



Education and Skills

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# The Matric Issue

The National Senior Certificate examination results are used as an important barometer to evaluate progress made in the South African education system. The class of 2016 boasted an overall pass rate of 72.5%, compared to 70.7% in 2015. The first issue of 2017 focuses on the Matric results and the results of TIMSS 2015 to provide insights into the current state of the country's education system.

From 2017, the TIMSS SA newsletter will be produced bimonthly with 6 issues per year. We will continue to focus on various aspects of education in the country, providing new and varied insights into South African education.



#### 2016 Matric @ a glance

Using data from the 2016 National Senior Certificate reports, we explore overall learner performance in terms of Matric pass qualifications, provincial achievement and performance from 2013 to 2016 in three key subjects: Physical Science, Mathematics and Mathematical Literacy.

## Class of 2016's mixed bag of results

The 2016 Matric results raised important questions about education in South Africa. In this opinion piece, we take a broad view of education in the country, examining grade 9 performance and the pathways that learners follow from grade 9 to grade 12, as well as grade 12 mathematics and physical science performance.

#### Greater expectations in mathematics are not beyond reach

In a recent article that was published in the Mail and Guardian, Linda Zuze discusses international examples of advancing deeper learning of mathematics for all learners. She argues that developing the mathematical talents of every South African child, is a responsible approach to take. She further suggests that we need to work towards higher standards for all learners to avoid reinforcing existing inequalities in South African education.

## A Rasch analysis of a Grade 12 test written by mathematics teachers

Sarah Bansilal, Professor in the School of Education at UKZN, explored mathematics teachers' proficiency in the mathematics that they teach through an analysis of a shortened Grade 12 examination using the Rasch model.

#### TIMSS 2015 in the news

Members of the South African TIMSS team wrote two opinion pieces related to the TIMSS 2015 results which appeared in the Mail and Guardian in December 2016: Pupils' scores show change is possible and Home is where the learning is. The TIMSS results were also covered extensively via various print and online media in the country.

The TIMSS 2015 results were mentioned by President Jacob Zuma in the 2017 State of the Nation address, where he highlighted the improvement in South African learner performance in Mathematics and Science between 2003 and 2015.

## **TIMSS 2015 International database**

The TIMSS 2015 international database is available to all individuals interested in the data collected as part of the most recent round of TIMSS. The data can be analysed using the downloadable <u>IEA IDB analyser</u>, and datasets are available in SPSS or SAS format. The South African <u>Grade 9 Mathematics and Science dataset</u> (SPSS) and <u>Grade 5 Numeracy dataset</u> (SPSS) are available for further analysis.

## What is happening in education research?

### **Xhosa Mathematics Dictionary**

In 2015, a Mathematics dictionary was published in Xhosa, having the potential to make Mathematics more accessible to those learners with Xhosa as a first language. For more information, contact Professor Nosisi Feza at <a href="mailto:Fezann@unisa.ac.za">Fezann@unisa.ac.za</a>.

#### Lancet Early Childhood Development Series

The 2016 series focuses on early childhood development, considering new scientific evidence for interventions and proposing pathways for implementation of early childhood development at scale.

# PISA

The results of the Programme for International Student Assessment (PISA) 2015 were released in December 2016 in two volumes: <a href="Excellence and Equity in Education">Excellence and Equity in Education</a> and <a href="Policies and Practices for Successful Schools">Policies and Practices for Successful Schools</a>. This global OECD education study assesses the skills and knowledge of 15 year old learners.

INTERESTED IN USING TIMSS DATA FOR YOUR RESEARCH? If you are interested in working with us on publications based on the TIMSS data, please contact us.

www.timss-sa.org.za