

IEA Compass Briefs



Researching education, improving learning

IEA 2022 General Assembly
Split, Croatia

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Doing great things together!

I can do things you cannot,
you can do things I cannot;
together we can do great things!

-Mother Teresa

I can really use your help!



Getting information out there is challenging!

- ILSAs are large and complex studies
- ILSAs take time to conduct
- ILSAs have a long tradition of being thorough (which is not normally equated with brevity)

People are busy...

- People have short attention spans (not just policy makers)
- In many respects, policy makers are celebrated for making quick decisions and consuming information quickly
- Many policy makers are not experts in education (although most think they are)

Compass Briefs Are One Way To Share Information



What are IEA Compass Briefs?

- Short works that address issues of interest to a broad range of educational stakeholders.
- Each publication connects study findings to recurrent and emerging questions in education policy debates at the international and national levels.
- The briefs cover a range of themes in relation to teaching and learning in school subjects addressed by the IEA studies.



But why?

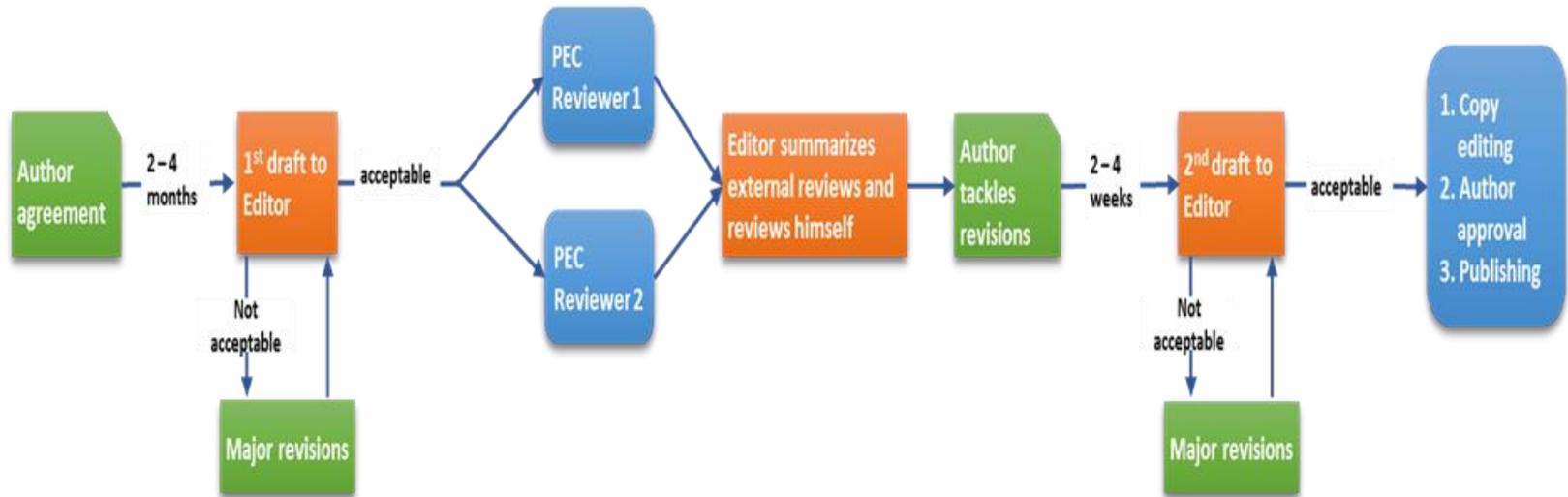
- **Compass Briefs** allows IEA to highlight some of its amazing work in a forum that a non-academic audience **might** read!
- **Compass Briefs** allow leaders in the field to present important aspects about parts of their work that have made use of IEA data or are important to the IEA community.

Who writes them?

- Academics
- Government officials
- Private consultants
- IEA researchers
- NGO and IGO staff and leadership

Lots of cool people (some are even attending this meeting)

Process?



Let's talk about a selection of briefs from 2022!



exciting

Sep 2022: A Booster for Digital Instruction



IEA COMPASS
BRIEFS IN EDUCATION
Researching education, improving learning
NUMBER 18 SEPTEMBER 2022

A Booster for Digital Instruction: The Role of Investment in ICT Resources and Teachers' Professional Development

SUMMARY

Results from the IEA's International Computer and Information Literacy Study (ICILS) Teacher Panel show a general increase in the use of information and communication technology (ICT) for teaching after the COVID-19 outbreak. This brief examines how changes in the availability of school ICT resources and recent participation in ICT-related professional development may explain increases in teachers' use of ICT during the pandemic in Denmark, Finland, and Uruguay. Results indicate positive effects of both professional development and school ICT resources on ICT use in all three countries. The brief concludes with a discussion of recent policy efforts to promote the use of ICT through targeted investments in computer infrastructure and ICT-related teacher training. It also outlines the implications for future evidence-based responses to educational disruptions.

IMPLICATIONS

- Teachers' use of technology increased significantly during the pandemic, showing that the COVID-19 outbreak has been a watershed moment for the use of ICT for instructional purposes.
- Education systems can support teachers' use of ICT by ensuring they have sufficient resources available in their schools and adequate professional development activities focused on ICT use for teaching and learning.
- The importance of digital instruction for remote learning will persist beyond the pandemic, as other events, such as extreme weather conditions, natural hazards or armed conflicts, may require digital instruction.
- Education systems worldwide need robust evidence to better understand what facilitates teachers' use of ICT. In this way, they can introduce appropriate measures to increase ICT use.

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Select Implications: Using ICILS Teacher Panel Data

- Teachers' use of technology increased significantly during the pandemic, showing that the COVID-19 outbreak has been a watershed moment for the use of ICT for instructional purposes.
- Education systems can support teachers' use of ICT by ensuring they have sufficient resources available in their schools and adequate professional development activities focused on ICT use for teaching and learning.
- Education systems worldwide need robust evidence to better understand what facilitates teachers' use of ICT.

April: Missing out on half of the world's potential

In partnership with

 **unesco**
United Nations Educational, Scientific and Cultural Organization

 **IEA**
International Education Assessment

COMPASS
BRIEFS IN EDUCATION

NUMBER 17.3 SPECIAL ISSUE APRIL 2022



Missing out on half of the world's potential:
Fewer female than male top achievers in mathematics and science want a career in these fields

SUMMARY

Using IEA's Trends in International Mathematics and Science Study (TIMSS) 2019 data, this brief explores the relationship between students' gender, their confidence and achievement in mathematics and science, and their aspirations to pursue careers in these fields. We find that more boys than girls at grade 8 want to have a mathematics- or science-related job. Girls and boys who have high confidence in mathematics and science are significantly more likely to want to work in these fields than those with low confidence in mathematics. In addition, we find that boys want to pursue a job involving mathematics as adults significantly more than girls of the same achievement level. This increased likelihood for boys holds across both high- and low-achievement groups. In comparison, there are smaller or no gender differences in the likelihood of pursuing a science-related career depending on achievement levels. The brief concludes with a discussion on the potential implications.

IMPLICATIONS

- Students' self-assessment of their skills in mathematics and science differs between boys and girls, risking gender disparities in participation in mathematics and science fields.
- Fewer girls than boys who are top achievers in mathematics and science aspire to a career in the field. This means that precious talent is being lost in these fields.
- Low-performing boys who want a career in mathematics could fall in their tertiary studies as their study choice may be poorly aligned with their mathematical capacities.

IEA and UNESCO

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Implications: Using TIMSS Data

- Fewer girls than boys who are top achievers in mathematics and science aspire to a career in the field. This means that precious talent is being lost in these fields.
- Students' self-assessment of their skills in mathematics and science differs between boys and girls, risking gender disparities in participation in mathematics and science fields.
- Low-performing boys who want a career in mathematics could fail in their tertiary studies as their study choice may be poorly aligned with their mathematics' capacities.

There are more coming (here are a few)

- Bullying (with a focus on cyber bullying)
- Hunger (there are a lot of hungry students)
- Boys and reading (joint brief with UNICEF)



www.iea.nl/publications/series-journals/iea-compass-briefs-education-series

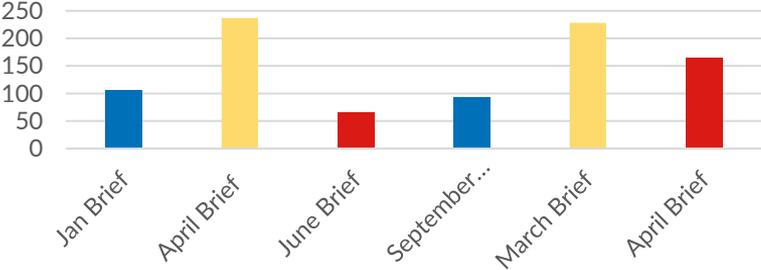
Translations help!

- Select briefs last year have been translated into Arabic, Danish, Spanish, and French.
- Past briefs also include German, Japanese, Russian.

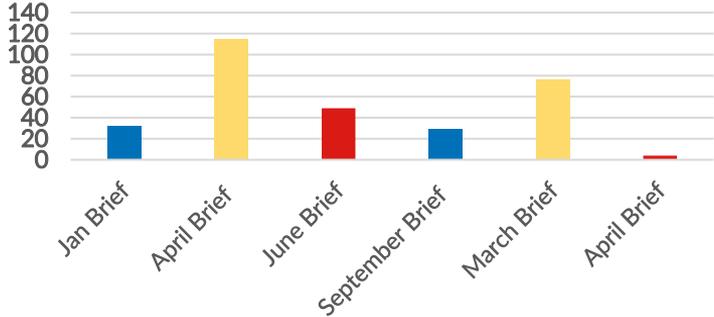


Metrics across Briefs 2021-22

IEA Compass Briefs Views on Website Within the First 30 Days of Release



IEA Compass Brief Downloads Within the First 30 Days of Release



Average Social Traffic Distribution Across Briefs



■ LinkedIn ■ Twitter ■ Facebook

Help!

- Our goal is at least 4 per year
- I ALWAYS appreciate topic and author recommendations.
- Please help get the word out:
 - Policy makers
 - Bureaucrats
 - IGOs and NGOs
 - Academics
 - Great for classes



Look...

- Briefs are an easy way to get more information about ILSAs into hands of people that can use it!
- With your help we can use briefs to reach a wider audience!

Everyone in this room knows a lot and together we can do a lot!

Thanks

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Questions, Comments, Ideas

www.iea.nl/publications/series-journals/iea-compass-briefs-education-series