

# TIMSS SA Newsletter



Inclusive Economic  
Development  
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## TIMSS SA Latest Publications

In this newsletter we share a number of recent journal articles and book chapters that used TIMSS South African data. These publications provide insights into achievement trends over time and contextual variables that are related to South African learners' achievement.

### Counting the cost of lost schooling in South Africa

This article in [The Conversation](#) by Vijay Reddy provides an estimate of how much contact teaching time was lost in 2020, and makes an "informed speculation" on the amount of learning loss. The key finding from the study is that the South African education system would have slid back by at least five years, i.e., to the outcome levels of 2015.

### TIMSS in South Africa: making global research locally meaningful

A chapter by Vijay Reddy and Sylvia Hannan, in the recently published book [Society, research and power: a history of the Human Sciences Research Council](#), provides an overview of the [history and motivation for participation in TIMSS in South Africa](#) over the past 25 years. The chapter also provides a nuanced description of achievement from 1995 to 2015, and highlights the impact of TIMSS research on knowledge generation and evidence-based policy-making in the country.

### Education and labour market inequalities in South Africa

In this [book chapter](#), Vijay Reddy and Bongwiwe Mncwango tracked the changes in school mathematics achievements from 2003 to 2015 using TIMSS 2015 data; university graduation rates for science, engineering and health related (SET) fields from 2008 to 2017; and demographic shifts of workers in high-skill occupations from 2008 to 2018.

Chapter in [Social Justice and Education in the 21st Century: Research from South Africa and the United States](#) (Edited by Pearson Jr., Willie and Reddy, Vijay)

### Reproducing inequality in the South African schooling system: What are the opportunities?

Fabian Arends, Lolita Winnaar and Catherine Namome used TIMSS 2015 data in this [book chapter](#), and the forms of capital identified by Bourdieu and Sen's capabilities approach to identify school contextual variables which could be converted into capabilities, which will in turn provide students with an opportunity to achieve improved functionings.

Chapter in [Social Justice and Education in the 21st Century: Research from South Africa and the United States](#) (Edited by Pearson Jr., Willie and Reddy, Vijay)

### School and individual predictors of mathematics achievement in South Africa: The mediating role of learner aspirations

This article by Angelina Wilson Fadiji and Vijay Reddy used TIMSS 2015 data to test the relationship between self-efficacy, school resources, positive school climate and mathematics achievement as [mediated by learner aspirations](#). The findings revealed that, in general, self-efficacy, learner aspirations and school resources were positively related to mathematics achievement.

## Learners' educational aspirations in South Africa: The role of the home and the school

Angelina Wilson Fadji and Vijay Reddy used a bio-ecological systems theory of development to explore the role of gender, socio-economic status, parental involvement and school climate in [determining educational aspirations](#). They used the nationally representative TIMSS 2015 data and the statistical analysis technique of structural equation modelling.

## An analysis of TIMSS 2015 science reading demands

Surette van Staden, Marien Graham and Jaqueline Harvey investigated the [reading demands](#) of restricted-use science items administered to South African grade 9 learners as part of TIMSS 2015. The results showed significant differences between the percentage of correct answers between the low and high readability categories.

## Examining science performance of SA Grade 9 learners in TIMSS 2015 through a gender lens

Jaqueline Naidoo and Doras Sibanda examined the relationship between [gender and science item achievement](#) of Grade 9 learners in TIMSS 2015. The results show that, in general, gender did not influence learner achievement in most of the test items. However, girls performed better than boys in some questions and in the knowing and reasoning cognitive domains. The study highlighted that gender had a limited effect in the manner in which the girls and boys answered the different test items.

## First workplace experience for young people with tertiary qualifications

In this [policy brief](#), Andrea Juan and Vijay Reddy examined the Department of Science and Innovation's (DSI) National Youth Service (NYS) programme supporting unemployed graduates with their first work experience. Based on data from a participant tracer study, recommendations include continuation and expansion of the DSI's model to other government departments.

## Interested in using TIMSS data for research?

If you are interested in working with us on publications based on the TIMSS data, please [contact us](#).

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