

# Towards a more equal society: Perspectives of educational inequality in South Africa

22 March 2017



science  
& technology

Department:  
Science and Technology  
REPUBLIC OF SOUTH AFRICA



HSRC  
Human Sciences  
Research Council

**Information Circular**

**Human and Social Dynamics (HSD) Research Seminar Series**

**Trends in International Mathematics and Science Study (TIMSS): Towards a more equal society: Perspectives of educational inequality in South Africa, a conversation between evidence and policy**

**22 March 2017**

**Emerald room, CSIR Conference Centre**

**Pretoria**

*The HSRC seminar series is funded by the Department of Science and Technology (DST). The views and opinions expressed therein as well as findings and statements of the seminar series do not necessarily represent the views of DST.*

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## **INTRODUCTION**

We look forward to your participation in the Human and Social Dynamics Research Seminar and policy round table, which the Department of Science and Technology (DST) is hosting in collaboration with the Human Sciences Research Council focusing on “Trends in International Mathematics and Science Study (TIMSS): Towards a more equal society: Perspectives of educational inequality in South Africa, a conversation between evidence and policy”. This seminar is scheduled to take place on 22 March 2017 in the Emerald room at the CSIR Conference Centre, Pretoria.

## **PURPOSE OF THE HUMAN AND SOCIAL DYNAMICS RESEARCH SEMINARS**

The Department of Science and Technology (DST) Human and Social Dynamics (HSD) Research Seminar Series aims to:

- Disseminate scientific research findings and transmit a body of new knowledge through an interactive process of critical dialogue and collegial critique to the social sciences and humanities research (SSH) community and other interested actors in the National System of Innovation (NSI);
- Provide an avenue for rated and other researchers, including researchers from rural-based universities to engage in knowledge dialogues across faculties and with other interested actors in the NSI;
- Present and discuss new and ongoing research, identify research gaps, and suggest new research agendas in SSH with a view to forging closer links between the research communities in these fields;
- Reinforce the visibility of SSH research to the higher education and science council sector;
- Enhance wider public understanding of the SSH, including the value and status of both individual and team-based research; and
- Strategically promote, develop, and coordinate collaborative and interdisciplinary research within and between higher education institutions and science councils.

## **BACKGROUND**

The Department of Science and Technology (DST) in collaboration with the Human Sciences Research Council (HSRC) are hosting a Human and Social Dynamics (HSD) Policy Roundtable. The purpose is to examine the current policy with regard to the issues raised in each of the policy briefs and engage in critical debate and discussion based on the findings of the policy briefs. Through these engagements we hope that the evidence from our analysis contributes to confirming, modifying or extending the present policy.

### **Rationale**

Inequality among different socio-economic, racial and gender groups is a salient topic in South Africa. Specifically in education, the South African education system exhibits a skew distribution of achievement levels for an upper-middle-income developing country. It is thus critical to assess educational inequality in order to address the systemic factors which inhibit the attainment of an equitable educational system. The analysis of data from the 2011 Trends in International Mathematics and Science Study (TIMSS) provides an opportunity to examine this issue from a number of different perspectives.

TIMSS is an international study which assesses mathematics and science knowledge at the Grades 4, 8 and 9 levels. South Africa has participated in four rounds of TIMSS Grade 8 and 9 surveys over the last 20 years. The analysis of this data has allowed the Human Sciences Research Council to examine the key policy areas of gender equity, safety and security, educational pathways and the impact of inequality. In addition, the emerging issue of learner attitudes as a significant factor in understanding learner achievement has been explored. Using this data, four policy briefs and a journal article have been published which contextualise mathematics and science achievement within the broader South African landscape of inequality and poverty. In a bid to deepen the South African education agenda, it is necessary to engage key stakeholders in critical discussion in key policy areas and emerging policy debates.

The policy briefs and journal article are as follows:

**1. Have we reached gender equity in mathematics education?**

The Constitution of South Africa serves as a compass for engendering gender equality in the country. The Department of Basic Education has illustrated its commitment to gender equality through the establishment of the Gender Equity Unit whose main function is to monitor gender equality. This policy brief highlights the complexity of the issue of gender inequality in education and the need for deeper and on-going analysis. The findings are used to provide practical recommendations to assist both girls and boys to have successful educational careers.

**2. Safe and Sound? Violence and South African Education**

Concerns about school safety continue to plague South Africa. The Department of Basic Education views school safety as a top priority and has implemented policies and measures to ensure the safety of all learners, educators and relevant stakeholders in schools. Recently the National School Safety Framework was published to address this concern. This policy brief looks at the issue of safety in schools, through examining the prevalence of violence in schools and factors which are related to levels of safety.

**3. Does it matter if students enjoy learning science? Exploring student attitudes towards science in South Africa**

Science is affecting people's everyday lives more and more. New technologies, discoveries and innovations are having a major impact on our health, welfare and security, while also becoming a cause for concern. The Department of Science and Technology has, through policies such as the Science Engagement Strategy, recognised the importance of supporting the public's understanding of and engagements with science and technology if South Africa is to become a more innovative society with a more democratic and participatory mode of science governance. How students experience science education at school plays an important role in shaping their attitudes towards school science, and in influencing their views about science-related topics as an adult. It is therefore important to shape positive attitudes towards science from the school level. This policy brief examines learner attitudes in relation to a number of contextual factors.

**4. Smooth, staggered or stopped? Education transitions in the South African Youth Panel Study**

A high proportion of young South African exits the school system prematurely. In addition the considerable grade repetition within education system itself further exacerbates both low average levels of schooling and high educational inequalities. Understanding educational transitions is vital in order to address basic skills shortages and improve the life chances of all South African learners. This policy brief is based on the South African Youth Panel Study which followed Grade 9 learners who participated in TIMSS 2011 over four consecutive years, to explore the educational transitions of young people.

#### **5. Resilient learners in schools serving poor communities [Journal article]**

Over the past decade, the South African government has embarked on a number of policy changes and initiatives, such as the Programme to Support Pro-Poor Policy Development in South Africa (PSPPD), to address the twin challenges of poverty and social inequality. These interventions have extended to redressing past inequities in education provision. The contention is that access to the support and educational resources would provide learning opportunities that should compensate for home poverty disadvantage. This is the basic assumption of the current government policy to improve education for all in South Africa. This article attempts to interrogate this assumption.

## PROGRAMME

### Trends in International Mathematics and Science Study (TIMSS): Towards a more equal society: Perspectives of educational inequality in South Africa, a conversation between evidence and policy

**Venue:** Emerald room, CSIR, Pretoria  
**Date:** 22 March 2017  
**Chair:** Dr Vijay Reddy, Executive Director, Education and Skills Development, HSRC  
**Rapporteur:** Ms Ntokozo Ndlovu and Ms Eulalia Snyman, Tony Elephant Media

08:30 - 09:00	Registration, Tea & Coffee
09:00 – 09:10	Introduction & welcome
09:00 – 09:10	<b>Welcome &amp; Opening Remarks</b> <i>Professor Crain Soudien, CEO, HSRC</i>
<b>09:10 – 09:20</b>	Session 1
09:10 – 09:20	<b>Mapping the area of research</b> <i>Dr Vijay Reddy, ED, ESD</i>
<b>09:20 – 09:40</b>	Session 2
09:20 – 09:40	<b>Gender and education: Presentation of gender policy brief</b> <i>Dr Linda Zuze</i>
<b>09:40 – 09:50</b>	Session 3
<b>09:40 – 09:50</b>	<b>Critical reflections on current policy on gender and education</b> <i>Department of Basic Education</i>
<b>09:50 – 10:00</b>	Session 4
<b>09:50 – 10:00</b>	<b>Critical reflections on current policy on school safety</b> <i>Ms Nokuthula Prusent – UNICEF</i>
<b>10:00 – 10:20</b>	Session 5
<b>10:00 – 10:20</b>	<i>Discussion</i>
<b>10:20 – 10:50</b>	Tea
<b>10:50 – 11:10</b>	Session 6
<b>10:50 – 11:10</b>	<b>Science engagement: Presentation of learner attitudes policy brief</b> <i>Dr Andrea Juan, ESD, HSRC</i>
<b>11:10 – 11.20</b>	Session 7

<b>11:10 – 11:20</b>	<b>Critical reflection on current policy on science engagement</b> <i>Dr Beverly Damonse, Group Executive: Science Engagement and Corporate Relations of the National Research Foundation (NRF)</i>
<b>11:20 – 11:40</b>	Session 8
<b>11:20 – 11:40</b>	<b>Education pathways: Presentation of education pathways policy brief</b> <i>Dr Katherine Isadale, Dr Vijay Reddy and Ms Lolita Winnaar</i>
<b>11:40 – 11:50</b>	Session 9
<b>11:40 – 11:50</b>	Critical reflection on current policy on post grade 9 pathways for students <i>Dr Mamiki Maboya, Department of Basic Education</i>
<b>11:50 – 12:10</b>	Session 10
<b>11:50 – 12:10</b>	Poverty and education: Presentation of resilient Learners journal article <i>Dr George Frempong, ESD, HSRC</i>
<b>12:10 – 12:20</b>	Session 11
<b>12:10 – 12:20</b>	Critical reflection on current policy on pro-poor schooling investments <i>Ms Percy Moleke, The Presidency</i>
<b>12:20 – 12:50</b>	Session 12
<b>12:20 – 12:50</b>	<b>Group discussion</b>
<b>12:50 – 13:20</b>	Session 13
<b>12:50 – 13:20</b>	What does this all mean for improved education policy? <i>Dr Thabo Mabogoane, DDG: Outcomes Facilitation, The Presidency and Prof Jill Adler, SARCHI chair</i>
<b>13:20 – 13:30</b>	Session 14
<b>13:20 – 13:30</b>	Closure <i>Dr Vijay Reddy, HSRC</i>
<b>13:30 -</b>	LUNCH

- - Departure -



**WORKSHOP DOCUMENTS**

On registering, delegates will be provided with supporting documentation at the workshop in their workshop packs, including the workshop programme, abstracts, and biographies.

**REGISTRATION**

The Registration Desk for the workshop will be located in the Foyer of the Emerald room in the CSIR Conference Centre

Registration commences at 8h00 on 22 March 2017. On arrival, delegates and guests should register and collect their name tags workshop bags from the registration desk. The Registration Desk will be open for general information enquiries throughout the workshop.

**PRESENTATIONS**

All presenters must please see that their PowerPoint presentations are loaded onto the computer system in advance of their session. IT staff that will be assisting at the event include Mr Thabo Stamper (cell: 076 628 3579, E-mail: TStamper@hsrc.ac.za).

Should you have any additional material you would like to make available to delegates, please bring along around 40 copies.

**INTERNET ACCESS AND COMMUNICATION FACILITIES**

Internet access is available in the CSIR Conference Centre.

Please note that it is not possible to provide a sufficient number of computers and work stations to cater for everyone expected to join us. We therefore recommend that you bring along your own laptop.

**THE WEATHER**

March season is usually good weather in Pretoria. You may expect average temperatures of 23° C to 38° C during your visit in Pretoria. We highly recommend that delegates bring along umbrellas.

For more accurate information, visit the South African Weather Bureau's website: <http://www.weathersa.co.za>.

**EXHIBITIONS**

Please support the exhibitors in the foyer of the Emerald room, where HSRC Press books will be available to view.

**PARKING**

Parking is available for delegates using their own transport

#### KEY CONTACTS DETAILS FOR YOUR VISIT

Programme director: <b>Dr Andrea Juan</b> e-mail: <a href="mailto:ajuan@hsrc.ac.za">ajuan@hsrc.ac.za</a> , cell: 083 468 6325
Events manager: <b>Ms Arlene Grossberg</b> , Tel 012 302 2811, Cell: 078 168 2996, E-mail: <a href="mailto:acgrossberg@hsrc.ac.za">acgrossberg@hsrc.ac.za</a> , <b>Ms Carolina Roscigno</b> , cell: 0825705312, E-mail <a href="mailto:croscigno@hsrc.ac.za">croscigno@hsrc.ac.za</a>
IT: <b>Mr Thabo Stamper</b> cell: 083 993 6657, E-mail: <a href="mailto:TStamper@hsrc.ac.za">TStamper@hsrc.ac.za</a>
Registration desk: <b>Ms Happy Solomon</b> 073 553 2930, E-mail: <a href="mailto:HSolomon@hsrc.ac.za">HSolomon@hsrc.ac.za</a>
Travel and accommodation: <b>Vandana Naran</b> Senior Consultant Hatfield   XL Nexus Travel Unit 17, Hatfield Bridge Office Park, 213 Richard Street, Hatfield [t] +27 12 342 1245 [f] 086 211 5317 [e] <a href="mailto:Vandanan@nexustravel.co.za">Vandanan@nexustravel.co.za</a> [Afterhours Call Centre] 071 677 1988
CSIR Event Coordinator: <b>Ms Pleasure Ntsime</b> , Tel: 012 841 3822, E-mail: <a href="mailto:PNtsime@csir.co.za">PNtsime@csir.co.za</a>

#### Have we forgotten something?

Please do not hesitate to get in touch if you have any questions or need further information about your trip

We look forward to seeing you soon!

We hope that you have an enjoyable and successful workshop.

ADDENDUM A

Meiring Naude Road, Brummeria, Pretoria | PO Box 395, Pretoria, 0001

Tel: +27 12 841 3884 | Fax: +27 12 841 2051

E-mail: [icc@csir.co.za](mailto:icc@csir.co.za) | Web: [www.csiricc.co.za](http://www.csiricc.co.za)

DIRECTIONS TO THE CSIR CONFERENCE CENTRE

*location map*

### LOCATION MAP

**CSIR ICC**  
Latitude S 25° 45.191'  
Longitude E 028° 16.649'

**Directions from North (travelling on N1 South)**  
Take N1 South  
Take the Lynnwood Road turnout and turn left into Meiring Naude Road  
Cross over one set of traffic lights (Kings Highway)  
Turn right into the first entrance, which is the CSIR south gate  
Keep left and follow the signs to the CSIR International Convention Centre

**Directions from South (travelling on N1 North)**  
Take N1 North  
Take Lynnwood Road offramp after Atterbury Road  
Turn right over highway  
Turn left into 1st street (Meiring Naude Road)  
Cross over two set of traffic lights (Kings Highway)  
Turn right at the next set of traffic lights, which is the CSIR south gate  
Keep left and follow the signs to the CSIR International Convention Centre

**CSIR International Convention Centre**  
*naturally hospitable • globally accessible*

*expect service*