

INTERNATIONAL RESEARCH ACCOLADE

IEA Bruce H. Choppin Memorial Award for outstanding PhD thesis

The International Association for the Evaluation of Educational Achievement (IEA), a prestigious organisation which conducts large-scale assessments such as the Progress in International Reading Literacy Study (PIRLS) in more than 50 participating countries, established two awards in order to honour the contributions made by the late Bruce H. Choppin and Richard M. Wolf to not only the IEA but also to the field of education, assessment and evaluation. Submissions for these awards are open to all countries and have in the past seen submissions from individuals hailing from world renowned institutions such as Dortmund and Oxford Universities. The awards are ultimately conferred upon those persons who have submitted exceptionally high-quality empirical research using IEA data. In particular, the Bruce H. Choppin Memorial Award aims to recognise an outstanding doctoral thesis and is awarded to a single individual annually.

Dr Karen Roux, a researcher for the Centre for Evaluation and Assessment (CEA), who submitted her thesis titled: Examining the Equivalence of the PIRLS 2016 Released Texts in South Africa across Three Languages was selected as the recipient of the prestigious Bruce H. Choppin Memorial Award in 2021.



Dr Karen Roux, Recipient of the IEA Bruce H. Choppin Memorial Award for outstanding PhD thesis

This study aimed at investigating the equivalence across English, Afrikaans and isiZulu Grade 4 and 5 texts which were used during the PIRLS 2016 assessment. This thesis highlighted four main considerations to safeguard against threats to validity of large-scale assessments – these include linguistic, functional, cultural and metric equivalences. Dr Roux made use of sequential explanatory mixed-methods approach to answer the research questions posed in her thesis.

The late Bruce Choppin was an early proponent of Rasch method of scaling aptitude and achievement test scores and it was in the same spirit that Dr Roux employed Rasch measurement during the course of her studies. She used this method in order to find greater insight and clarity into the development of assessments, particularly as it applies amongst the various languages, within the South African context.

THE PIRLS SEMINAR SERIES

An academic engagement on the PIRLS 2016 trend data

MESSAGE FROM THE DIRECTOR



In 2022, the CEA celebrates its 20-year anniversary at the Faculty of Education. We hope to reflect in 2022 on all of the CEA's contributions to and partners in education projects, discussion and debate in the South African landscape and beyond.

We cannot think of a more fitting tribute to the CEA's work than the main activity of 2021, the year in which PIRLS 2021 data collection took place amidst a continued pandemic. In 2021, we engaged with partners in the Western Cape with systemic data in efforts to ascertain teaching and learning loss due to the Covid-19 lockdown. Meanwhile, our postgraduate Assessment and Quality Assurance programmes are flourishing, with four graduates and two dissertation submissions during the year. This newsletter highlights some achievements, but also some losses the year left in its wake. In 2022, we look forward to working on the School Monitoring Survey with partners from the National Department of Basic Education and the Tshwane University of Technology, as well as a project with the Independent Schools Association of South Africa. The centre's vision continues to be a hub of specialist and expert knowledge in the fields of educational research and assessment and we thank everyone who has tirelessly worked with us on our mission, in years gone by, in 2021 and in years still to come.

Prof Surette van Staden

Director: Centre for Evaluation and Assessment



Prof Martin Gustafsson



Dr Karen Roux

In our previous edition of the CEA Newsletter, we shared news about a further investigation into the South African trend estimation between PIRLS 2011 and PIRLS 2016. In March 2020, Prof Martin Gustafsson published an article in 'The Conversation' (<https://theconversation.com/new-evidence-supports-the-belief-that-south-africas-education-is-not-all-bad-132280>) that brought the attention to greater trend growth between PIRLS 2011 and PIRLS 2016 than what has been originally reported. Encouragingly, this article points to new evidence that shows education sector growth and improvement in the right direction.

In April 2020, Prof. Surette van Staden published a follow-up piece in 'The Conversation' (<https://theconversation.com/international-study-shows-where-south-africas-education-system-needs-more-help-134448>) that investigated the nature of growth further. In this article, a case is made for the lack of growth in those sectors of the education that are traditionally seen as socio economically disadvantaged. In consequent publications, growth is further qualified in terms of reading skills, where evidence points to Grade 4 learners' inability to engage with reading at higher levels of cognition.

The continued debate around this issue culminated in a three weekly PIRLS 2021 webinar series with the theme, '*Understanding PIRLS: Investigations, Results and Discourse*'. On 17 March 2021, Prof Gustafsson presented his work on the trend issue entitled '*Beyond Belief: Growth in learner achievement during PIRLS 2016*'. A week later, Prof Surette van Staden presented some counter evidence that shows weak performance of achievement as interpreted against the skills presented by the PIRLS international benchmarks. This benchmark presentation was followed by Dr Karen Roux's presentation on 31 March 2021 about the validity of the test translations, learner responses and the story to be told from what can be surmised from errors, omissions and quality of responses to the achievement tests. The webinars were attended by academics, practitioners, members of the education ministry and students, with rich discussions on the possible solutions to these issues, and strategies for improvement.

PIRLS 2021 Data Collection Successfully Administered



Temporary staff at the CEA assisting with the packing and unpacking of PIRLS achievement booklets and questionnaires

For the CEA, this was the year of PIRLS 2021 administration! The uncertainty that the Covid-19 pandemic brought meant increased worry about the successful implementation of PIRLS, not only in South Africa, but also in participating countries who have been affected by the pandemic globally.

The CEA managed to administer the main study in all sampled schools between August and October 2021. PIRLS 2021 was administered to 457 Grade 4 classes across all nine provinces and in all 11 official languages. Additionally, a nationally representative sample of 338 Grade 6 classes were tested in Afrikaans and English to ascertain achievement at the end of the Intermediate Phase. The Grade 6 assessment was administered in those two languages that have 1) traditionally been the best performing languages in PIRLS, and 2) the two languages of learning and teaching for most children once the switch is made from Home Language at the end of Foundation Phase. This mammoth task would not be possible without the support from the National Department of Education, who appointed provincial coordinators across the country to assist in making contact with schools, informing them of PIRLS 2021 and assuring cooperation from districts and school leadership.

Our data collection partners for this study worked tirelessly to ensure that we meet deadlines for the conclusion of data collection despite challenges related to Covid-19 hotspots that prevented testing, unforeseen challenges at schools and even motor vehicle accidents. The task of unpacking booklets into batches and scoring the achievement booklets took place as soon as materials started returning from the field. Thembi Matlou and Gabriel Mokoena took the lead in coordinating these enormous tasks respectively.

From 1-5 March 2021, the National Research Coordinator (NRC) scoring meeting took place online, and already here staff from the CEA were trained in detail on how to conduct scoring activities nationally once administration has taken place.

Under the leadership of Mishack Tshele, data capture of all achievement and background questionnaire material took place according to plan. We are greatly indebted to every individual, organisation and team of people who made this project a reality to enable us to submit the South African dataset to the IEA on 15 December 2021.

The worldwide PIRLS 2021 results release in December 2022 is perhaps of greatest importance in the study's history as evidence of the possible role that Covid-19 had to play in learning losses and gains from an empirical perspective.



The CEA at Online Conferences

Despite the online nature of most of our interactions over the last two years, conferences had to continue!

Prof van Staden was invited as a panel member for the school principal webinar hosted by the SOS (Skole Ondersteuningsentrum) on 22 January 2021. Her presentation focused on the practical implications at school-level as evidenced by PIRLS results and how these can be practically implemented. On 28 September 2021, Prof van Staden was invited as keynote speaker at the SANTS Private Higher Education Institution to discuss assessment matters and issues of quality in schools and as it feeds into the Higher Education landscape.



The European Conference for Educational Research was held in the first week of September 2021. At this conference, which took place online instead of in Geneva as originally planned, Prof van Staden presented her work with Prof Claudia Schreiner from the University of Innsbruck in a paper entitled, 'Making national sense of international large-scale assessment data: Differences in reading instruction practices from two country perspectives'. This study emphasises the importance of understanding International Large-Scale Assessment (ILSA) data for a specific context, not just its value in providing overall data. We argue for realistic systemic aims in terms of goals for reading competence and reading excellence. Austrian students start to benefit from classroom instruction for students at the higher scale of reading achievement. These results are not mirrored for South African students in terms of even basic reading skills achievement, perhaps because socio-economic issues still override any possible effect for classroom practice if a school is situated in a disadvantaged community

Dr Karen Roux invited to speak at the Gauteng Department of Education's InterSen Reading Webinar Series



Dr Karen Roux

The Gauteng Department of Education is currently hosting an ongoing webinar series entitled InterSen Reading: A Scientific Approach to Reading, which places the focus on reading across the Intermediate and Senior Phase. As part of their flagship webinar, Dr Karen Roux was invited to speak at on the 15th of September 2021. The inaugural address for the series was made by Deputy Director General of Education, Alison Bengtson. Dr Roux was requested to provide her insight in the fundamental aspects relating to how reading skills are acquired during an individuals' lifetime. Her presentation, titled Scientifically speaking: How do we learn to read?, addressed the key aspects of young learners' ability to acquire language and reading skills as well as addressing some of the current misconceptions surrounding reading literacy.

Dr Roux's presentation sought to bridge the gap between the physiological structure of the brain and the acquisition of the intrinsic skills required for the development of language in order to assist in answering the age old question, is reading in fact a natural process? The presentation attempted to address this in two distinct parts

Dr Karen Roux invited to speak at the Gauteng Department of Education's InterSen Reading Webinar Series....*Continued*

The initial part of the presentation unpacked the language ability within the education context, which is of course an aspect that can be equated with a coin in the sense that language ability as such has two sides. The first side being the common, everyday language which we use on a regular basis as part of our daily interactions and for the most part is limited to the use of simple language structures. The other half of the coin relates to the concept of language as it used in scholastic and academic contexts. The latter is usually context reduced where meaning cannot be constructed from paralinguistic features.

The final part of her presentation dealt with the vocabulary levels of individuals, the foundation of reading skills as well as the physiological structure of the brain and the development of language. It was here that Dr Roux examined the so-called 'reading brain' and discussed the question of whether reading is in fact a natural process.

Dr Roux was joined by Mr Mmboniseni Nematangari (DBE: CES – GET InterSen Languages), Mrs Jacklyn Makgato (Retired Principal) and Ms Sibongile Twala (English Teacher).

SCORING PIRLS 2021 ACHIEVEMENT BOOKLETS

The Centre for Evaluation and Assessment (CEA) completed the scoring of the Progress in International Reading Literacy Study (PIRLS) 2021 achievement booklets. This high-status project, funded by the Department of Basic Education (DBE), involved an intricate data collection process where representatives of the DBE assisted the CEA with quality control monitoring. More than 25 000 learners across all languages and provinces participated in this study.

The CEA recruited scorers across different spheres of the education sector with a proven background in teaching or working with languages at school level. The scorers attended training in respect of how to score PIRLS constructed response items. Each achievement booklet consists of two passages and contains



approximately 15 items. Each item tests one of the four processes of comprehension, namely: Focus on and retrieve explicitly stated information, Make straightforward inferences, Interpret and integrate ideas and information as well as Evaluate and critique content and textual elements (formerly, this process was referred to as "examine and evaluate content, language, and textual elements").

Learners were tested to determine whether they can answer questions which range from explicitly stated information to making evaluations based on what they have read. Mr Gabriel Mokoena, assisted by Dr Karen Roux, spearheaded the scoring process along with more than 30 scorers to ensure that the scoring is streamlined and in line with international regulations.



The CEA in the media ▶

On 8 September, the world celebrates International Literacy Day. The Constitutional Court confirmed the importance of the PIRLS findings in South Africa at a special session on this day in 2021, where basic reading and writing skills were declared as human rights. The issue, brought forward by the Human Rights Commission and Prof Nic Spaull from the University of Stellenbosch, makes reference to the PIRLS benchmarks as evidence of the attainment of such basic skills to which all children have the right by age 10.

Coinciding with International Literacy Day on 8 September, Prof Surette van Staden was interviewed on Radio Sonder Grense (RSG) on the importance of literacy, the barriers in the South African education system and how some malleable factors can be leveraged to ensure improvement, growth and development.

CEA researcher discusses testing reading literacy on International Literacy Day

Every year on 8 September the world celebrates International Literacy Day. It is clear that even though there has been a steady increase in literacy rates over the last 50 years, UNESCO studies have shown that there are still approximately 250 million children worldwide who are not acquiring basic literacy skills.

Dr Karen Roux (CEA researcher), alongside Prof Kathleen Heugh (University of South Australia) and Dr Alude Mahali (HSRC), was invited to speak at the Human Sciences Research Council (HSRC) on the 8th of September as part of the HSRC's Inclusive Economic Development research division webinar in order to highlight the importance of International Literacy Day and to provide her insights when considering literacy in the South African schooling and higher education contexts. Dr Roux's presentation, entitled Testing reading literacy: what the past, present and future holds for PIRLS, focused on what lessons can be learned from

past cycles of the Progress in International Reading Literacy Study (PIRLS). In addition, she also considered the growing influence of the digital divide in terms of teaching, learning and assessment in South Africa.

Literacy is considered one of the fundamental rights to which all human beings are entitled to and there can be little doubt that it creates the foundation for all future learning. It has been well established that the art of reading and writing serves to improve lives by empowering children and adults to actively participate in society. In South Africa, government has made it clear that literacy is a matter which they deem to be of great importance and have affirmed their commitment to additional pathways to enhance our current literacy levels. The seminar, hosted by the HSRC, provided a platform recognising the value of literacy in South Africa and allowing for local experts to provide their insights into what the future may hold for literacy levels in the Republic.

Memorandum discussions with the Western Cape Education Department



The team from the Centre for Evaluation and Assessment (CEA), represented by Prof Rinelle Evans, Hendrick De Kock and Gabriel Mokoena (pictured here on the right) attended the Memorandum discussions with the Western Cape Education Department (WCED) at the Cape Teaching and Leadership Institute (CTLI) on the 15 - 16 October 2021.

The purpose of the discussions was to discuss and finalise the memorandums with the WCED's chief and senior markers in preparation for the marking of the 2021 cycle of the systemic tests. The CEA has been instrumental in the development and refinement of language and mathematics test items for the Western Cape Systemic testing. The WCED systemic testing, which comprise of Language and Mathematics test for Grades 3, 6 and 9 in English, Afrikaans and isiXhosa, has been administered in the province since 2002 to identify areas for improvement and also to identify areas of the curriculum that require additional support.



CEA CONGRATULATES AQA DOCTORAL ACHIEVEMENTS



Our PhD graduates from top to bottom

- Dr Vuysile Khumalo (Supervisors: Prof Surette van Staden, Prof Marien Graham)
- Dr Karen Roux (Supervisors: Prof Surette van Staden, Prof Lilli Pretorius, UNISA)
- Dr Sello Moyo (Supervisors: Prof Surette van Staden, Dr Celeste Combrinck)
- Dr Prosper Dzifamesi (Supervisors: Prof Marien Graham, Prof Surette van Staden)

We also congratulate the supervisors and Prof Surette van Staden for the faculty award for best supervisor for 2020.

IN MEMORIAM

Prof Tjeerd Plomp

It was with sorrow that we learnt of the passing of Prof Tjeerd Plomp on 17 September 2021. Prof Plomp was affiliated to the University of Twente in the Netherlands and received his honorary doctorate from the University of Pretoria on 11 April 2014. He played an instrumental role in the strategic direction of the CEA, its projects and growing its postgraduate offering in the field of Assessment and Quality Assurance.

We will remember Prof Plomp for his kindness, humility and exceptional work ethic. His visits to the CEA were always met with excitement and anticipation of the wisdom and experience he generously shared without hesitation. We extend our sincere condolences to his wife, family, colleagues, students and every person whose life he touched in a meaningful way.



Dr Nelladee Palane



*'The bustle in a house
The morning after death
Is solemnest of industries
Enacted upon Earth –*

*The sweeping up the heart
And putting love away
We shall not want to use again
Until Eternity'*

-Emily Dickenson

We know that the bustle at the office will not be the same without Nelladee and that sweeping up all the hearts she touched will take time and courage. But we will never put our love for Nelladee away, because we cannot forget her honesty, good humour, optimism, dedication and depth of thinking in everything she did.

A special message from **Taslima Ahmed** sums up our memories:

'Always smiling, always encouraging. My dear friend "Nelz" as I would call her. I will miss your hugs and smiles as I walk through our office door, our little walks we use to do to keep fit. I know you are in a better place. Rip dear one. Lots of love'.

CEA PUBLICATIONS 2021

We are excited about the PIRLS book, which should gain momentum in 2022. The book deals with PIRLS data over ten years of administration in South Africa, where we have come from and what we have learnt from International Large Scale Assessments (ILSAs) in a developing context.

A special issue on the role of language in education is set to see the light soon in the South African Journal for Education. We thank the editor-in-chief, Prof Ronel Ferreira for this opportunity and for Prof van Staden to serve as guest editor.

Three submitted manuscripts are currently under review from work that resulted from students' postgraduate studies. These range in topics from using summative assessment for formative purposes (from work done by Mary-Antoinette Dliwayo), to the role of resilience in mathematics (the work of Vuyisile Khumalo), and the role of translations and establishing evidence of Differential Item Functioning across three languages of PIRLS 2016 texts (by Dr Karen Roux).

Trend evidence of PIRLS data currently forms part of a chapter written by Prof van Staden and Prof Gustafsson as part of a literacy book that includes the most prominent surveys, interventions and case studies of literacy work done in South Africa over the last ten years. Published work for 2021 includes:

- Graham, MA, Van Staden, S, Dzamesi, PD (2021). "Communicating Lesson Objectives and Effective Questioning in the Mathematics Classroom: The Ghanaian Junior High School Experience" International Journal of Instruction, 14 (4), 965-984.
- Mtsatse, N., & van Staden, S. (2021). "Exploring differential item functioning on reading achievement: A case for isiXhosa" South African Journal of African Languages, 41(1), 1-11.



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