IEA Publications and Editorial Committee Report

IEA General Assembly 2021

Seamus Hegarty



Researching education, improving learning

Publications and Editorial Committee (PEC)

- Reviews documents
 - Study reports
 - Research for Education manuscripts
 - Research for Educators manuscripts
 - Compass briefs
 - Teacher Snippets
- Ensures the high quality of IEA publications
- 3 Study reports, 1 Research for Education manuscript, 1
 Research for Educators manuscript, 6 Compass briefs and 1
 Teacher Snippet reviewed since GA 2020

IEA Study Reports

Measuring global education goals: How TIMSS helps. Monitoring progress towards Sustainable Development Goal 4 using TIMSS

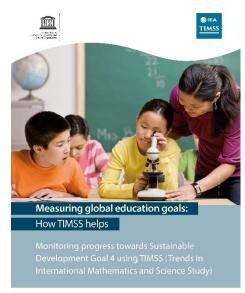
IEA & UNESCO Joint Report for TIMSS 2019 Released December 2020

Findings from the TIMSS 2019 Problem Solving and Inquiry Tasks

Due for release at 62nd General Assembly meeting

Changes in Digital Learning During a Pandemic-Findings from the ICILS Teacher Panel

Due for release at 62nd General Assembly meeting







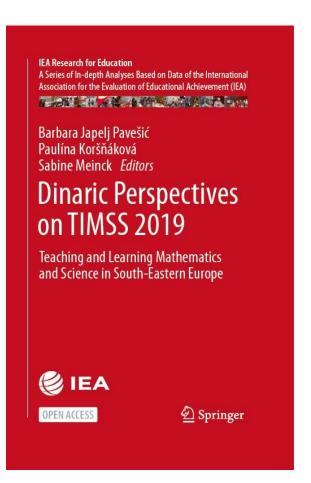
IEA Research for Education series

Volume 13

Dinaric Perspectives on TIMSS 2019. Teaching and Learning Mathematics and Science in South-Eastern Europe

Edited by Barbara Japelj Pavešić, Paulína Koršňáková and Sabine Meinck

Release: TBA





IEA Research for Educators series

Volume 1

Putting PIRLS to Use in Classrooms across the Globe: Evidence-based Contributions for Teaching Reading Comprehension in a Multilingual Context

Edited by Marian Bruggink, Nicole Swart, Annelies van der Lee, & Eliane Segers

Release: Spring 2022





IEA Compass: Briefs in Education

No. 11 – Gender gaps in science are not a given. Evidence on international trends in gender gap in science over 20 years.

November 2020. Sabine Meinck and Falk Brese

No. 12 – Computational thinking, socioeconomic gaps, and policy implications.

January 2021. Zbigniew Karpiński, Giorgio Di Pietro and Federico Biagi

No. 13 – Female science and mathematics teachers: Better than they think?

April 2021. Dirk Hastedt, Matthias Eck, Eunsong Kim and Justine Sass.



Female science and mathematics teachers: Better than they think?

SUMMARY

Jsing IEA's Trends in International Mathematics and Science Study (TIMSS) 2015 data, this brief explores the relationship between teachers' gender and students' mathematics and science achievement, as well as gender differences in science and mathematics teachers' self-efficacy and its relation to job satisfaction. We find that there is no direct relationship between the gender of the teacher and students' performance in science nd mathematics. Grade 4 and 8 students taught by female eachers perform just as well in science and mathematics than heir peers taught by male teachers. Yet, results show that female science and mathematics teachers have less self-efficacy than their male counterparts. Additionally, the relationship between self-efficacy and job satisfaction is positive, and this relation is particularly strong for female science and mathematics teachers. The brief concludes with a discussion of the potential implications of these results, some suggested actions to build female science and mathematics teachers' self-efficacy, and areas for further research

IMPLICATIONS

- Lower self-efficacy of female science and mathematics teachers may affect girls' own self-efficacy in these subjects, and pursuit of science, technology, engineering, and mathematics (STEM) careers. There is a need for interventions—for example, leadership training and learning from a community of practice—aimed at raising awareness among female STEM teachers of their strengths and building their self-efficacy.
- Self-efficacy is positively correlated with job satisfaction and more so among female teachers. Professional training programs tailored to enhance male and female teachers' self-efficacy beliefs also need to address issues related to job satisfaction and overall teacher well-being such as working conditions and school climate.

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IEA Compass: Briefs in Education

No. 14 – Exploring coherence between Swedish grades and TIMSS 2015.

June 2021. Maria Axelsson and Christian Tallberg

No. 15 – 'Follow me for more content' How does social media use relate to activism among young people?

September 2021. Lauren Musu and Guillem Fernández Villà.

No. 16 - *Curriculum-based international large-scale assessments.*

Release date TBA. Jan-Philipp Wagner & Dirk Hastedt





IEA Awards

IEA offers two annual awards to recognize high-quality empirical research that makes use of IEA data. The intention of the awards is to encourage and promote outstanding research conducted by graduate students, postgraduate students, and established researchers.

Bruce H. Choppin Award

This award, established by IEA in 1985 as a memorial to the late Dr Bruce H. Choppin, recognizes outstanding master's theses or doctoral dissertations that employ empirical research methods and use IEA data.

Richard M. Wolf Award

This award, established in 2005 as a memorial to the late Dr Richard M. Wolf, recognizes the author or authors of a paper published in a refereed journal, monograph, or book that includes analysis of data from one or more IEA studies.



IEA Awards

Bruce H. Choppin Award

Dr Karen Roux **University of Pretoria**



Examining the Equivalence of the PIRLS 2016 Released Texts in South Africa across Three Languages.

Roux, K. (2020). Examining the equivalence of the PIRLS 2016 released texts in South Africa across three languages. PhD thesis, University of Pretoria. http://hdl.handle.net/2263/805

Richard M. Wolf Award

Dr João Marôco New University of Lisbon



What makes a good reader? Worldwide insights from PIRLS 2016.

Dr Michalis Michaelides University of Cyprus



Negative Keying Effects in the Factor Structure of TIMSS 2011 Motivation Scales and Associations with Reading Achievement.



IEA Awards

- Further details of this year's award winners may be found in the 2021 *IEA Insider*.
- Details for proposals at: www.iea.nl/about/opportunities/award
- Submission deadline is March 31 every year.
- Non-English submissions must be accompanied by a synopsis in English.



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Thank you!