



data
driven
districts



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DATA DRIVEN DISTRICTS PROGRAMME

Old Mutual Education Flagship Project and the DDD Dashboard

using the power of data to support education interventions

December 2018

Old Mutual Education Flagship Project (OMEFP) and the DDD Dashboard: A Case Study

Data Driven Districts (DDD) Programme

In 2012 the Department of Basic Education (DBE) partnered with the Michael & Susan Dell Foundation to launch the Data Driven Districts (DDD) Programme. The DDD Programme aims to support improved learner outcomes through the increased quality, availability, analysis and use of education data to instil a data-driven culture in the education system.

The DDD Programme provides tools, training and processes which helps collate and aggregate school-level data from the South African Schools Administration and Management System (SA-SAMS), through the use of an online dashboard.

The DDD Dashboard is a powerful, easy-to-use management platform that visualises education data from SA-SAMS in an approachable, highly intuitive way.

Currently over 11 million of the 12,5 million public school learners are represented on the DDD Dashboard.

Collaboration with NGOs

Over the past two years the DDD team has increasingly interacted and worked with education NGOs across South Africa to share the benefits from data use achieved in the public education sector. During this time, the team has found that the DDD Dashboard and its data usage methodologies create significant benefit for education NGO programmes. The DDD team works closely with partner NGOs to maximise the benefits gained from the data available on the Dashboard. Although each NGO programme experiences different benefits, some general benefits include:



1 Access

The DDD Dashboard provides access to **validated** data which is **easy to source**. Significant **time savings** are achieved as stakeholders have direct access to data and don't have to rely on schools or third parties to provide data.

2 Analysis

The DDD Dashboard provides **visual representations** of carefully selected **education metrics** that are key indicators of change in education. This gives funders **increased visibility** of the performance of the schools, learners and educators they are supporting. This allows them to play a more **active role in programme** implementation alongside their NGO service partners.

3 Change

Sustained **behaviour change** is facilitated by having **objective data** as a basis for **performance analysis**. Mentoring conversations around performance analysis are based on this objective data and facilitate a constructive conversations around improvements that result in improved learner outcomes. This facilitates a change in **mindset** where data analysis is the basis for critical decision making.

4 Impact

Data-driven decision making improves the quality of **interventions** implemented at different levels of the NGO programme. This **targeted** and **focused** approach yields **better results sooner** and **improves the effectiveness** of the NGO programme.

OMEFP case study

The Old Mutual Education Flagship Project (OMEFP) is a large CSI-funded programme that has benefitted from the use of the DDD Dashboard and the incorporation of DDD data usage methodologies into the project.

The OMEFP was started in 2013 and covers 52 schools in three districts. The project's intention is to:

- increase the number bachelor passes of Grade 12 learners taking Maths and Science,
- improve content knowledge and teaching practices of teachers,
- improve and develop professional skills within management structures, and
- work towards ensuring basic management processes are in place across schools.

From its inception, OMEFP has partnered with the SEED Educational Trust and LEED service partners to deliver the project's objectives. As of 2016, New Leaders Foundation with its DDD Programme was included as an additional service partner to facilitate the use of data within all levels of the project.

This document is a case study on the partnership between the OMEFP and the DDD Programme in the town of Jane Furse in Limpopo. The intervention in Jane Furse included 11 schools; three primary schools, seven secondary schools and one combined school.

Stakeholders in the project

As mentioned above, there were several key stakeholders playing a role in the project and each of these received training and made unique use of the Dashboard in delivering on their responsibilities.



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Old Mutual – OMEFP originators and funders

To deliver on the project, Old Mutual set up an OMEFP leadership team. This team used the DDD Dashboard primarily for collection of data on metrics critical to measuring the impact of the project.



SEED Educational Trust – service partner

SEED Educational Trust is an NGO specialising in the development, training and coaching of school leadership teams and district officials. Mr Henry Harman was the SEED management mentor in Jane Furse. Henry's focus was to capacitate school-level education officials in professional management and leadership of schools. As a support to his focus, he used the DDD Dashboard to analyse data on critical metrics central to school management and leadership functions.



LEED service partner – a collaboration between LEAP schools and Edunova

LEAP schools have a focus on running Maths and Science after-school learning centres in the OMEFP to support learner improvement. Edunova are a provider of ed-tech tools, which when used in partnership with LEAP schools, comprised the LEED initiative. Ms Christine Boxall was the project manager for LEED. Her focus was to run the Maths and Science after-school learning centres and to provide support to school-level education officials for the OMEFP schools. Ms Boxall used the DDD Dashboard to monitor learners in the learning centres and to inform the running of the interventions.



New Leaders Foundation (NLF) – co-ordinators of the DDD Programme

The NLF team aimed to embed data-driven decision making amongst education officials and other programme service partners. This included training and coaching in data usage methodologies.



School-level education officials - Principals and Heads of Department (HODs) at project schools in Jane Furse

The school-level education officials worked closely with the service partners of the OMEFP to transform the way in which the schools and curriculum implementation were managed.

Impact of data use in the OMEFP

The following section describes some of the key benefits of DDD data use within the OMEFP to date.

Performance analysis and monitoring at a school level

Madibong English Medium Primary School

Madibong English Medium Primary school experienced a significant shift in their approach to performance analysis and how it related to improving quality teaching. The SEED mentor, Henry Harman, had worked extensively with the SMT to strengthen management and leadership skills. Part of the intervention involved performance analysis sessions on a subject and learner level. With Henry's support, the principal and HODs began a practice of monitoring subject performance to identify why their school was performing worse in school-based assessments (SBAs) than external assessments.

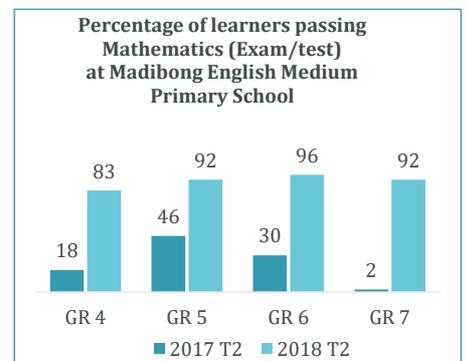
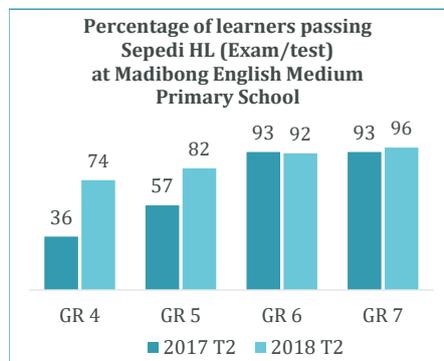
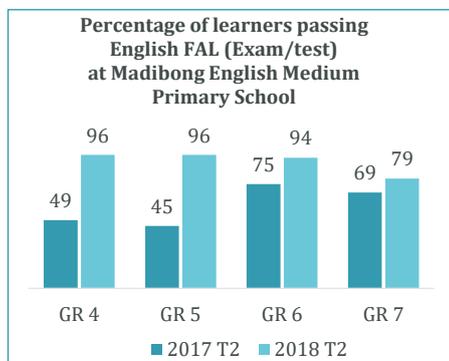
“DDD shows the difference in school-based and external assessments and was a major learning for the school in terms of improving the quality of teaching. It showed where the gaps were and started the process for addressing the gaps. The improvement from this intervention has motivated teachers to work harder and achieve better results.”

—Mr Malata, principal of Madibong Primary School

The school's leadership used the DDD Dashboard to identify where content knowledge gaps existed and the data provided an objective basis for approaching the teachers in this regard. Teachers responded with vigour to improve their performance and interventions were formulated that created impressive results.

The improved results motivated teachers to engage more deeply with data and performance analysis and a culture of data-driven decision making has become embedded in the management and leadership practices. The drive to improve the quality of teaching and results for external assessments has led the school to not only source external assessments from its own province but from other provinces too. The school is highly motivated to continue improving.

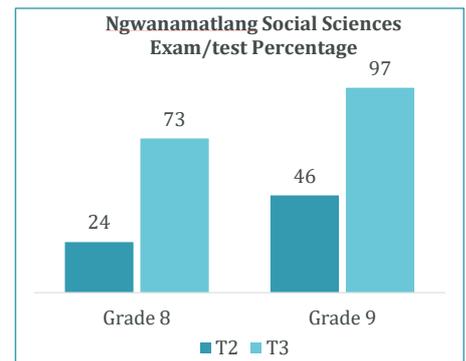
The graphs below show the marked improvement in English First Additional Language, Sepedi Home Language and Mathematics between term 2 of 2017 and term 2 of 2018. This improvement is due to the school's concerted effort to improve teaching quality and close content knowledge gaps identified by the difference in external and school-based assessments. This improvement has been a great motivating factor for the teachers to continue striving for improved results and has contributed to embedding a data-driven culture in the school.



Ngwanamatlang Secondary School

Mr Moraila, principal of Ngwanamatlang Secondary School, used the DDD Dashboard with the whole teaching staff at a meeting. The visual representations showed the term 2 mark for Social Sciences was pulling down the school's overall performance. Through an intervention led by the HOD, that included closer monitoring of work schedules and curriculum coverage, a marked improvement in Social Sciences was achieved. The dedicated work of the HOD and Social Science teachers showed a remarkable improvement in the subject performance which could be seen by all staff when next term's data was shared.

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“When DDD did refresher training, then something shifted. The reluctance was overcome and we could see how the system could help. Then there was a willingness to take it on board. Now we can't live without it.”

– Mr Moraila, principal of Ngwanamatlang Secondary School

Change in mindset to data-driven conversations

Upon introducing the DDD Dashboard there was some initial apprehension by both service partners and school management as the tool was seen as yet another requirement being introduced by an NGO. Over time though, the value of the DDD Dashboard became evident as the service partners started using the tool to collect data for performance analysis and reflection on leadership and management practices.

Now schools comment that they can't live without the DDD Dashboard. Principals describe how their SMT meetings are centred around data-driven conversations rather than other agenda items. Principals love being able to access the data themselves without being reliant on data clerks or other parties to view their school's data.

In many of the Jane Furse schools the value of data has proved so powerful that principals and SMTs asked for service partners to show the whole staff the data. This yielded incredible results as the visual representations of data made analysis easy and poor performance couldn't be hidden.

Staff became highly motivated to improve where their grade, phase or subject was lacking. A high performance attitude was re-ignited in staff and great pride was taken when their hard work and effort showed better results at the next viewing.

As the culture of data-driven decision making began to become embedded in the schools, HODs seized the monitoring tools of the DDD Dashboard to facilitate data-driven conversations for formulating, implementing and monitoring the impact of interventions.

Generally, the impact of the DDD Dashboard has brought about a change in mindset where data is now central to the professional management and leadership of the school. Data-driven conversations have become integral to the functioning of the project schools and has become embedded in the school's performance analysis. SEED mentor, Henry Harman, feels strongly that the DDD Dashboard was critical to facilitating the shift in mindset to data-driven conversations in schools and believes the change happened faster and was entrenched sooner as a result.

“The process of change is a long-term process but the DDD speeds up this process by making analysis easier.”

– Henry Harman, SEED management mentor

Effective monitoring leading to more impactful interventions

Before the DDD Dashboard, schools found it difficult to monitor many aspects of their day-to-day operations and academic performance. From administrative tasks, such as the duplicate registrations of a learner in different schools and correct learner details, to academic performance of learners and subject performance of educators.

The level of detail that the DDD Dashboard contains makes comparing subjects and grades over time very easy. A learner can be viewed as a whole child and areas of weakness are easier to identify. Patterns across subjects or grades can be seen and gaps in teacher content knowledge can be recognised and remedied by HODs.

“More time is spent analysing the data because the visuals are easy to understand.”

– Christine Boxall, LEED project manager

Overall better interventions can be formulated and monitored by using the DDD Dashboard. LEED service partner, Christine Boxall sites three examples where the DDD Dashboard helped monitoring in the LEED portion of the OMEFP.

“The DDD Dashboard is a game changer. It saves time and results in a more targeted programme.”

– Christine Boxall,
LEED project manager

1. Monitoring learner performance over time and across subjects created a whole view of the child.

LEED used data from the DDD Dashboard to create a view of the learner before the learner started at a learning centre and so a more targeted and focused approach could be taken to supporting that child. It also saved time as the targeted support could be offered from the beginning of the year or term rather than a few weeks into the term once the facilitators had come to know and identify the learner’s challenges.

Over time, data was used to monitor the learner’s academic performance to gauge whether support needed to be augmented to accommodate the learner’s growth.

Even though LEED’s focus was on Maths and Science, where data indicated gaps in languages, these could be addressed as they had an impact on the Maths and Science progress and in so doing the child was viewed and supported more holistically.

2. The impact of LEED’s remedial interventions could be better monitored over time.

The DDD Dashboard made monitoring of learners much simpler, where previously accessing school data was cumbersome. LEED could better monitor the learner’s academic performance over time and could compare the learner’s improvement to historic data. Even once exiting the LEED learning centres, LEED could assess the learner’s progress beyond the project.

LEED also found that the data could help find learners who may have exited the programme for unforeseen reasons and were no longer in contact with the programme. LEED discovered that even learners who had participated in the programme for a short period of time, benefited from the programme long after they had exited the intervention. This finding was a great motivator for the team.

3. The DDD Dashboard proved useful in identifying and assessing the feeder schools for Grade 8 learners.

LEED worked with a number of secondary schools who found Grade 7 learners were not adequately prepared for Grade 8. Data from the DDD Dashboard made it possible to identify the feeder schools that were struggling to adequately prepare their learners for secondary school. LEED was then able to facilitate conversations around improving academic performance and teacher content knowledge to better support the primary schools in preparing learners for secondary school. Primary and secondary school principals started working together to improve the Grade 7 results.

Future and indirect benefits

The partnership between OMEFP and the DDD Programme has brought about many benefits for all levels of stakeholders. Some future benefits have been identified which could further support the impact of the OMEFP and future partnerships with other NGOs.

Future benefits

- The OMEFP leadership has highlighted their excitement at the possibility of mining the DDD Dashboard database for guidance on where to focus their attention when formulating education interventions.
- In the OMEFP, data-driven conversations have been focused at a leadership and management level. As has already been seen, these conversations are starting to filter down to the teacher level through management meetings and HODs using the DDD Dashboard. The hope is that over time these data-driven conversations will be as entrenched at teacher level as is currently experienced at management level in the project schools.

Indirect benefits

Indirect benefits have also been identified during the course of the DDD Dashboard involvement. These have impact beyond the scope of the OMEFP but are significant in their own right and show the depth to which the impact has been felt.

- Principals feel more empowered to act in their role. Mr Moraila, principal of Ngwanamatlang Secondary School, has become a mentor to surrounding schools. His passion for the DDD Dashboard has encouraged him to reach out to other principals and share his knowledge of the tool and the impact it has had on his school. He has become such an avid user of the DDD Dashboard he doesn't know how other principals live without it. His confidence and leadership skills have improved through assisting other schools become familiar with the DDD Dashboard.
- The management team at Madibong Primary School has noticed an improved standing of the school in the community's eyes. Their improved results and closer attention to learners with challenges has made parents take notice. Their school is also fast becoming a sought-after feeder school for secondary schools in the area.

"The DDD is accessible. I can be self-reliant to find information. This gives me confidence as I have the knowledge at my fingertips. I feel like I have taken control back to manage the school."

– Mr Moraila, principal of Ngwanamatlang Secondary School

Conclusions

The partnership between OMEFP and the DDD Programme has brought forward many, varied and powerful benefits for the OMEFP and its schools. The collaboration between stakeholders has created great impact in achieving the goal of creating a data-driven culture.

The OMEFP leadership have found a source of data that supports their project goals with increased efficiency. Service partners have a tool that supports them in driving performance analysis and instilling a data-driven culture towards school interventions. Schools have a tool to perform self-analysis that guides formulating interventions that are targeted and focused on school goals.

The benefits of the OMEFP and DDD partnership have left a deep impression on all stakeholders. The DDD Dashboard has been a catalyst for the OMEFP, which can easily be replicated for other NGOs due to the long-term involvement in education by the DDD team. Their experience and expertise provide a broad support base for the objectives of most education NGOs.