

Data Know Best

Tracking Learner Achievement and Assessing the Old Mutual Education Flagship Project (OMEFP) in Motheo District, Free-State, South Africa

Abstract

Big data has become a focal point in many industries. Companies seek to leverage the use of big data to inform decisions and even increase profit margins. Government departments have also become interested in how private sector expertise meets public service delivery models. The field practicum focuses on using big data generated by schools in informing decisions toward improvement of governance and management and ultimately learner achievement.

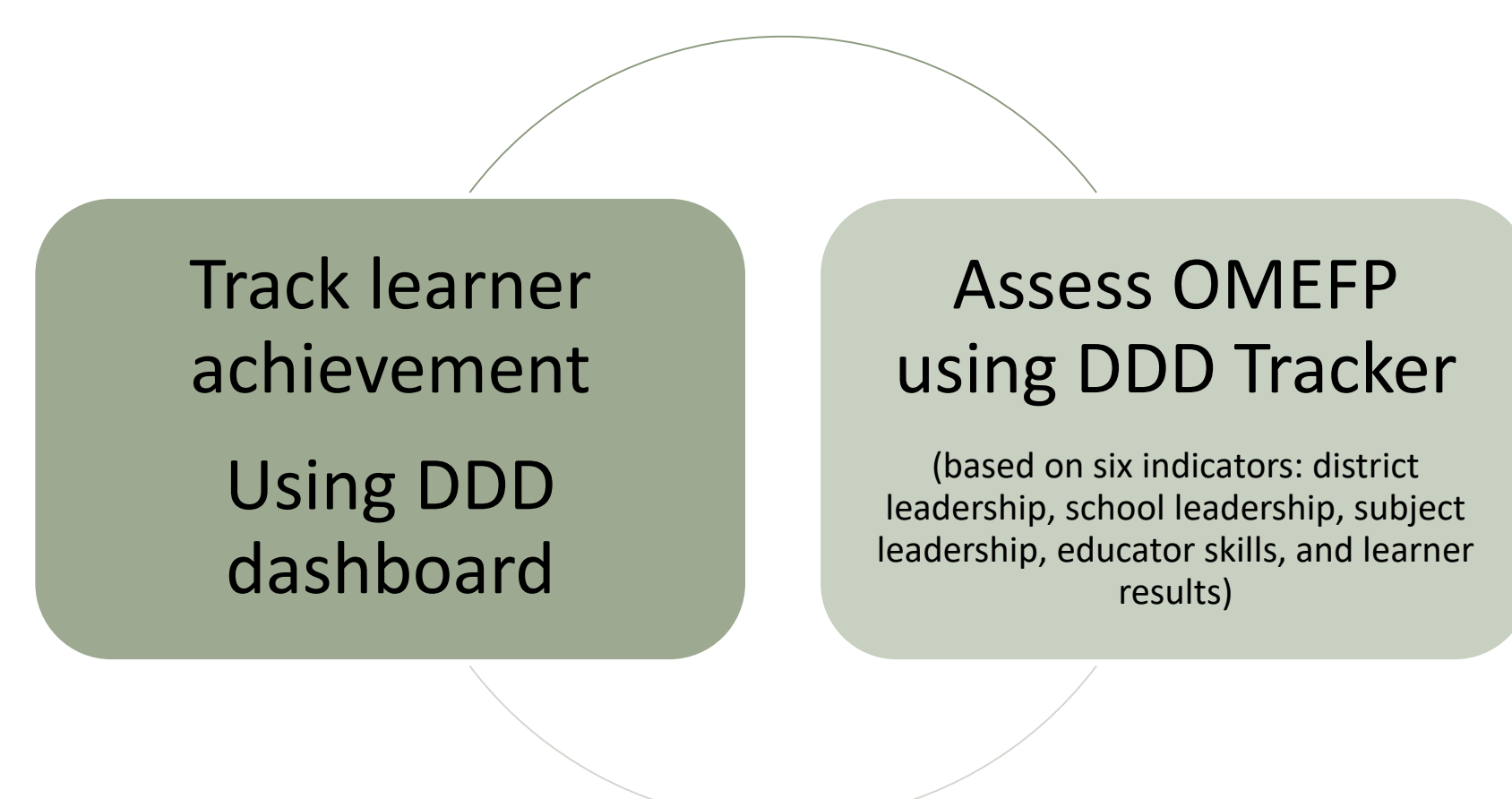
The objective of the field practicum was to track learner achievement in nine project schools in the Free-State Province in South Africa by using the Data Driven Districts dashboard to extract learner achievement scores as well as assess the OMEFP by using the Data Driven Districts (DDD) Tracker, a survey instrument based on six indicators relating to school governance and management. OMEFP activities consisted of curriculum mentoring for educators in Math, Science and English subjects.

Background

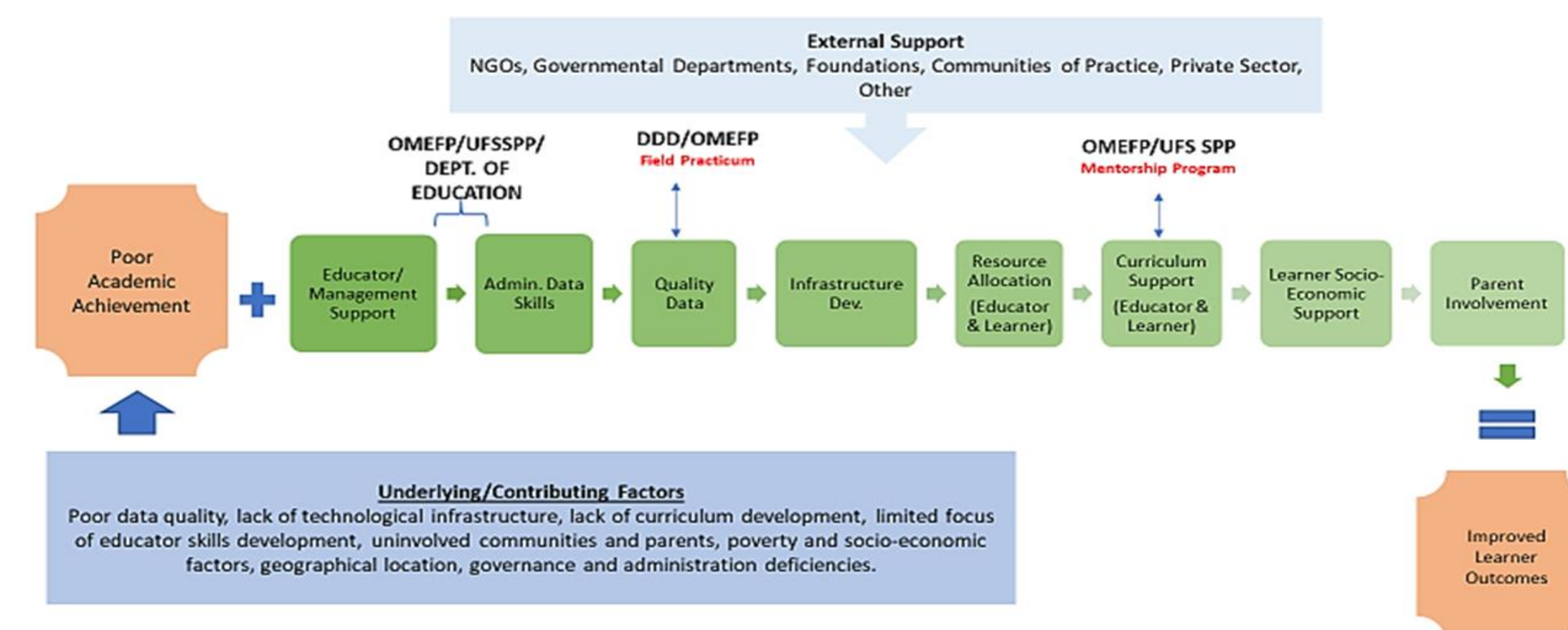
- Basic Education in South Africa possesses serious challenges resulting in learners achieving poor scores in critical subjects like Math and Science. Various reasons based on present and historical factors inform the current status. Some of the main challenges presently faced by the Department of Basic Education are presented as follows:



Objectives



Conceptual Framework



Methods



3 sets of paper-based surveys



Data Driven Dashboard System



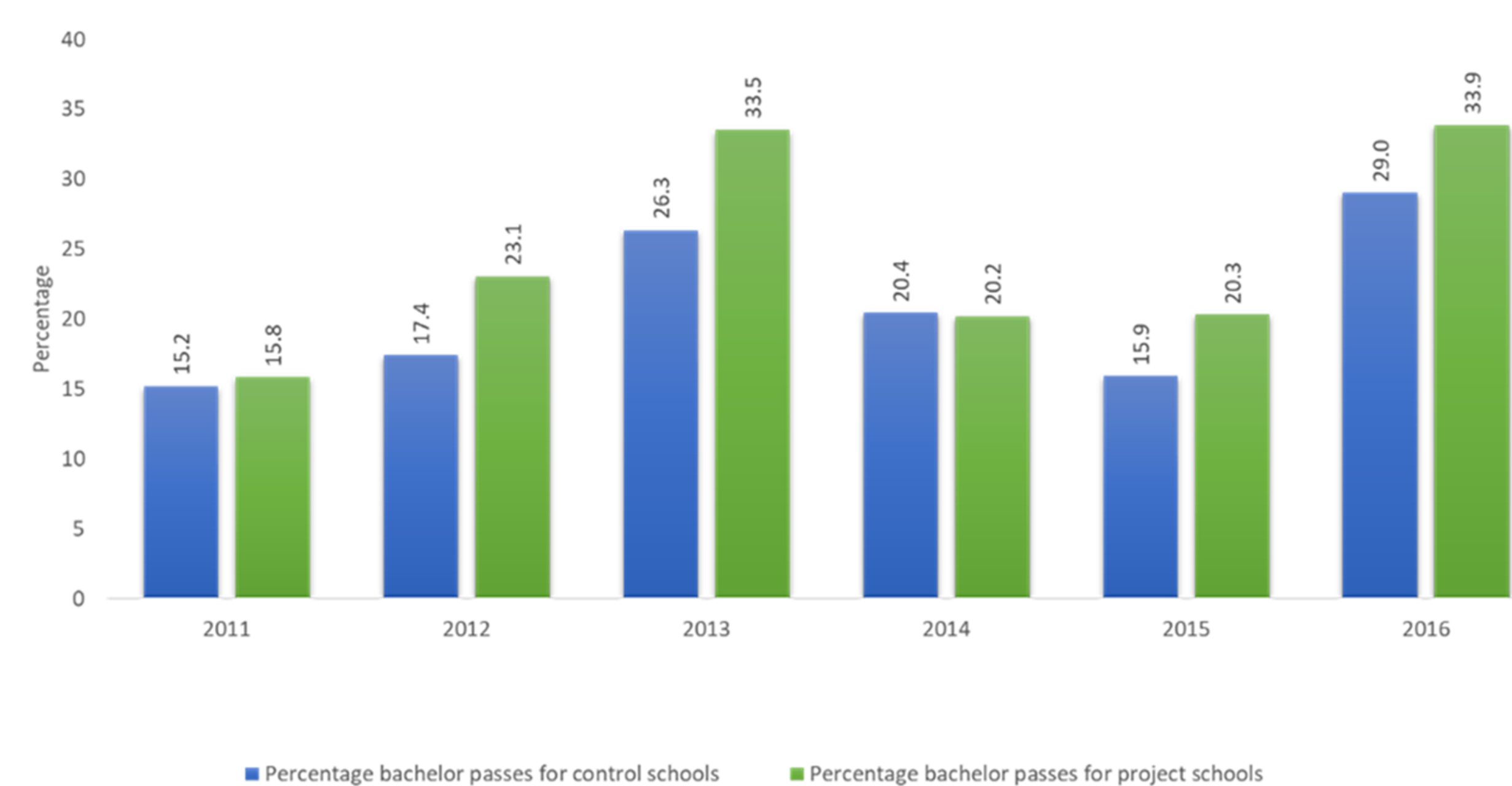
9 project schools

Surveys were administered to educators, heads of department, deputy principals and principals. 188 respondents completed the survey over the period of three days.

The DDD an online system that extracts schools data from a national schools administration system and simply visualizes it for schools to easily understand and input data was used to track learner scores and achievement.

Results

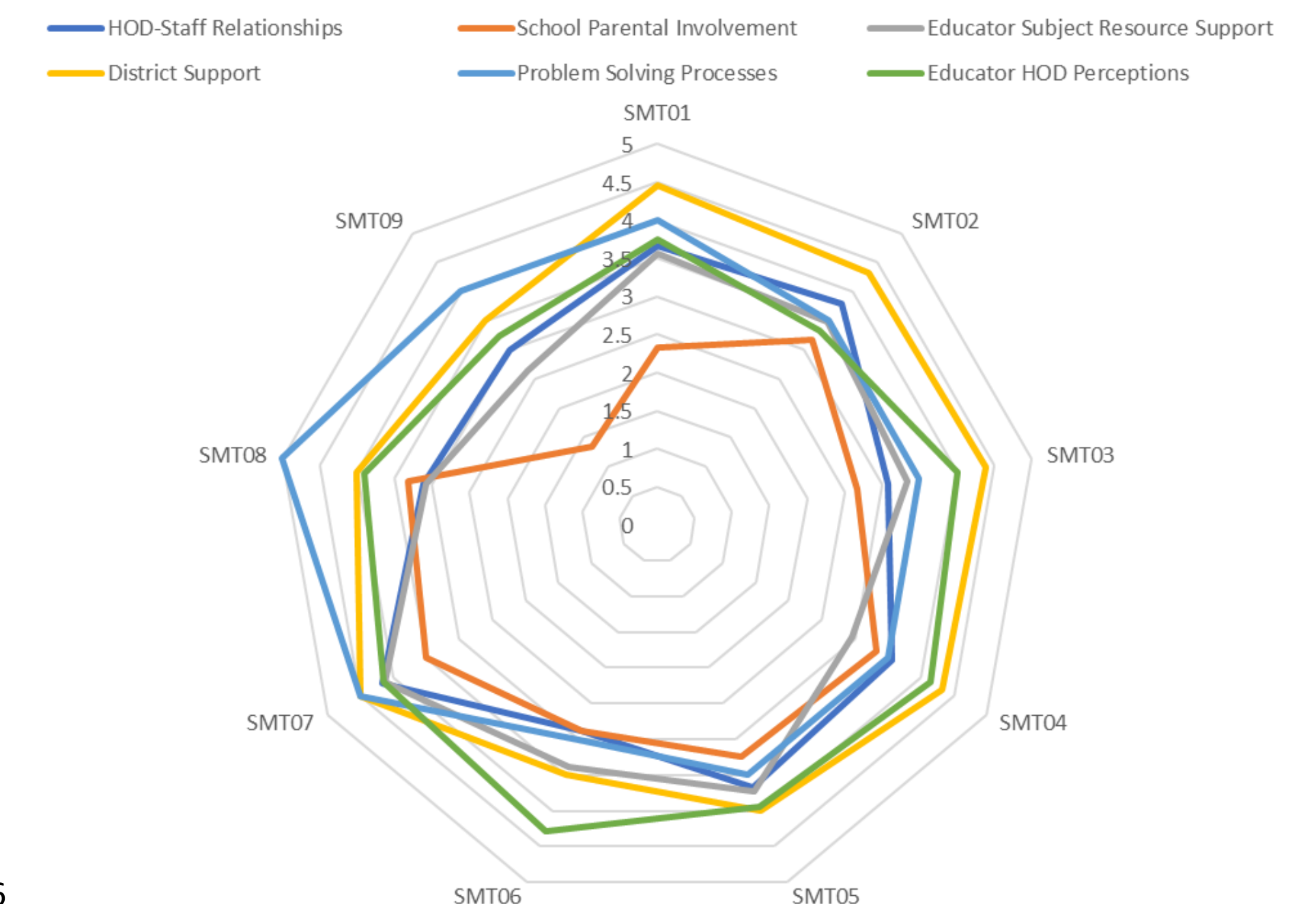
Grade 12 Bachelor Pass Scores



Bachelor passes have specific criteria that must be met by students. Fulfilling the requirements allows for students to gain passes that allow them to be enrolled at University for a Bachelors Degree.

Results

Indicators: All Schools



Least Scoring SMT06

Highest Scoring SMT 07

Most schools scored below 3 for School-Parental Involvement

HOD Staff R/Ships: communication on mission and vision, opportunity to share ideas. above 3

School-Parental Involvement : attend meetings, check homework, involved in extra school activities. Low in all schools, 4 scored below 3 ;;

Educator Subject Resource support – above 3 average all schools

District Support: Visits from circuit manager 3 times a year, informative constructive visits, frequent and open communication with circuit manager

All schools felt supported by district:

Problem Solving Processes – clear communication, issues logged/reported attended to in agreed time frame, clear process of reporting issues – above 3

Educator Perceptions on HODs (Math and Science) – HOD experience capability, skills, support - All above 3

Conclusions

- Impacts achieved in governance and relationship between school management and educators. However, grade 12 Math and Science scores fluctuate and have slight variations between control and project schools. Thus OMEFP alone cannot be attributed to the slight increases.
- Variance in perceptions regarding effectivity of OMEFP.
- ‘Courtesy bias from respondents for fear of losing future funding. Use independent evaluator.
- Abrupt policies (i.e. progression) affect educators and learner scores.
- Data availability has allowed schools to engage on results and begin identifying areas that need attention.
- Data quality needs improvement (connectivity, input quality, training).

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