

Principals Upfront Dialogue 13

Using data to enhance learner achievement from the Foundation Phase to Matric

11 March 2020

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01 Setting the scene

Data usage is a competency that all educators have, and when data is used in a purposeful manner to make decisions for the school – from the Foundation Phase right through to Matric – it becomes a powerful tool for meaningful and sustainable change. South African schools, school leaders and educators have access to numerous sources of data but making decisions about which data to use and how to use it can seem overwhelming.

Dialogue 13, held on 11 March 2020 at the Holy Family College, Parktown, Johannesburg, considered the role of data in driving decision-making at school and district level, how data is used and managed, and how these practices relate to improved learner performance.

This overview highlights the key themes and issues discussed by the speaker, panellists and participants.

Principals Upfront Dialogue Series

Public dialogues addressing the leadership role of school principals

Presented by Matthew Goniwe School of Leadership and Governance, Catholic Institute of Education, Sasol Foundation and BRIDGE

Principals Upfront gives principals a platform to share working practice and information about different facets of school leadership. The dialogues also enable those involved in supporting school leadership to develop a deeper understanding of the roles that principals play.



02 Framing the Dialogue

While the idea of schools and teachers using data for decision-making is not new, there is currently a growing awareness of the crucial role that data plays in school leadership and managing learner performance. Developments in software and enhanced access to technology have both increased the amount of data available and made it possible for schools and districts to access this data and integrate it into their day-to-day working practices. This in turn has emphasised the importance of capacitating school leaders across South Africa to use data effectively.

Ms Noluthando Mqakelana, Partnerships Manager for New Leaders Foundation (NFL), opened the dialogue with a presentation highlighting the value to principals of using data for decision-making. This was followed by a panel discussion on the practical considerations, benefits and challenges of using the Data Driven Districts Dashboard, from the perspectives of a principal, an HoD and a district official.

03 Presentation

Data-driven Decision-making in Schools: Starting the Practice of Improvement – Noluthando Mqakelana, New Leaders Foundation (NFL)

Click [here](#) to view the presentation



Ms Noluthando Mqakelana,
New Leaders Foundation

The presentation explored (i) how data supports the school leadership role, and (ii) how the Data Driven Districts Dashboard enables school data to be used efficiently and effectively for decision-making. Data, properly used, would:

- Allow principals to take control of what is happening in their school and focus on leading the school towards achieving its vision, instead of reacting to the crises that occur.
- Enable principals to act in accordance with the best interests of their school by addressing those issues which are specific and significant to the school, rather than merely responding to the requirements for compliance.
- Enable schools to set themselves and their learners up for success in Matric, without extraordinary efforts during the Grade 12 year, by providing targeted attention and support to those who need it, from the lower grades.

Previous approach to using data

Noluthando observed that in the past, schools have tended to focus more on the collection of data, and less on the analysis of this data – and even less on drawing insights from the data to use for decision making and how to implement those decisions to bring about the changes they wanted to see. A possible reason was that many school officials deemed the use of data to be the responsibility of somebody above them – so they saw their role in relation to data as simply being to collect it. This reflected the education system’s focus on compliance, and schools had little expectation of receiving any follow-up to the data submitted. Noluthando argues that data usage should instead involve an exchange of insights, both within schools and with the district.

“In order to change this situation, we need to change our whole attitude to data, and how we engage with data, so that data is actually being used for our benefit.” (Noluthando Mqakelana, NFL)

Linking school leadership with data-driven decision-making

Definitions of leadership often include the concepts of **mastering change**, and of **activating change by influencing others**. In the case of school principals this would include motivating their SMT and teachers to move with them in the desired direction. Data gives principals the means to achieve this kind of influence. Having access to school data and being able to use it effectively to make relevant decisions strengthens principals in their leadership position and increases their ability to support their staff. On the other hand, if principals don't have a close relationship with their school data, their ability to exert influence is weakened.

As instructional leaders, the core purpose of principals is to make sure that the curriculum is delivered, and that this is done in ways that promote the highest possible standards of learner achievement. Nolutando observed that this core purpose highlights the need for principals to be **solutionists**. Not only do principals need to develop organisational structures that support instruction and learning, but they must also be able to recognise which problems fall within their sphere of control, and then to tackle and solve those problems. Again, having access to school data and being able to use it efficiently and effectively increases principals' ability to take on and resolve these challenges.

The Data Driven Districts (DDD) Dashboard helps schools to target the specific issues that they are struggling with, and to direct their responses at those issues.

Stages in an effective data-driven decision-making cycle

- **Collect the data** – Capture school data on SA-SAMS
- **Process the data** – The Dashboard makes sense of the data entered on SA-SAMS and presents it visually in a variety of reports. The reports combine and compare data in different ways, for e.g. the Principals Dashboard Report (*slide 10*) can show performance across terms in subjects at risk, together with teacher and learner attendance.
- **Analyse the data** to obtain insights on and understanding of the problem (e.g. what are the reasons for the low learner performance?)
- **Determine the strategy** – Based on the identified reasons, what actions do the principal, SMT and teachers need to take in order to shift learner performance in the school?
- **Implement the action** needed to bring about the required improvements.
- **Assess the impact** – Evaluate if the strategy is working, and how effective it is by comparing data from before and after implementation. If the strategy isn't working, it is important to find this out early, and to be flexible enough to make changes.
- **Provide timeous feedback** – to be effective, data collection and usage must inform what happens in the classroom – for e.g. if there is a delay in making data available (i.e. in marking and capturing the results), the opportunity to help struggling learners will be lost.

The data usage cycle continues with more data being collected and used to make decisions leading to quality improvements, implementing them and evaluating the impact.

“Being ‘data-driven’ means that data usage is continuous. As long as teaching and learning is happening, schools should be collecting, analysing and acting on the data to keep the cycle of improvement going.”
(Nolutando Mqakelana, NLF)

What conditions enable schools to use data in this way?

- **Data quality** – Data quality must be good, as decisions based on inaccurate, irrelevant or incomplete data could lead to actions that are harmful.
- **Data capacity** – Schools must have the capacity to access, understand and use the data collected, which speaks to training on Excel as well as on using the Dashboard.
- **Data culture** – This requires an understanding of the value of continuous improvement¹ and a willingness to commit to implementing continuous improvement practices. The clarity of the schools' vision and mission also plays a role in creating a data-driven school culture.

For information on accessing the Data Driven Districts Dashboard, see slides 12 - 16.

04 Panel Discussion



Ms Thuli Mthembu,
SMT, Isaac Makau
Primary School,
Wattville



Mr Kesval Govender,
Principal, Woolhope
Secondary School, Port
Elizabeth



Mr Edwin Ditsi,
Circuit Manager,
Gauteng West
District

What data is used in your school or district? How and for what purposes is it used?

Principal's perspective:

Our overall purpose in using data is to improve learner performance. Some of the ways we use and work with data are:

- **Capturing data** – School data must be captured accurately and timeously on SA-SAMS, to ensure a true reflection on the DDD Dashboard.
- **Managing learners at risk** – The Intervention Report alerts the school to slow and struggling learners. Without proper access to data, such learners are likely to be progressed through the system, as each year the severity of the learner's problems are only recognised when it is 'too late' to take effective action. With access to holistic data, schools can pick up much earlier in the year if learners are at risk.
- **Managing performance** – The Dashboard data allows principals to see the patterns in the various reports. We can compare the class profiles for the same subject that is being taught by different teachers, and link this to the quality of teaching.

"It is no use getting a 100% pass in a subject if all the marks are low; we want quality in that 100% pass. This is about teachers being accountable and taking responsibility for learner performance in their subject." (Kesval Govender, Principal)

¹ Continuous improvement is an approach to quality improvement through small, incremental improvements ('little by little') on a regular basis. This approach includes the idea of people at all levels of an organisation working together to effect the improvements.

- **Monitoring attendance** – The Dashboard data allows easy monitoring of both teacher and learner attendance. Following up on poor attendance has led to situations of need being identified and has enabled the school to respond appropriately.

In the Nelson Mandela District, the Dashboard has completely changed the way the District interacts with schools and principals:

- When Subject Advisors arrive on monitoring visits, they already have a full picture of the school’s current and past performance in that subject, and how this compares with performance across the district. This allows them to target the significant issues and already in February, give the school performance targets.
- All principals are now required to account annually to their peers for their school’s performance. This means going into the Dashboard, mining the data, creating a PowerPoint presentation and presenting it to a group of colleagues, including from other circuits, to explain the details of their school’s performance (including reasons for improving or failing to improve).

The HoD perspective:

Since we started using the Dashboard, we have seen a positive change in the way we manage learner performance – even though we are not yet using data as widely as we would like.

“As HoDs we like to include ourselves in finding solutions to whatever the Dashboard shows is happening with learners, so that our teachers do not feel they are being put in an ‘us and them’ situation.” (Thuli Mthembu, HoD)

- The report we use most often is the Principal’s Dashboard. This allows us to compare our results with what the district expects from us, as well as make a year-on-year comparison per subject with our previous results. We look at the pass percentage, average mark, and numbers of learners achieving above a certain percentage, to determine how they are performing qualitatively.
- We find it useful to compare our results with those of the circuit, the district and the province, particularly where subjects are provincially set. This is a key reason for using the Dashboard: it gives us a broader perspective that helps us gain a clearer understanding of issues. For example, if schools in similar circumstances to ourselves are able to manage learners’ problems (such as language barriers), it means that there must be something we can do to resolve the problems we are having.

“Our principal used to be the main user of the DDD. The rest of us on the SMT would cite all sorts of reasons why we wouldn’t be able to use it. But the moment BRIDGE brought us on board, we began to realise how much the DDD can assist us as HoDs as well.” (Thuli Mthembu, HoD)

- Another useful report is the Intervention Report – this shows which learners require additional support, and if interventions used in the previous term are bearing fruit. This enables us as HoDs to advise teachers on where to increase the support they are giving to learners.
- As a full-service school, we have learners who struggle as well as those who excel. The Learner Chart Report helps us to create a ‘buddy system’, pairing learners who experience difficulties in certain subjects with learners who perform well in those subjects.

The District perspective:

“Data usage is critical for the District – but we need to make sure that our use and management of data is integrated into normal school processes. We must not see the Dashboard as something separate, that we look at for its own sake. And the most important thing is for us to intervene, based on what the data tells us.” (Edwin Ditsi, Circuit Manager)

The District uses school data extensively to inform decision-making and engagements with schools:

- **Monitoring of school data**, including the number of user logins to the Dashboard, provides a basis for discussion at quarterly meetings with principals, deputies and HoDs. For this reason, schools need to ensure that they upload data timeously.
- **Quality assurance of school data** – verifying the accuracy of data so that the quarterly mark schedules and the Dashboard data match at all points.
- **Target setting for Grade 12 learners** – taking historical data into account and determining improvements to be made.



Principals Upfront panelists

Monitoring of the following by the District is important, and leads to interventions as needed:

- **Learner and educator attendance** – analysing longer absences and intervening. The District monitors weekly and monthly educator attendance percentages and intervenes where needed to make sure that missed teaching time is made up.
- **Uploading of learner marks** on SA-SAMS to ensure that schools populate according to their assessment plans and that default dates are adhered to.
- **The status of learner performance** – identifying learners whose status (promoted, progressed or not promoted), has not been assigned and engaging schools to have that corrected.
- **Learner achievement** – the Dashboard ranks learners according to achievement, which allows the District to identify when and where to intervene.
- **Over age learners** – this involves identifying learners who are three or more years older than the grade level and (where appropriate) managing the process of exiting them from the system.

An important aspect of the District’s data usage involves **comparative analysis**. For example, comparing subject performances across the various schools, and against district and provincial performance, enables Subject Advisors to be informed and prepared in terms of how they need to intervene when they visit schools.

What practices did you put in place in your school or district to ensure that it became more data driven?

Principal’s perspective:

- We did a lot of work to get where we are now. When we started 4 – 5 years ago we had just one administrator working on one computer, who was responsible for all capturing and management of data. The system was very unstable, so we had to bring in a server. We then connected the computer

laboratories and gave all our teachers access to SA-SAMS, so they now capture their own marks (which are verified by the HoDs).

- Secondly, we have given all our teachers access to the Dashboard so they can see their own data, as well as that of their colleagues (attendance, marks, task coverage, etc). This has created an element of competition amongst teachers, which has increased the pace of both task coverage and data collection.

The HoD perspective:

We bring the Dashboard into our meetings wherever we can. Each time we discuss a topic, we make a point of referring to what the Dashboard shows. This has helped the whole staff to realise the importance of using the Dashboard.

“Our teachers have come to realise that when we as HoDs say something, it is because we have looked at the Dashboard – so now they will ask us what the Dashboard is saying about their subject and their learners. That in itself tells me we are on the right track.” (Thuli Mthembu, HoD)

Many people fear the unknown, or technology, so they rely on others who are more familiar with the Dashboard to download reports for them. This can become burdensome for those staff members. To mitigate this, SMT members are training all keen and willing staff on the reports we have become conversant with, and periodically the SMT sits together to work on the Dashboard, so that we can train each other and all learn more.

The District perspective

The Gauteng West District deliberately set out to be structured in its approach to using data. This involved piloting a data culture transformation, which included:

- **Goal setting**, as the first point of entry, to enable measuring and comparing
- **Advocacy** to increase awareness of the Dashboard
- **Capacity building** – principals and deputies have already received training, and HoDs are currently receiving training.

A key point is that data management and usage must support policy and legislation; for e.g., the National Protocol for Assessment which dictates times for marking and capturing, and how assessment should be managed. When visiting a school, the District will make sure all the relevant policies and systems are in place. This also assists in monitoring that the school’s assessment, moderation and mark capturing practices align with its assessment policy.

“It is critical that everything we do as school leaders is supported by policy.” (Edwin Ditsi, Circuit Manager)

How has the impact of the DDD Dashboard been felt in your school or district?

1. **Principal’s perspective:** For us the *Intervention Report* has been most impactful. We can identify learners in Grades 10 and 11 who are struggling (e.g. in maths) and make sure teachers spend more time with that cohort of learners. To then see from new data on those learners that they have improved, has been significant. Previously we used spreadsheets, but it was difficult to see clearly what was happening to individual learners. We also did not have continuity because we would start new files each year and set the previous ones aside. Our focus is now much sharper, which has been a big factor in the improvements we are seeing.
2. **HoD’s perspective:** In 2019 when we received the term 3 *Intervention Report* and were able to sit as a staff and study it, we could say to individual teachers, “The Dashboard is showing that these learners in your subject are struggling, and that you need to intervene immediately.” Teachers were able to stand up in front

of everybody and show accountability by acknowledging that they had not done justice to their learners and subject, and that they needed to do more. That in itself shows greater awareness, and we can expect that in future, more teachers will start with interventions early in the year.

3. District's perspective:

- One very valuable aspect of the Dashboard is that it provides schools with the evidence they need to produce their internal self-evaluations. Using the data allows schools to select their area of focus and to generate strategies for achieving the targets they set.
- The Dashboard also provides schools with the evidence they need to prioritise policies needing review and redevelopment.

Data does not restrict itself to specific topics but cuts across areas, such as learner performance. We can't put the data aside, but must integrate it with whatever we are doing. For example, the approach of some colleagues is to concentrate first on completing the ATP, and to intervene later. But learners coming through from previous grades bring barriers with them, and we can't overlook these learners in order to accelerate our ATP coverage – if we don't attend to their needs, they will bring our results down. (Edwin Ditsi, Circuit Manager)

05 Questions and Comments

Participants discussed the topic in small groups. Below are a selection of comments and questions to the panel:

Obtaining assistance with technical problems relating to the DDD Dashboard:

We've used the Dashboard successfully for two years, but this year our data appears to be corrupted at the point of departure from SA-SAMS. Large sections of data are missing, i.e. our data is not projecting through properly from SA-SAMS to the DDD. How does one report and get support for a problem that originates with SA-SAMS? We have been trying unsuccessfully to get help since January and will soon have to submit schedules.

The process for getting help is:

- Confirm there is a backup of the SA-SAMS data
- (In Gauteng) contact the school's assigned IT specialist, and if the problem remains unresolved, escalate it to the supervisor
- Seek help from the District Information Systems Management Department
- If the matter is still unresolved, request your circuit manager to take up the issue. In your communication, document all the steps you have taken to deal with the challenge.
- It is also advisable to ask a private IT specialist to investigate, as the problem could lie on the school's side, e.g. be the result of a virus or technical issue in the school's system.

Giving teachers access to the Dashboard:

- Teachers should be able to look at their own data before it is viewed at SMT and District level, to see how their learners are doing.

Bringing in the human element:

This sounds very mechanistic – it seems to be all about results, and how to measure the results. How does the human factor come into the Dashboard?

- It all depends on how you as the principal or senior manager approach what is available on the Dashboard, and how you manage the relationship between information, the Dashboard and the teachers. The Dashboard provides a more logical way of viewing the data that helps you identify what the issues are. It creates accountability in your interactions with teachers and allows you to report properly to parents on their children’s progress.
- It is the action that one takes in response to the data that counts most.
- The human element comes in through the way we use the data. With access to a learner’s data, we can pick up problems such as frequent absenteeism – this could lead to an investigation that might reveal challenging circumstances and require further action (e.g. a referral to social services).

“The use of the Dashboard brings the human element into the picture by igniting the right conversations, with the right people.” (Noluthando Mqakelana, NFL)

Value of the DDD Dashboard:
 “I do appreciate the DDD. For me its key purpose is to monitor curriculum delivery. Having the DDD does not mean that HoDs can stop doing their jobs – instead, the DDD supports the HoDs in their work. We’ve realised that the human element alone could bring in errors – whether this is by accident, or intentional to make the marks look better. The DDD provides a true reflection of what is happening on the ground. Whether we like it or not, automation brings efficiency and allows us to immediately attend to matters. The introduction of the DDD is not a threat to those who are doing their work properly.” (Dialogue participant)

Closing Remarks

Concluding the discussion, Mduduzi Qwabe of the Catholic Institute of Education (CIE) observed that the shift towards increased data usage in schools and districts had led to a change in attitude towards learner performance data. Whereas previously a simple pass/fail result might have been regarded as providing sufficient information, the increased access to data was making possible a more detailed examination of performance, which in turn was opening the way for more targeted and hence effective responses to issues affecting learner performance.

“We’ve seen how the increase in data usage marks the beginning of having greater knowledge, which in turn gives us greater power. It is what we as schools and districts do with that knowledge and power that is important.” (Mduduzi Qwabe, CIE)

The next Principals Upfront dialogue is due to be held in July 2020.

Dialogue participants are reminded of BRIDGE’s knowledge management role. All meetings, presentations and discussions are captured and shared on BRIDGE’s Knowledge Hub. To access the Knowledge Hub, click [here](#).

Principals Upfront welcomes your input for planning future seminars. If there are any burning issues you would like to have addressed, or if you would like more information on this dialogue series, contact Patience Voller at patience@BRIDGE.org.za

