
# BREAK-AWAY FEEDBACK

Where insight meets impact

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# 3-2-1 GO!

# Break-away conversation structure

## 3 WHAT

**CURRENT REALITY: What is the current state of the topic at hand?**

*Identify the top three "realities" / key observations that best describe this state, focusing on aspects that need to change in order to move South African education forward.*

Guest contributor input.

Audience input: All

## 2 WHY

**CHALLENGES: What are the biggest issues/ challenges that contribute to the current state, or which pose barriers to improving this?**

*Identify the top two issues/challenges for each of the realities identified in the preceding discussion (six in total). These could be actual obstacles or the lack of critical aspects, but which have the potential to be changed.*

Audience input: All

## 1 HOW

**STRATEGIES FOR CHANGE: What actions or strategies could be taken to address each of these challenges? [45 min]**

*Identify one strategy (a simple action, or a series of actions, policy changes, etc) for each of the six challenges identified in the preceding discussion, and which could contribute to overcoming or mitigating that issue. Specify whose involvement is needed to make that action happen, and what role Education Management Information Systems (EMIS) could play.*

Audience input: All

# BREAK-AWAY #1

## Understanding and improving data collection, management and use in South African education

***Rapporteur: Shiloh Naiken (NECT)***

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# *3 – 2 – 1 GO!*

## The current state of data collection, management and use in South African education

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| **1. Observation: Policy Gaps and Misalignment** | Contributing factor:<br>• **Lack of Data Standards:** Robust policies governing data quality and standards at every educational level are absent, leading to inconsistent data accuracy and reliability across schools.<br>• **Barriers to Real-time Data Access:** Existing policies often prevent the collection and use of real-time data, which is essential for informed decision-making and timely interventions.<br>• **Inadequate Support for School-level EMIS Officials:** School EMIS personnel often lack the training, resources, and guidance needed to manage and report data effectively, resulting in incomplete or incorrect data submissions. | Action for improvement:<br>- Development of a comprehensive national data policy that enforces standards, encourages real-time data reporting, and ensures support for school-level data personnel through continuous training and infrastructure provision. |
| **2. Observation: Technology Fragmentation and Integration Challenges** | Contributing factor:<br>• **Standalone Systems Lacking Integration -** Current data collection systems are fragmented, with limited integration for cross-verification and validation. This compromises data accuracy and the ability to conduct thorough analyses.<br>• **Underutilisation of Digital Technology** - While digital technologies have the potential to streamline data collection, they are underutilised or poorly implemented, resulting in inefficiencies and data bottlenecks. | Action for improvement:<br>- Shift towards an integrated, interoperable digital ecosystem for data management, ensuring seamless verification and validation processes.<br>- Investment in advanced digital tools and platforms that support efficient data collection, processing, and reporting is crucial. |

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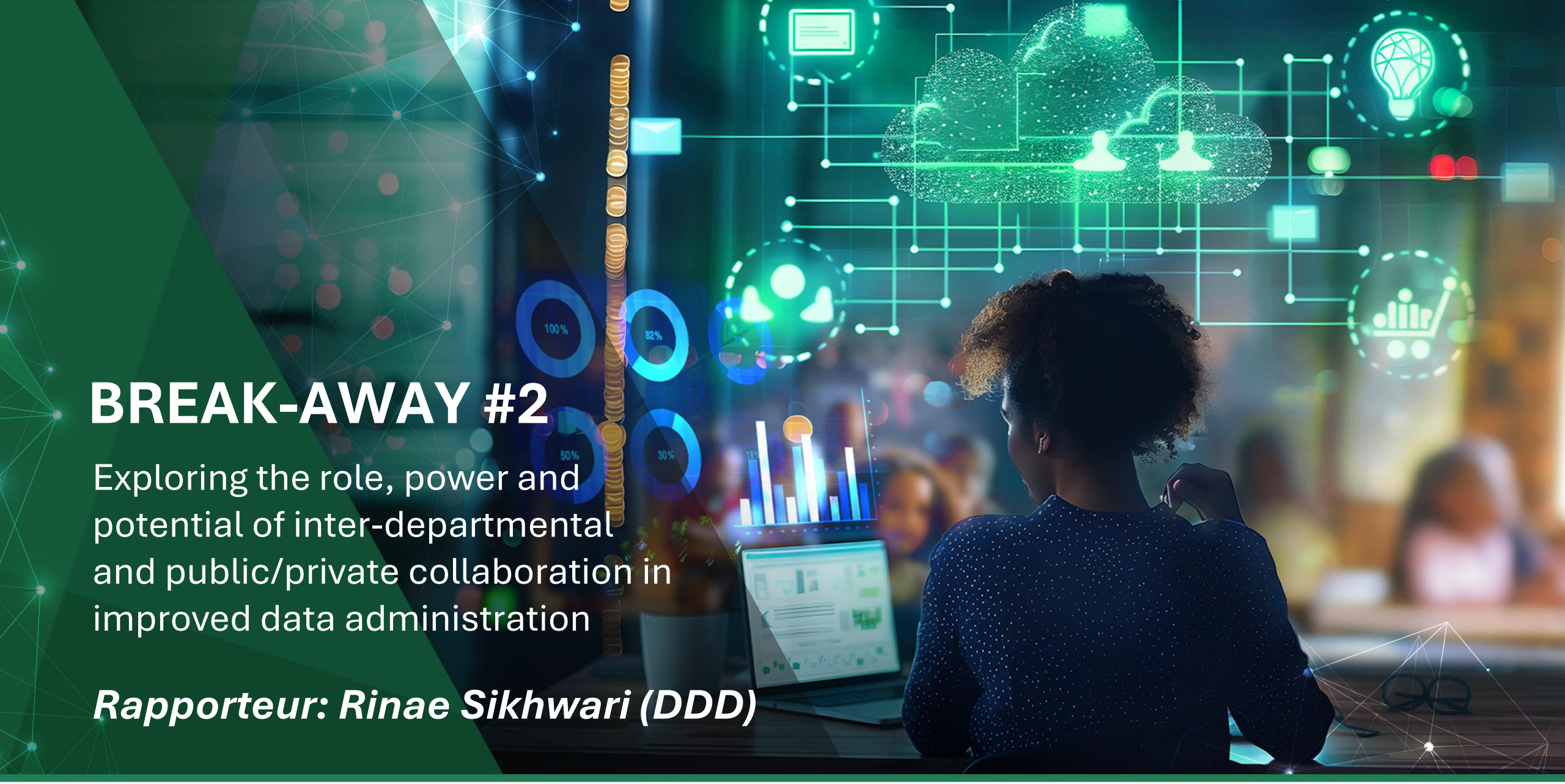
# Continued ...

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| **3. Observation: Process and Data Utilisation Bottlenecks** | Contributing factor:<br>• **Absence of a Unique Learner Identifier (ULI)**: There is no reliable, system-wide unique identifier for tracking learner migration and progression.<br>• **Delayed Data Availability:** The lag between data submission and its availability for analysis impairs timely decision-making and responsiveness to educational needs.<br>• **Focus on Limited Data Quality (LURITS):** Current data collection in education primarily emphasizes the quality of specific, limited datasets like LURITS, while overlooking other vital aspects of educational data that could provide more comprehensive insights.<br>• **Data Collection Overload:** Schools are overwhelmed by requests for vast amounts of data, much of which is either redundant or underutilised, creating an unnecessary burden on schools. | Action for improvement:<br>- Finalise the implementation of the ULI to improve learner tracking and reduce data redundancy.<br>- Streamline data collection processes, focusing on actionable and relevant data.<br>- Emphasise the collection of real-time, diverse data sets that inform both macro-level policies and micro-level interventions. |
| **4. Observation: Lack of Data Literacy and Culture of Data Use** | Contributing factor:<br>• **Limited Understanding of Data Importance -** Key stakeholders, including teachers, administrators, and district officials, do not adequately emphasize the importance of data collection, management, and utilisation.<br>• **Data Not Being Fully Utilised -** While schools are asked to provide extensive data, much of it is not fully leveraged for decision-making or planning purposes, rendering the process inefficient and demotivating for data providers. | Action for improvement:<br>- Foster a culture of data literacy at all levels of the education system, ensuring that educators/administrators understand the value of data in improving outcomes.<br>- Shift towards data-driven decision-making, where collected data is actively used to inform policy changes and school-level interventions. |



# BREAK-AWAY #2

Exploring the role, power and potential of inter-departmental and public/private collaboration in improved data administration

***Rapporteur: Rinae Sikhwari (DDD)***

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# Inter-departmental and public/private collaboration in improved data administration

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| 1. **Misalignment** of understanding priority areas to detail among DBE and partners<br>• Transparency from government w.r.t to inter-governmental systems and processes | • Lack of clarity on priorities<br>• No framework<br>• Data abundant yet unstructured → different sets of data collection tools and processed (lack of standardisation)<br>• Lack of data collaboration = people problem; trust element to sharing data<br>• Compromised data due to duplication | • Streamlining policy & standardising governance to build trust and partnerships<br>• Finding ways to do it: if there is a will and providing proof of capability to get government buy-in<br>• Policy formulation and preceding strategies to leverage collaboration for efficiency<br>• Leveraging data integration champions for systematising data to curb multiple sources, processes and systems)<br>• Unlocking systematic collaborations (e.g. Drop-out data between DBE and DHET) |
| **2. Collaboration & Integration:**<br>• Across departments, within departments, and between public and civil society<br>• Working in silos (govt departments, NGOs, private sector)<br>• Systems (streamlining process)<br>• Lack of standardisation (tracking individual from birth-to-death) | • Self-interest: parties looking to benefit without offering<br>• Lack of trust<br>• Duplication<br>• Lack of co-planning and co-creation<br>• Lack of consensus on the “What” “Why” and “How”<br>• Partnerships with international institutions<br>• Lack of recognizing and understanding authority → government feeling like they are being channelled to “external” standards of transparency<br>• Barriers : managing risk; inter-departmental information sharing, data breaches, governance, policy | • Joint planning to discuss roles, responsibilities and areas of support<br>• Resource models and transversal systems<br>• Communication<br>• Have a system development owner for the trickle down to the various departments → COLLABORATIVE INTEGRATION (e.g. DHA implementing Digital Identity policy)<br>• Use lessons learnt from DBE to speed up processes for integration (e.g. DHET)<br><br>• Building efficiency through creating value from partnerships<br>• Mutual trust and beneficial relationship building<br>• Contextual solutions<br>• Focus on the “HOW?” → recognition of the dynamic nature of the SA context<br>• Build trust → use data to collaborate ; make collaboration easy<br>• Collective ownership of collaboration; identifying the collective “Why? “<br>• Understanding of the concept of “common client” |

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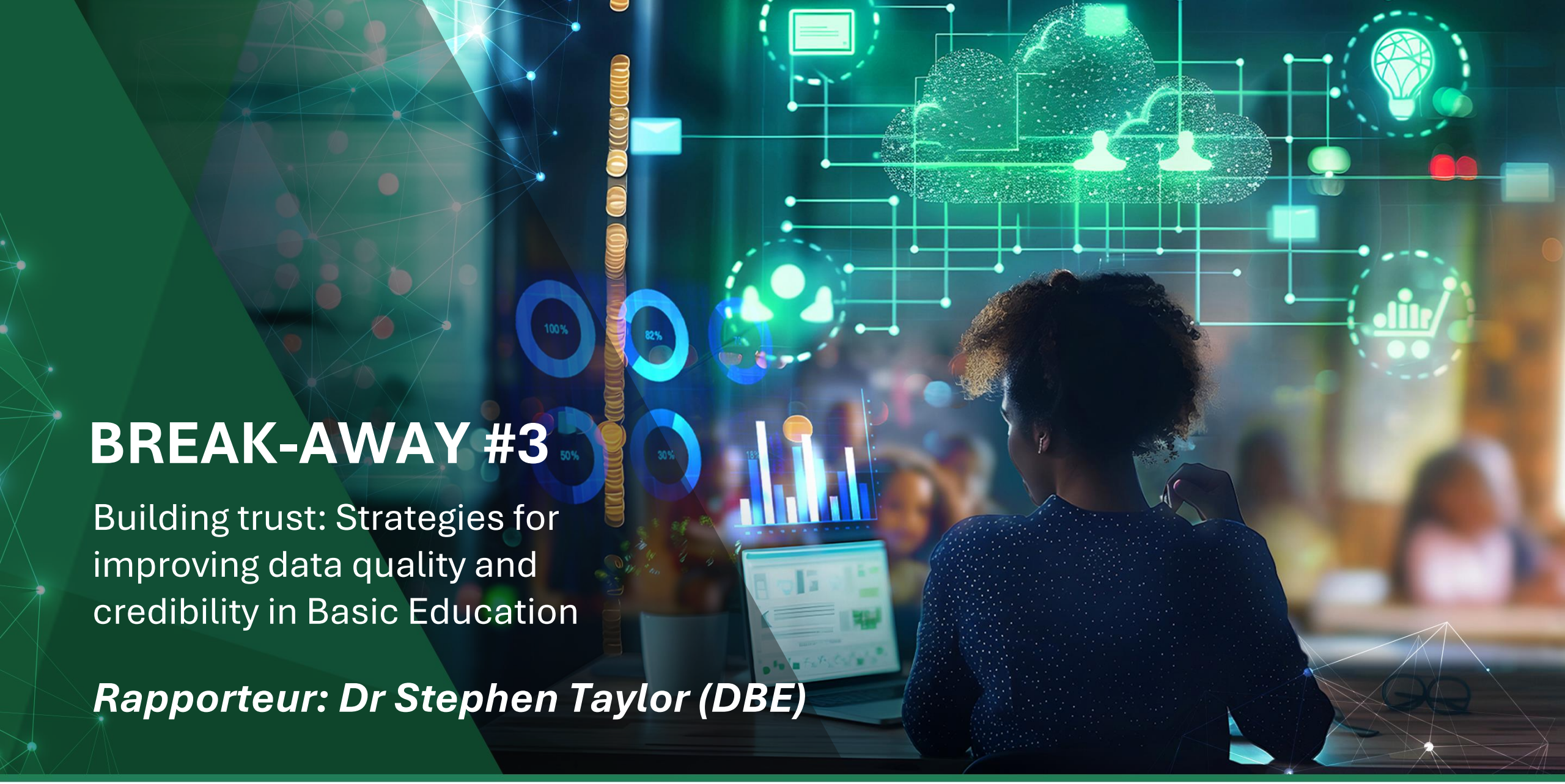
## Continued …

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| **3. Political will and leadership:**<br>• Pace of initiatives and implementation<br>• Public-private engagement<br>• Streamlining policy and standardizing governance to build trust and partnerships<br>• Meeting inter-governmental needs | • Top-down buy-in  data culture<br>• Tools offered by private sector contradictory to what government is trying to achieve (misaligned priorities)<br>• Wanting without the will to give (lack of mutually beneficial relationship building )<br>• POPIA restrictions : Low motivation for the formulation of PPPs<br>• Reluctance of participation<br>• Lack of framework | • Social justice and equity gaps interventions which are customized to the SA “market”<br>• Annual dialogue between government, private sector, and NGOs<br>• Widespread guidance and advise on how departments can get exemptions to share data while ensuring there is no contravention of POPIA<br>• Alignment between articulation of strategies, priorities<br>• Embedding and earning confidence (lessons learnt from COVID vaccination process) → partnership formulation and streamlining systems over short periods of time<br>• Comprehensive human resource policy → streamlining pipeline flows into the higher education |



# BREAK-AWAY #3

## Building trust: Strategies for improving data quality and credibility in Basic Education

***Rapporteur: Dr Stephen Taylor (DBE)***

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## Improving data quality and credibility in Basic Education

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| 1. Observation: Insufficient data validation at the point of entry | Contributing factor: Most officials don't understand the value of the data, to the system or to themselves. Therefore, captured for (malicious) compliance. | Strengthen implementation of policies → Identify Roles and Responsibilities. Policy holders and polity implementors<br>SMTs to experience value of the data → analyse results and profile learners to implement targeted interventions |
| | Contributing factor: Inadequately understood standards for capturing | To implement a standard reporting system and stop over burdening schools<br>Capacity building fosters capability! Sustainability → now and the future → leveraging on NGOs<br>Moderation of the data by SMTs |
| 2. Observation: Trust in overall data collection process | Contributing factor: Lack of feedback to schools on data quality | Operational at source at local level (school/source) should translate into validation<br>Data Culture Transformation → fostering a data quality culture |
| | Contributing factor:<br>Not enough shared understanding of the various reasons why we need data;<br>EMIS do not own other SA-SAMS modules, limited integration with other line-functions | Increase use of data and sharing of analysis across different line-functions (e.g. Curriculum, NSNP, LSEN, RME)<br>To have built-in quality assurance tools → Principals to take accountability.<br>Can SA-SAMS Provide value? Reports that are needed by key role players? |
| 3. Observation: Education Data is sitting in different pockets, and we need to integrate the different systems | Contributing factor:<br>Not enough standardisation of data validation processes | Important to have a system to support the administration of data<br>Implement clear standards → define common formats and key data points/metrics |
| | Contributing factor: incomplete Unique identifiers for tracking learners.<br>LURITS creates a unique ID for learners | Action for improvement:<br>Use SASQAF for DBE data.<br>Improve data entry on name, surname, ID number; LURITS ID to follow learners across schools |

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# BREAK-AWAY #4

## Predictive analytics and its role in forecasting educational outcomes

***Rapporteur: Frans Ramphele (DBE, EMIS)***

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# Predictive analytics and its role in forecasting educational outcomes (1/3)

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| <u>Growing application and infrastructure requirements for predictive analytics</u><br><br>Predictive analytics, though present in the DBE's DDD platform (e.g learner performance and absenteeism), is not widely adopted across provinces. Efforts like the Western Cape's collaboration with the World Bank and CSIR's election modeling are commendable but remain isolated use cases. | • The absence of critical datapoints in current data systems hinders the development of accurate and actionable predictive models. | • Define essential indicators that need to be captured, incorporating broader educational, social, and leadership factors.<br>• Ensure that necessary datapoints for reporting (e.g learner performance, socio-economic factors) are available.<br>• Establish standard operating procedures (SOPs) to institutionalize the use of data for forecasting. |
| | • Existing models beyond what DDD has done lack integration with education data | • Align ICT and EMIS strategies with analytics trends in government and private sector. |

# Predictive analytics and its role in forecasting educational outcomes (2/3)

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| **Process gaps and lack of readiness**<br><br>Data infrastructure in education, is not equipped for predictive analytics due to the absence of key indicators. While classical data analysis and trend analysis exist, their accuracy and depth are limited by incomplete datapoints. | • Current infrastructure limits the ability to process and integrate complex data sources. | • Invest big data and related infrastructure to process education analytics. |
| | • There's no comprehensive framework/policy for integrating predictive analytics into decision-making processes at a systemic level. | • Work towards integrating predictive analytics readiness into EMIS framework and strategies. |

# Predictive analytics and its role in forecasting educational outcomes 3/3

| 3 Current reality: | 2 Factors that have contributed to this: | 1 Actions to enable improvement: |
|---|---|---|
| <u>Growing expertise in Data Science for Education</u><br><br>The lack of trained personnel with expertise in both data science and education is a significant limitation. This results in limited capacity to exploit existing data for predictive purposes. | • There is a shortage of officials who understand data science and the nuances of the education sector, limiting the sector's ability to leverage predictive models effectively. | • Invest in targeted training programs to reskill education officials in data science, with a focus on predictive analytics and their application in education. |