

# IEA Policy Briefs

October 2016

Oslo

David Rutkowski



**IEA**

*Researching education, improving learning*

# Current-Editors



- Tom Loveless (March 2015-present)
  - Nonresident Senior Fellow at the Brookings Institution
- David Rutkowski (March 2015-present)
  - Professor Educational Measurement at the University of Oslo



# Funding



The initial briefs were funded by the National Center for Education Statistics of the US Department of Education under Contract No. ED-08-CO-0117 with the International Association for the Evaluation of Educational Achievement (IEA).

# About the briefs (official goals)



- The briefs aim to address issues of particular interest to policymakers based on secondary analysis of data from IEA's studies.
- Each publication in the series aims to connect study findings to recurrent and emerging questions in education policy debates at the international and national level.
- The briefs cover a range of themes in relation to teaching and learning in school subjects addressed by the IEA studies.

# About the briefs (editor's vision)



- For top scholars in the field to engage with IEA data (TIMSS and PIRLS) and explore a policy relevant topic.

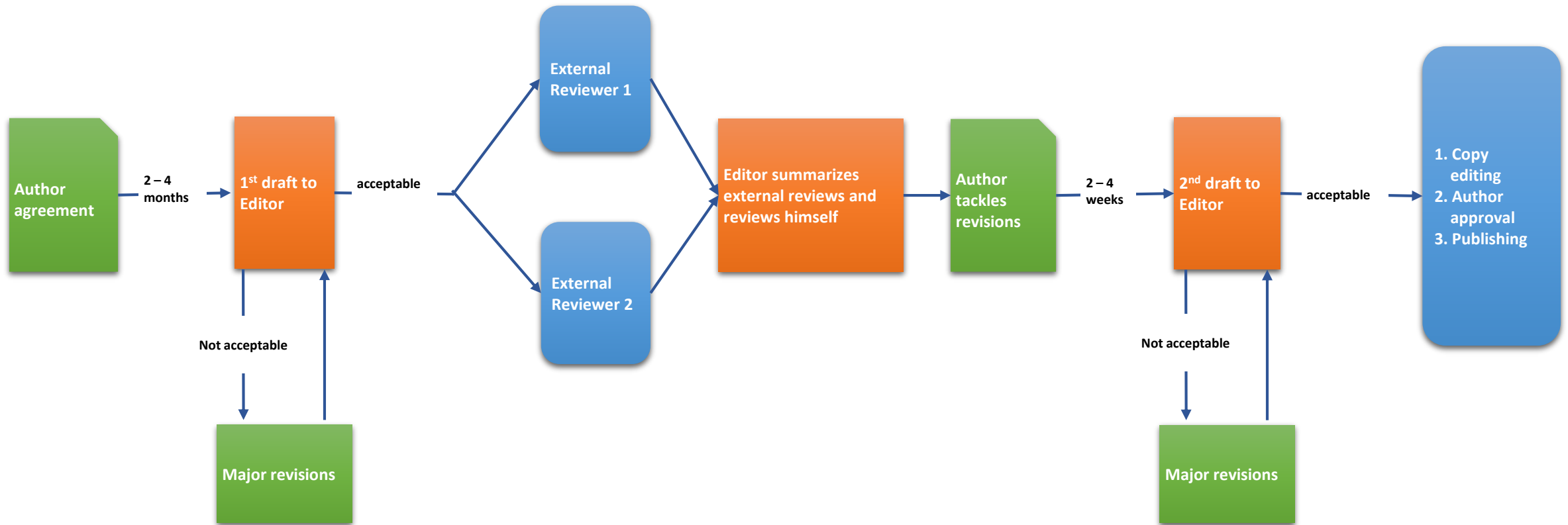
Do you want to write a policy brief?



Sure

Institutional Affiliations: Austria, Bulgaria, Germany, Spain, Mexico, New Zealand, Norway, Slovenia, South Africa, Sweden, U.S.

# Current publication process



# Number of briefs (counts)



13 Published since (2013)

- 7 under current editors

1 Currently in Production

2 Under Review

# 3 Examples



## **September 2016**

*Are teacher characteristics and teaching practices associated with student performance?*

## **October 2015**

*Using PIRLS data to investigate the relationship of teachers' instruction with students' out-of-school reading behaviors*

## **August 2015**

*Advanced academic performance: Exploring country-level differences in the pursuit of educational excellence*



# Brief 1



*Title:*

*Are teacher characteristics and teaching practices associated with student performance?*

*Authors:*

**José G. Clavel**, University of Murcia, Spain

**Ildefonso Méndez**, University of Murcia, Spain

**Francisco Javier G. Crespo**, National Institute for Educational Assessment (INEE), Spain

# Brief 1 (Purpose)



## Purpose:

Examines how different strategies and methodologies used by teachers in their day-to-day activity may have an influence on the academic performance of their students.

## Data:

TIMSS 2011

# Brief 1 (Conclusions)



(1) Only one strategy, collegial practices, exhibited more positive associations than negative associations with student performance among countries.

(2) Two strategies, passive teaching and active assessment, were more often negatively associated than positively associated with student achievement.

# Brief 1 (Conclusions)



(3) Countries exhibited heterogeneous effects, depending upon economic development.

- In higher GDP per person countries, active teaching strategies were associated with enhanced student performance, while passive teaching strategies appeared detrimental.

(4) Policymakers should exercise caution when importing policies that have apparently worked well in other countries.

- The national (and local) context may dramatically change how policies affect outcomes.

# Brief 2



## *Title:*

Using PIRLS data to investigate the relationship of teachers' instruction with students' out-of-school reading behaviors

## *Authors:*

**Morgan S. Polikoff**, University of Southern California, USA

**Nan Zhou**, University of Southern California, USA

# Brief 2 (Purpose)



Purpose:

To examine the relationships of several instructional practices with multiple measures of students' out-of-school reading.

Data:

PIRLS 2011

# Brief 2 (Policy Implications)



## Policy Makers

(1) Consider the ways in which instructional policies might influence outcomes other than reading achievement, or consider the ways that policies might indirectly affect desired outcomes.

(2) Design data collections to gauge the extent of inequality in both in-school and out-of school behaviors that might contribute to student achievement.

# Brief 2 (Policy Implications)



## Teachers

- (1) To the extent that these results are supported by more rigorous research, consider incorporating more independent reading in class to help students to establish the habit of reading independently.
- (2) Conduct instructional activities that stimulate students' interest in reading and make in-class reading a more enjoyable activity that encourages out-of-class reading.



# Brief 2 (Policy Implications)



## Researchers

(1) Consider building more comprehensive measures of theoretically important instructional behaviors into future national and international studies.

(2) Explore more complete conceptual/theoretical models of the influence of policy or instruction on student behaviors and outcomes, perhaps using structural equation models or other sophisticated modeling approaches.

# Brief 2 (Policy Implications)



## Parents and interested citizens

- (1) Ensure students have access to the materials (e.g., books, technology) they need in order to have equal opportunity to read at home.
- (2) Consider the ways that parents and non-school agencies can support the educational efforts that schools take to improve student reading behaviors.

# Brief 3



*Title:*

*Advanced academic performance: Exploring country-level differences in the pursuit of educational excellence*

*Author:*

Jonathan A. Plucker, Johns Hopkins University, USA

# Brief 3 (Purpose)



## Purpose:

Drawing on from multiple years of TIMSS data the brief examines country-level differences in excellence, including disparities in advanced achievement within countries among subgroups of students (also known as excellence gaps)

## Data:

TIMSS (various cycles)

# Brief 3 (Policy Implications)



## Emerging Issues:

(1) Are economically developed countries with low levels of advanced academic performers (e.g., Norway in science, Sweden in math) impacted differently from developing countries with similarly low levels of advanced scorers, such as Iran and Malaysia in math or Jordan in science.

# Brief 3 (Policy Implications)



(2) Research should focus on the extent to which high-scoring countries have comprehensive national excellence policies for education and, eventually, workforce development.

- There have always been robust research programs on educational excellence around the world, but much rarer is research on country-level education policies for advanced achievement

# Brief 3 (Policy Implications)



(3) With respect to excellence gaps, the findings suggests that even some relatively high-performing countries have significant gender, immigrant, or socioeconomic gaps they need to address.

(4) Countries should monitor the degree to which all subgroups of students achieve advanced performance and then include those data whenever assessment results are publicly released.

# Challenges

There are a few!



# Timing

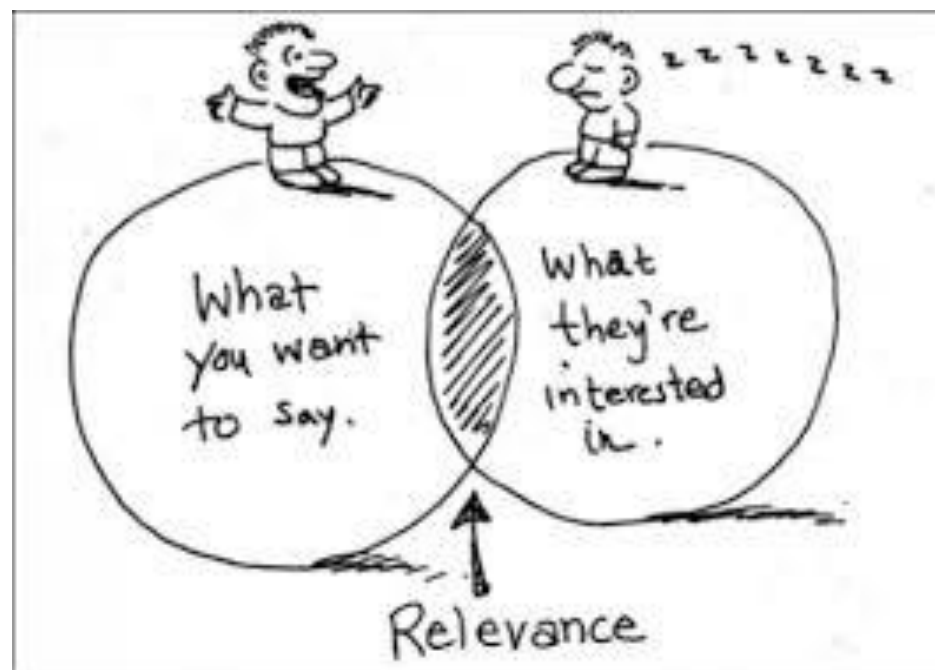
I'm writing a new article,  
should be out sometime  
next year



I'm writing a post,  
should be out in  
the next few hours



# Tone



# Structure



# Future



- Continue to work with top-scholars
- Additional structure while leaving room for flexibility
- Inclusion of more topics and studies
- Focus on length and style
- Continue to stay true to the data
- Gender and national balance of authors

# Your Help



- Author Suggestions
- Topic Suggestions (appreciate author)
- Feedback (what you like and don't like)
- Help Promoting the Briefs

Where to find the briefs:

[http://www.iea.nl/policy\\_briefs.html](http://www.iea.nl/policy_briefs.html)

## My contact:

David Rutkowski, PhD

Professor of Educational Measurement

Centre for Educational Measurement

University of Oslo, Norway

david.rutkowski@cemo.uio.no

+47 22 84 44 68



**THANK YOU!**



**IEA**

*Researching education, improving learning*