and other stakeholders to analyse data from SIGE, the National Institute of Statistics (INS), and local assessments and to develop regional learning agendas.

1.1. Scope of the DBIR

Cycle 1 focuses on establishing CoPs to foster collaborative data use and address evidence gaps in foundational learning. The initiative targets the Centre and Northwest Regions, aiming to build capacity, promote stakeholder collaboration, and create feedback loops to inform national education planning.

Cycle 1 of the Design-Based Implementation Research (DBIR) initiative is specifically focused on establishing Communities of Practice (CoPs) to foster collaborative data use and address evidence gaps in foundational learning. This initiative specifically targets the Centre and Northwest Regions of Cameroon, with the aim of building capacity, promoting stakeholder collaboration, and creating effective feedback loops to inform national education planning.

1.1.1. Design of DBIR Cycle 1

The design for the first cycle focused on several key areas:

- Launching CoPs in two pilot regions.
- Co-creating a manifesto to guide CoP operations.
- Identifying regional learning priorities.

1.1.2. Objectives

The objectives for the first iteration of the DBIR were to:

Establish two operational CoPs led by MINEDUB and supported by eBASE Africa

Unlocking Data

- Develop a manifesto to define CoP operations and priorities.
- Enhance regional capacity to utilise education data.
- Identify foundational learning priorities for regional learning agendas.

1.2. Report structure

The structure of this report is as follows: Section 1 introduces the Context of the DBIR. Section 2 outlines the methodology and activities undertaken. Section 3 presents key findings and insights. Section 4 summarises lessons learned and proposed adaptations. Section 5 describes preliminary outcomes and indicators. Finally, Section 6 discusses conclusions and outlines the next steps.

2. Methodology review

The approach adopted for DBIR Cycle 1 was guided by principles of co-creation, iterative learning, and contextual adaptation. This approach adopted here closely aligns with Brookings' ROSIE (Research on Scaling the Impact of Innovations in Education) framework's principles for successfully expanding educational innovations. It involved a series of participatory workshops and stakeholder engagements designed to establish CoPs and actively promote collaborative data use within Cameroon's education sector.

2.1. Activities completed during DBIR Cycle 1

The first cycle of the DBIR comprised several key activities to achieve its objectives:

- Stakeholder mapping: A comprehensive stakeholder mapping exercise was undertaken to identify and engage key actors for the Communities of Practice (CoPs) in the Centre and Northwest Regions. This process involved consultations with MINEDUB to map relevant stakeholders, including Regional Delegates, divisional officials, INS representatives, university researchers, CSOs, council representatives, and school heads. The mapping ensured inclusive representation, capturing diverse perspectives to strengthen collaborative data use and align CoP activities with both local and national education priorities.
- **DBIR design:** A structured co-design process was conducted to establish the operational framework for the Communities of Practice (CoPs) in the Centre and Northwest Regions. This involved a collaborative workshop with MINEDUB, eBASE Africa, and key stakeholders to define the CoP's objectives, governance structure, and operational guidelines. The design phase prioritised stakeholder input to ensure alignment with regional education priorities and the broader goals of the Unlocking Data Initiative, thereby creating a tailored approach to foster collaborative data use and address foundational learning challenges.
- Ministry validation and appointment of focal points: Formal validation was secured from the Ministry of Basic Education (MINEDUB) to officially initiate the Communities of Practice (CoPs) in the Centre and Northwest Regions. MINEDUB subsequently appointed Regional Delegates as focal points to lead and coordinate the CoP activities, ensuring alignment with national education priorities. This validation process involved consultations to confirm the initiative's objectives and establish clear roles for Ministry leadership, thereby laying a strong foundation for stakeholder collaboration and effective implementation of the CoPs.
- Stakeholders Workshop (March 30, 2025): A full-day workshop was convened at Marcson's Hotel in Limbe, engaging 15 policymakers, including MINEDUB Regional Delegates and representatives from the Ministry of Basic and Secondary Education. Its primary aim was to launch the Communities of Practice (CoPs), introduce the Unlocking Data Initiative, and facilitate the co-creation of a

manifesto to guide CoP operations. Interactive presentations and discussions during the workshop focused on foundational learning data gaps, stakeholder roles, and regional priorities, fostering commitment to collaborative, evidence-informed decision-making.

■ Thematic discussions: During the aforementioned workshop, thematic discussions were facilitated. These discussions focused on identifying regional priorities for foundational learning and addressing persistent challenges in data use, such as fragmentation and limited analytical capacity. Participants explored various strategies for leveraging existing data sources like SIGE, Programme d'Analyse des Systèmes Éducatifs de la CONFEMEN (PASEC), and local assessments, laying the groundwork for developing regional learning agendas and actively fostering collaborative data-driven decision-making within the newly established Communities of Practice (CoPs).

2.2. Data and methods

The DBIR Cycle 1 employed a combination of methods to facilitate its objectives, which were fundamentally guided by principles of co-creation, iterative learning, and contextual adaptation. The methods included:

- Participatory workshops for co-creation and reflection: These workshops were central to the DBIR's approach, enabling stakeholders to collaboratively establish Communities of Practice (CoPs) and promote the shared use of data. Examples of these include the structured co-design process for the DBIR, and the comprehensive Stakeholders Workshop held on 30 March 2025.
- Qualitative analysis of stakeholder discussions: Insights were derived from the rich discussions and consultations held with various stakeholders, particularly during the workshop sessions. This qualitative analysis helped to understand the key challenges within the education data ecosystem in Cameroon.
- Review of existing data sources to inform CoP agendas: A crucial aspect of the methodology involved examining available education data. Participants explored strategies for leveraging existing data sources such as the Education Management Information Systems (SIGE), the Programme d'Analyse des Systèmes Éducatifs de la CONFEMEN (PASEC), and various local assessments. This review was intended to inform the development of regional learning agendas and foster data-driven decision-making within the CoPs.

2.3. Distribution of participants

The participants for the DBIR Cycle 1 were strategically selected to ensure comprehensive representation and diverse expertise, as detailed in Table 1:

Unlocking Data

Table 1. Participants for the DBIR

Stakeholder group	Role	Number
MINEDUB Regional Delegates	CoP coordinators	2
MINEDUB Officials	Policy and Planning	8
INS Representatives	Data expertise	2
CSO Representatives	Local insights and assessments	3

2.4. Limitations

During the initial phase of the Design-Based Implementation Research (DBIR) Cycle 1, several limitations were encountered. These challenges impacted the implementation and effectiveness of the Communities of Practice (CoPs) and included:

- Limited regional capacity: Sub-national staff, such as teachers, divisional officers, and regional education officials, exhibited a lack of adequate training in collecting, analysing, and interpreting data, which significantly impacted their engagement with the Communities of Practice (CoPs). This capacity gap limited their ability to effectively contribute to data-driven discussions and utilise existing datasets, such as SIGE and PASEC, for actionable insights. As a result, the depth of collaborative analysis during Cycle 1 was constrained, limiting the CoPs' ability to fully address regional learning priorities. This also affected the quality of feedback loops intended to inform national planning as sub-national actors struggled to translate data into meaningful policy recommendations.
- Bureaucratic Blocks: Significant bureaucratic challenges were encountered in securing formal approval from the Ministry of Basic Education (MINEDUB) for the CoPs, which delayed the implementation of Cycle 1 activities. The prolonged approval process required extensive consultations and additional documentation, slowing down the timeline for establishing the CoPs and initiating stakeholder engagements.

3. Key findings and insights

Cycle 1 activities revealed critical insights into the education data ecosystem in Cameroon, which were drawn from the workshop sessions and stakeholder consultations. Two key findings emerged:

3.1. Fragmented data landscape

Stakeholders highlighted the disconnection between various existing data sources within Cameroon. Specifically, data from SIGE, INS, and local assessments are often collected but not effectively utilised for decision-making. The workshop session emphasised the need for a unified platform to integrate these disparate sources. A MINEDUB official noted:

"Data exists, but it's scattered. We need a way to bring it together for meaningful insights."

3.2. Capacity gaps

Stakeholder engagements revealed that regional actors, including teachers, divisional officers, and regional education officials, lack sufficient training in data collection, analysis, and interpretation. This capacity gap significantly limits their ability to effectively engage with education data, such as SIGE and PASEC datasets, within the CoPs. The absence of analytical skills restricts their capacity to generate actionable insights from data, impeding the development of evidence-based strategies needed to address foundational learning challenges. Furthermore, this capacity deficit weakens the CoPs' ability to foster robust collaboration and contribute to regional learning agendas.

3.3. Trust deficit

Stakeholder discussions among stakeholders revealed a significant trust deficit between government entities and research institutions. Policymakers expressed scepticism regarding the validity and relevance of independent research, often questioning its methodological rigour and applicability to policy needs. Conversely, researchers voiced doubts about the reliability and transparency of government-generated data, such as SIGE datasets, citing inconsistencies and limited accessibility. This mutual scepticism hampered effective collaboration within the CoPs, limiting the integration of diverse data sources and constraining the potential for evidence-informed decision-making to address foundational learning challenges.

3.4. Data quality

Stakeholders identified significant gaps in the quality and focus of data collected within the education system. Data collection primarily emphasises school attendance, such as class registers, which are often recorded but subsequently left unused and stored on shelves in staff offices. In contrast, data on learning attainment, specifically foundational literacy and numeracy outcomes, is rarely prioritised or systematically collected. This skewed focus limits the ability of the CoPs to analyse essential learning metrics, thereby hindering evidence-based decision-making and the development of targeted interventions aimed at improving foundational learning outcomes. Cycle 1 activities, particularly the workshop and thematic discussions, heightened stakeholders' awareness of this lack of focus on learning attainment.

4. Preliminary outcomes and indicators

The initial phase of the Design-Based Implementation Research (DBIR) Cycle 1 in Cameroon yielded several preliminary outcomes and indicators, primarily focused on establishing a foundation for collaborative data use within the Communities of Practice (CoPs). These outcomes reflect progress in stakeholder engagement, institutional alignment, and increased awareness of data use challenges, setting the groundwork for deeper impact in subsequent cycles.

Key preliminary outcomes include:

Operational CoPs: Two regional Communities of Practice (CoPs) were successfully established in the Centre and Northwest Regions, as planned in Cycle 1. Led by MINEDUB Regional Delegates, these CoPs serve as structured platforms for stakeholders to collaborate on foundational learning data use. Their operationalisation marks a critical step towards fostering evidence-informed decision-making at the regional level, with initial activities laying the groundwork for sustained engagement.

Manifesto Development: Stakeholders co-created a manifesto that outlines the objectives, roles, and operational guidelines for the CoPs. This document ensures alignment among MINEDUB, INS, CSOs, and other actors, providing a clear framework for collaborative data reflection and regional learning agenda development, which will guide future CoP activities.

Increased Awareness: The activities undertaken during Cycle 1, particularly the workshop and thematic discussions, heightened stakeholders' awareness of existing gaps in data use, such as fragmented data sources and the lack of focus on learning attainment. Participants acknowledged the urgent need for integrated data systems to support evidence-based planning, fostering a shared commitment to addressing these challenges in future cycles.

Stakeholder Engagement: Collaboration among MINEDUB, the National Institute of Statistics (INS), civil society organisations (CSOs), and other stakeholders experienced significant improvement during the workshop session. This enhanced engagement has established a foundation for ongoing cooperation throughout the DBIR cycles and beyond, enabling more inclusive and coordinated efforts to improve the use and users of data in Cameroon.

5. Conclusion and next steps

Cycle 1 of the DBIR process successfully laid the foundation for regional CoPs in Cameroon, fostering collaboration and highlighting data use challenges. Looking ahead, future cycles of the DBIR process will focus on deepening the engagement of these CoPs, developing regional learning agendas, and piloting data integration tools.

Next steps:

- Conduct thematic data reflection sessions (Months 3–4).
- Synthesise regional findings (Month 5).
- Host a national reflection event (Month 6).

Reference

This reference is available digitally in our evidence library at https://docs.edtechhub.org/lib/JB98ZXEI

Pambe, R., Yuh, N. M., Awah, N., Kelese, M., & Okwen, P. (2025). Exploring the Foundational Learning Data and Knowledge Ecosystem in Sub-Saharan Africa: Cameroon's Situational Analysis. Unlocking Data. https://doi.org/10.53832/unlockingdata.1017. Available from https://docs.unlockingdata.africa/lib/NXKXXG66. Available under Creative Commons Attribution 4.0 International. (details)