It has been another busy year for IEA, with the launch of four study reports, an updated policy brief series and developing partnerships with new and old collaborators.

In November 2017, we co-hosted an event with the European Commission in Brussels to launch results of the ICCS 2016 international European reports. Overall trends indicated a substantial increase in civic knowledge over time in many countries that participated in ICCS 2009 and 2016. These launches were followed in April by an event in Lima, Peru, in cooperation with the Peruvian Ministry of Education, to launch the ICCS 2016 Latin American report. The event was hosted in Spanish with live English translation in the webcast and the significant media coverage across Latin America provided a boost to IEA’s profile in the region. There is more in this newsletter about the exciting secondary research already being done to follow up ICCS 2016, and the preparations for ICCS 2022.

In December, we marked 15 years of PIRLS trends with an event at the UNESCO Headquarters in Paris to launch the PIRLS and ePIRLS 2016 results. The extensive reports were complemented by a series of infographics and videos that helped to illustrate the data and trends. Encouragingly, PIRLS trends indicate that there are internationally more good readers than there were 15 years ago. The event also marked the launch of the joint IEA/UNESCO publication, Measuring SDG4: How PIRLS can help.

April saw the launch of our revised policy brief series under a new name: IEA Compass: Briefs in Education. Series editor, David Rutkowski of Indiana University, has pulled together a fascinating collection of subjects for IEA Compass, which will continue to be published regularly throughout the year. Published topics so far have included the effects of bullying on mathematics achievement, and the way Chinese Taipei has used TIMSS data to improve their system of mathematics education. Look out for some special editions coming up too, written in collaboration with other organizations.

Our last newsletter marked 10 years of IERI, the coming together of IEA and the Educational Testing Service as the IEA-ETS Research Institute. In the decade since the partnership began, IERI has hosted over 30 academies, to the benefit of over 750 researchers. This year marks the 5th anniversary of the IERI journal, Large-scale Assessments in Education.
Our major milestone for this year is the 60th anniversary of IEA. We have produced a special publication to mark the occasion which includes a timeline of IEA achievements and memories from members past and present. Readers are also invited to visit the dedicated anniversary section on our website for more stories. This anniversary is a good time to reflect on IEA’s long partnership with UNESCO, which dates back to the conferences held in Hamburg at the UNESCO Institute for Education in the 1950s. An article in this newsletter by Dr. Paulína Koršňáková explores this shared history and the joint-working which still goes on today, including support for the UNESCO Institute for Statistics monitoring of Sustainable Development Goals (SDGs), as well as our joint publications.

Our Literacy and Numeracy Assessment (LaNA) study continues to develop with further plans for pilot projects. The successful pilots in the Punjab, Pakistan in 2017 and in Haiti in 2016 confirmed the LaNa assessment as a potential benchmark for measuring SDGs, especially SDG4, which is to “ensure inclusive and quality education for all and promote lifelong learning”.

Looking ahead, we are all very excited about the 8th IEA International Research Conference which will take place in Copenhagen in June 2019. The theme is “The difference that makes the difference”, which will provide a broad umbrella under which we are anticipating some lively discussion and debate. We hope to see you there!

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IEA Compass: Briefs in Education

DAVID RUTKOWSKI (INDIANA UNIVERSITY)

IEA is delighted to announce a reimagined brief series with a fresh new format. Based on IEA studies, the IEA Compass: Briefs in Education series (formerly, IEA Policy Briefs) addresses issues of interest to a broad range of educational stakeholders, especially, but not limited to, those involved in influencing educational decision and policymaking. The name and layout were updated to reflect a shorter and more concise format and to encourage a wider audience.

The newly designed series will continue to include briefs that connect IEA study findings to recurrent and emerging questions in education policy debates at the international and national levels. In addition, select briefs will also focus on how participating systems are using IEA studies to inform their educational systems. For example, the June 2018 brief authored by Professor Fou-Lai Lin from the National Taiwan Normal University speaks to how Chinese Taipei has used successive cycles of TIMSS data as a guide for formulating educational policies, and as an evidence base for evaluating new policies. This brief should be of interest to those interested in how IEA studies can be used to inform, change and monitor educational policies.

No one likes a bully

How systematic is international bullying and what relationship does it have with mathematics achievement in 4th grade?

SUMMARY

- Children are bullied in primary schools around the world.
- The amount of bullying varies widely but, on average, nearly half of all children report being bullied at least once a month.
- Children who are bullied tend to do less well in mathematics.

IMPLICATIONS

- The TIMSS 2015 results clearly show that bullying is not isolated to one country. Rather, bullying is an international phenomenon that spans cultures and economies.
- TIMSS 2015 provides evidence of a strong international association between bullying and mathematics achievement at the fourth grade. Bullying prevention policies should be considered to ensure a safe learning environment where all students can meet their potential. Scholars and policymakers should work together on this crucial topic to reduce bullying and improve achievement.
- This simple analysis of the international grade 4 TIMSS results shows that bullying begins at an early age, and achievement gaps between frequently and infrequently bullied students also emerge in the early years of education. Bullying policies also need to begin in the early years.
- TIMSS provides an important resource for policymakers to monitor both existing and new anti-bullying interventions, and it is a rich resource to learn from others and monitor what works.
E-learning in test administrator training

ULRICH SIEVERS & STINE ZIEGLER (IEA HAMBURG)

Digitalization has created new opportunities for teaching and learning, including e-learning programs in different contexts. At IEA Hamburg, the National Field Operations Unit has been using e-learning as a supplement to the traditional classroom training for test administrators since 2016 within the scope of several studies.

The advantages of e-learning are becoming increasingly evident in national longitudinal studies carried out by IEA Hamburg. At the first measurement point, a group of test administrators is trained through extensive classroom sessions. For subsequent measurements, they are further trained through online courses and online tests. E-learning courses have also proven themselves in international cross-sectional assessments such as PIRLS or TIMSS.

WHAT ARE THE BENEFITS OF E-LEARNING?
For test administrators, online courses and online tests have become a useful supplement to face-to-face training.

Courses may be adapted to suit the administrators’ previous knowledge and experience so that relevant issues for the respective study may be taught in a focused way. Animated and interactive presentations as well as varied task formats support the communication of contents.

E-learning courses are also effective instruments for quality control and quality assurance. Learning content can be adapted to the level of knowledge of the respective test administrator group.

A group of test administrators is trained through extensive classroom sessions. For subsequent measurements, they are further trained through online courses and online tests. E-learning courses have also proven themselves in international cross-sectional assessments such as PIRLS or TIMSS.

The data makes the difference
How Chinese Taipei used TIMSS data to reform mathematics education

SUMMARY
Chinese Taipei has used successive cycles of TIMSS data as a guide for formulating educational policies, and an evidence base for evaluating their effects. Although Taiwanese students have performed well in TIMSS, the percentage of students reporting low confidence in and low enjoyment of mathematics is significantly greater than the international average.

Trends in students’ achievements and attitudes toward mathematics were used to design the After Class Support project, introduced in 2006, and subsequent TIMSS data inspired the Just Do Math program, a new approach to mathematics teaching and learning introduced in 2014.

Both teachers and students are enthusiastic about the new methods, and reactions have inspired national discussion on curriculum change. Educators and policymakers will use TIMSS 2019 to evaluate the true success of the program.

IMPLICATIONS
All countries seek to identify strategies to improve student performance in mathematics. Policymakers and researchers need to delve into the available evidence and collaborate to develop appropriate solutions to national educational disparities.

Students’ confidence in their ability to do mathematics, and their level of enjoyment of the subject, has been found to strongly influence their mathematics achievement.

TIMSS provides vital data for governments and researchers to compare and contrast differences in students’ mathematics performance within and between countries.

Innovative mathematics approaches can transform learning motivation for students of all abilities, and reignite teachers’ enthusiasm for teaching.

Acknowledging that the educational policy community in many IEA-member educational systems are comprised of a wide array of actors, including parents, teachers, public servants and elected officials, authors of the new briefs are encouraged to write and present findings in a way that is accessible to a general educational audience. In this regard, we hope that the IEA General Assembly members will help promote the series by encouraging those interested in their respective countries to read the briefs. For example, briefs have been used in university classrooms, by teacher organizations, and parent groups to inform conversations and demonstrate how IEA data can inform our understanding of education and practice.

Finally, although the format has changed and the vision has expanded, all briefs will continue to include either policy implication or recommendations aimed at providing a clear focus on how brief findings can assist the large and diverse policy community. Additionally, to help ensure high quality publications, the briefs are reviewed by multiple IEA Publications and Editorial Committee members, the editor, as well as experts in the related field.

The goal of the series is to highlight the diversity of policy-relevant applications of IEA study results. Please feel free to send ideas for prospective topics and authors to the series editor, David Rutkowski (drutkows@ie.edu).
Growing with new tasks
IEA as a partner for international research

RALPH CARSTENS, STEFFEN KNOLL, JULIANE HENCKE & ANJA WASCHK (IEA HAMBURG)

A bit more than a decade ago, the international team at IEA Hamburg began to assume responsibilities beyond the set of tasks traditionally covered in IEA studies such as international data management. Starting with the IEA Second Information Technology in Education Study (SITEs) 2006, in 2004 the team developed survey operations, designed new tools for electronic questionnaires, implemented sampling plans, coordinated parts of the study implementation and led the technical documentation in partnership with researchers at the Universities of Twente and Hong Kong.

In 2005, a team of experienced staff from IEA Hamburg and IEA Amsterdam, together with renowned experts from Statistics Canada in Ottawa, bid for the implementation of the first cycle of the OECD Teaching and Learning International Survey (TALIS) 2008, a new, questionnaire only, international survey that focuses on the working conditions of teachers and principals, commissioned by the Organisation for Economic Co-operation and Development (OECD). As the international study center, the team in Hamburg, led by our current Executive Director, Dirk Hastedt, closely cooperated with National Project Managers (NPMs) in 24 countries, the external Instrument Development Group (IDEG), and the survey’s governing body. Being an international study center was a challenging and exciting new task for all colleagues involved, who were sourced from a variety of units at the IEA Hamburg and Amsterdam. Technical standards, field operations, communication platforms, a comprehensive set of manuals and software tools, translation processes, quality control approaches and technical documentation were developed for the survey’s three key phases: an item pilot, a field trial phase and the main data collection. The study results were published in June 2009.

Between 2010 and 2014, an IEA-led consortium successfully implemented the second cycle of TALIS, again with an international study center in Hamburg. The 2013 cycle, now led by Steffen Knoll and Ralph Carstens, saw an increase in overall complexity and expanded responsibilities for IEA due to more participating countries and language versions, international options for primary
and upper secondary levels, and work on data scaling and reporting. Furthermore, IEA chaired the Item Development Expert Group (Paulina Koršnáková) and led the initial framework development (Leslie and David Rutkowski). A revised consortium, now including the Australian Council for Educational Research (ACER) for framework development but with otherwise unchanged leadership, was awarded the contract for the third cycle of TALIS that collected the bulk of data this year. With more than 45 countries and economies participating and most data collected online, IEA took additional responsibility for convening and chairing the Questionnaire Expert Group and developing the survey instruments for TALIS 2018. Experts from IEA Hamburg’s Research and Analysis Unit are responsible for all scaling work and table production. Managing the increased number of participants under the same timeline required improved communication, tools and workflows.

The development of IEA’s capacity to lead international large-scale surveys continued. IEA Hamburg directed and supervised the implementation of the IEA Early Childhood Education Study (ECES) in 2014/2015 as well as the IEA International Civic and Citizenship Education Study (ICCS) 2016, again in powerful and successful partnership with academic institutions and scholars, most prominently the National Foundation for Educational Research (NFER) in the United Kingdom and ACER. Encouraged by the highly positive feedback from the sponsors, our national counterparts and many other groups including an IEA Consortium led by Juliane Hencke in cooperation with RAND Europe in Cambridge, UK, successfully competed for the OECD TALIS Starting Strong Survey, which is also collecting its data this year and reporting in 2019. This TALIS-inspired study in nine countries focuses on staff and center leaders in pre-primary education at ISCED level 0.2 and children under the age of three, a new approach which provided many challenges to be evaluated and solved.

As the newest addition, IEA is the key consortium partner with ACER in the OECD International Early Learning and Child Well-being Study (IELS). Launched in 2016, IELS explores common language, frameworks and assessment materials for children’s early learning development and is managed by the two co-directors for operations: Anja Waschk and Juliane Hencke. Again, key tasks include, but are not limited to, sampling and weighting, technical standards, field operations, survey manuals, data processing, organizing NPM meetings, and advice on study planning, analysis and reporting. With vast differences in design and collection modes, this study provides new challenges for test development, administration and analysis but also opens new opportunities for IEA staff to demonstrate their capacity to develop high quality approaches and processes.

Naturally, the study coordination teams collaborate closely and share staff to maximize synergies whenever possible and appropriate, with supervision by one of three co-heads for international studies in Hamburg, Ralph Carstens. While study centers for all IEA studies are and will be located at external universities, research centers and similar organizations, we remain available as a reliable and effective partner for research at the national, regional and global levels. Past and current liaisons with international organizations, including the UN system (UNESCO, UIS, UNICEF), the World Bank, and the Inter-American Development Bank, and national ministries of education and evaluation bodies will for sure continue to expand and thrive, whether for focused studies, national assessment systems or work related to the Sustainable Development Goals.

News from IERI

EUGENIO GONZALEZ (ETS)

Last year, the International Association for the Evaluation of Educational Achievement (IEA) and the Educational Testing Service (ETS) celebrated their 10 year anniversary of joining forces to form the IEA-ETS Research Institute (IERI; http://www.ierinstitute.org). It has now been over a decade of productive and valuable collaboration between these two stalwarts of educational measurement, whose mutual goal through IERI is to nurture and promote improved research into the science of large-scale assessment in education.

Devoted to building understanding and research capacity around the world, IERI has hosted over 30 IERI academies on specialized topics related to large-scale assessment and delivered over 20 training courses as part of larger professional conferences, as well as helping countless researchers navigate their way through the many various international large-scale assessment databases and their associated methodology. To date, over 750 researchers have benefited from IERI’s flagship academies alone.

This year marks the 5th anniversary of the IERI journal, Large-scale Assessments in Education (http://www.largesscaleassessmentsineducation.com) which grew from the IERI monograph series. The journal helps to disseminate state-of-the-art information about empirical research using large-scale assessment data, and to make the results available to policymakers and researchers around the world. This open-access journal allows authors to retain the copyright of their articles, leaving them free to reproduce and disseminate their work, and authors also benefit from no article processing charges. Our recent blog post featured on SpringerOpen discusses some of the highlights of the past five years.

For more information about IERI and their activities, please visit the website www.ierinstitute.org.
IEA’s partnership with UNESCO

PAULÍNA KORŠŇÁKOVÁ, IEA SENIOR RESEARCH AND LIAISON ADVISOR

IEA benefits from an international network of partner institutions with whom we share our dedication to research, education and the improvement of learning worldwide. As one of our oldest and closest collaborators, our relationship and work with UNESCO is of particular importance.

The connection between UNESCO and IEA dates back to the 1950s when a small group of researchers met on a fairly regular basis at conferences held at the UNESCO Institute for Lifelong Learning (UIL). This institute, located in Hamburg, Germany, was established to focus on comparative education and therefore provided fertile ground for developing IEA. Early IEA studies were conducted in close collaboration with the UIE. In 1969, the more extensive work involved with IEA’s Six Subjects Study led to IEA being formally established as an independent entity from its new headquarters in Sweden.¹

Our close ties with UNESCO have continued throughout IEA’s history. Since 1984, IEA has been a member of The Collective Consultation of Non-Governmental Organizations on Education for All (CCNGO/EFA), an international network of over 300 national, regional, and international Non-Governmental Organizations (NGOs). This network is UNESCO’s key mechanism for dialogue, reflection and partnership with NGOs working in the field of education.² More recently, the network has played a vital role in coordinating international efforts towards meeting the 2030 Sustainable Development Goals (SDGs) as adopted by UN Member States in 2015.³

The Goals are a set of ambitious targets to address poverty, hunger, disease and other development challenges by 2030. The Education 2030 Incheon Declaration for Sustainable Development includes SDG4 which aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Setting this goal brought a renewed and broader international focus on inclusion, equity, gender equality, and effective...
and relevant learning. Intergovernmental bodies discussed possible indicators for monitoring progress toward SDG4 targets, placing new attention on the importance of international education monitoring.

IEA actively supports UNESCO Institute for Statistics (UIS) efforts in the field of monitoring SDG4, particularly by contributing to task forces as part of the Global Alliance to Monitor Learning (GAML) collaboration. GAML brings together a broad range of stakeholders involved in national and cross-national learning assessment initiatives to address technical issues and provide practical guidance for countries on how to monitor progress towards SDG4. In September 2017, IEA Hamburg hosted a GAML meeting that aimed to harmonize global learning assessment data relating to SDG Indicator 4.1.1. IEA Hamburg is pleased to also be a host for the October 2018 GAML meeting.

Within this context, as a leader in international large-scale assessments of education, IEA is well-placed to provide data for monitoring progress towards achieving SDG4. Our archive of published reports and ongoing studies provide valuable trend data for monitoring many of the SDG4 indicators yet, until recently, these resources have not been well known amongst policymakers. Our challenge, therefore, has been in finding ways to promote IEA studies beyond academic and research circles.

Since 2015, IEA has made some remarkable steps in communicating study results beyond its membership, many of which have been thanks to our relationship with UNESCO offices and agencies. The most valuable result was the release of IEA’s PIRLS 2016 and ePIRLS 2016 results on 5 December 2017 at UNESCO Headquarters in Paris. In addition to launching the PIRLS 2016 reports, the event also introduced a UNESCO/IEA jointly produced booklet entitled Measuring SDG4: How PIRLS can help. The goal of this publication was to increase participants’ understanding of PIRLS and ePIRLS findings and their relevance for policymaking, the importance of learning assessments for measuring progress toward SDG4, and actions needed to translate 2030 commitments into national education development efforts to ensure that no one is left behind.

More recently, IEA worked with the UNESCO office in Santiago for the launch event of the ICCS 2016 Latin American report held in Lima, Peru on 11 April 2018. The event helped to publicize the report beyond the usual academic circles and generated a strong media interest.

The high regard and reputation for IEA within the research community are not sufficient, we need to promote the value of our data and build collaborations with those who would understand, support and advocate for our work. Our partnership with UNESCO offices and institutes is a natural fit and has led to many valuable opportunities to demonstrate the wider policy and monitoring-relevance of our research, particularly regarding the Sustainable Development Goals. We look forward to continuing this productive partnership.

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Emerging citizens: Completing the second cycle of ICCS and mapping future directions

WOLFRAM SCHULZ (ACER), TIM FRIEDMAN (ACER), JOHN AINLEY (ACER), BRUNO LOSITO (ROMA TRE) & RALPH CARSTENS (IEA HAMBURG)

The past year was very busy for the International Civic and Citizenship Education Study (ICCS).

November 2017 saw the release in Brussels of the main report: Becoming Citizens in a changing world: IEA International Civic and Citizenship Education Study 2016 International Report. The event was co-hosted by the European Commission and drew great interest from a wide range of stakeholders. The report contains information based on data collected from 94,000 students in about 3,800 schools from 24 countries. It reveals a range of important findings in relation to young people’s knowledge and understanding of key aspects of civic and citizenship as well as their attitude, and engagement with civic life in varying contexts for civic and citizenship education. Overall, substantial increases in civic knowledge over time in many countries who participated in ICCS 2009 and 2016 as well as somewhat higher levels of endorsement for equal rights in many countries represented a very positive development. At the same time, a majority of students rejected the use of violence and also held positive attitudes toward diversity.

The release of major study reports continued in April this year with the publication of Young People’s views of Government, Peaceful Coexistence, and Diversity in Five Latin American Countries: IEA International Civic and Citizenship Education Study 2016 Latin American Report in both English and Spanish. The report covered issues seen as important by the regional National Research Coordinators (NRCs) ranging from students’ perceptions of public institutions and government, their views on peaceful coexistence and their perceptions of social cohesion and diversity. As in the 2009 cycle, young people expressed high and worrying levels of support for justifications of dictatorship but at the same time a majority of students rejected the use of violence and also held positive attitudes toward diversity. The launch for this report took place in Lima in...
cooperation with the Peruvian Ministry of Education and generated significant media coverage across Latin America.

There are further plans to disseminate findings related to our civic and citizenship data. IEA is currently preparing the development of a publication aimed at capturing contexts, policy discussions and the impact of IEA studies on civic and citizenship education at the country level. The volume will consist of authored per-country chapters as well as cross-country perspectives with Barbara Malak-Minkiewicz and Judith Torney-Purta, both IEA honorary members, serving as editors. Contributions based on ICCS 2016 data are also planned for publication in the IEA Compass: Briefs in Education series.

In March 2018, an analysis workshop specifically focusing on using ICCS 2016 data was held in Hamburg. Researchers worked with national and international datasets to address specific issues related to their respective interests. The time of this meeting followed the release of the ICCS 2016 International Database and the accompanying User Guide earlier in March. Future IERI academies will continue to support and guide researchers in the use of ICCS and other large-scale databases.

Prior to the database analysis seminar, the first meeting of NRCs for the new ICCS 2022 was held, which provided an initial opportunity to discuss directions for the next cycle of this study with interested national representatives. Participants discussed possible revisions to the Assessment Framework concerned with newly emerging topics in civics and citizenship education (e.g. related to global and digital citizenship, sustainability, social media, migration and diversity, or populism), the ways in which ICCS could be implemented as a computer-based assessment, and interest in sampling an additional grade. Discussions were conducted under the premise that any changes would need to be applied in a way that maintains strong links with previous ICCS cycles. Discussions will be continued via online surveys of priorities, concept papers on new or expanded areas, and next meetings in early 2019.

The ICCS consortium consists of the Australian Council for Educational Research (ACER), LUMSA University in Rome, the Laboratorio di Pedagogia Sperimentale (LPS) at Roma Tre University and IEA. These organizations are developing concepts in emerging areas to improve and broaden the scope of ICCS.

Enrollment for ICCS 2022 is still open, with many countries from 2009 and 2016 participating again. For more information on how to join ICCS 2022, contact secretariat@iea.nl. For information on ICCS 2016, contact iccs@iea-hamburg.de.
PIRLS 2016 AND ePIRLS 2016 RESULTS RELEASED AT UNESCO HEADQUARTERS IN PARIS

IEA and the TIMSS & PIRLS International Study Center released the PIRLS 2016 International Results in Reading and ePIRLS 2016 International Results in Online Informational Reading at the UNESCO headquarters in Paris on December 5, 2017. IEA Chair, Anne-Berit Kavli and IEA Executive Director, Dirk Hastedt delivered opening remarks, along with Svein Osttveit, UNESCO Education Sector Director. Ina V.S. Mullis and Michael O. Martin, Executive Directors of the TIMSS & PIRLS International Study Center, presented the results.

A roundtable discussion followed, moderated by Soo-Hyang Choi, Director of UNESCO Division of Peace and Sustainable Development, on measuring UNESCO’s Sustainable Development Goal 4 for learning using PIRLS and ePIRLS 2016 data, as well as actions needed to realize the Education 2030 Agenda commitments across national education systems.

Approximately 319,000 fourth grade students were assessed in 2016, providing 15 years’ worth of trend data to countries that have participated since PIRLS began in 2001. The extensive reports were published online, accompanied by infographics and videos that helped illustrate results and data trends. Visitors to the ePIRLS report also have the opportunity to try out the electronic assessment for themselves — reading, clicking, and scrolling through two of the same tasks that were administered to participating students.

PIRLS 2021: TRANSITIONING TO DIGITAL ASSESSMENT

In February, a new cycle of PIRLS and ePIRLS was launched with the 1st PIRLS 2021 National Research Coordinators Meeting in Hamburg, Germany. Participating countries reviewed informational and literary passages and context questionnaires.

In May, the PIRLS Reading Development Group held its 1st Meeting in Rotterdam, The Netherlands. The group reviewed the updated PIRLS 2021 Framework and Item Writing Guidelines and drafted and reviewed literary and informational passages for PIRLS 2021.
Pictured in attendance were (back row, from left): Michael O. Martin (TIMSS & PIRLS International Study Center at Boston College), Julian Fraillon (Australia), Charlotte Aldrich (TIMSS & PIRLS International Study Center), Jenny Wiksten Folkeryd (Sweden), Andrea Netten (IEA), Galina Zuckerman (Russian Federation), Liz Twist (England), Latifa Alfalasi (United Arab Emirates), Ina V.S. Mullis (TIMSS & PIRLS International Study Center), (front row) Verónica Díez Girado (Spain), Elizabeth Pang (Singapore), Marc Colmant (France) and Karen Wilson (United States). Not pictured are Jan Mejding (Denmark) and Erin Wry (TIMSS & PIRLS International Study Center).

Countries Across the Globe Administered TIMSS 2019 Field Test in the Spring

The TIMSS 2019 field test was successfully administered in March and April with 31 countries and six benchmarking entities at Grade 4 and 24 countries and 5 benchmarking entities at Grade 8 in the digital version (eTIMSS); and 19 countries at Grade 4 and 17 countries at Grade 8 in the paper version. Schools and ministries across the globe took to social media to share their TIMSS field test experiences.

For the field test, students completed, either electronically or on paper, approximately 260 TIMSS mathematics and science items at the fourth grade and 300 at the eighth grade. Those taking the eTIMSS also completed five mathematics and three science Problem Solving and Inquiry (PSI) tasks at the fourth grade, and four mathematics and three science PSI tasks at the eighth grade. The interactive PSIs are colorful, animated, and dynamic, delivering an engaging assessment experience that can motivate students. Countries that are transitioning from paper format to digital are increasing operational efficiency while making the assessment more engaging and interactive for students.

Social Media Posts from the TIMSS Field Test (Clockwise from Top Left): The Russian Federation, Saudi Arabia, Canada, Turkey, Spain, Oman, France and the United Arab Emirates.
IEA Hamburg conducts a video study in Germany for the first time

MAREN HEMPEN AND MAREN MEYER-EVERDT (IEA HAMBURG)

With the organization and implementation of the TALIS video study Germany, the National Fields Operation Unit and the National Data Management Unit in IEA Hamburg is overseeing a video study for the first time, the innovative design of which involves some special features and challenges.

The study is part of the OECD Teaching and Learning International Survey (TALIS-Video); its scientific direction in Germany lies with the German Institute for International Education Research DIPF (Deutsches Institut für Internationale Pädagogische Forschung). The study aims to gain deeper insights into instructional processes for mathematics and to find out how these processes are connected to students’ learning outcomes. In total, 85 mathematics teachers of lower secondary classes in Germany will participate.

The study design prescribes six measuring points per mathematics class within several weeks. These include three video records of lessons, achievement tests and student surveys as well as teacher surveys. This complex and comprehensive study design requires high flexibility related to serving participating teachers, coordinating test administrators as well as printing and dispatching test materials.

The test window was from October 2017 to October 2018 due to the different survey periods of participating classes while school recruitment takes place gradually and continued into the start of the test period. Therefore, different steps in preparation and implementation needed to be organized in parallel. Generally, it is very challenging to find teachers who are willing to participate.

Another challenge of the video study is the requirement to train test administrators in how to use the video equipment in addition to their regular training. Test administrators must also be proactive in making their own practical arrangements with teachers and schools.

To face the diverse requirements of the TALIS video study in Germany, IEA Hamburg has developed a flexible and custom-fit study support procedure that ensures a high degree of standardization and, at the same time, provides an individual service for the participating teachers. This was partly based on extensive experiences and well-established procedures from other studies but also required the development and implementation of completely new procedures. With the TALIS Video project, we have demonstrated IEA Hamburg’s ability to provide a highly standardized yet still tailor-made study support.

In case of any questions please contact Maren Hempen and Maren Meyer-Everdt (talis_video@iea-hamburg.de).

IEA Research Awards 2018

Dr Martin Hooper from the Measurement, Evaluation, Statistics, and Assessment (MESA) program at Boston College’s Lynch School of Education was awarded the IEA's Bruce H. Choppin Memorial Award for outstanding dissertation. The dissertation is entitled, Applying the Pseudo-Panel Approach to International Large-Scale Assessments: A Methodology for Analyzing Subpopulation Trend Data, and his doctoral committee included a number of IEA collaborators: Drs Ina V.S. Mullis (chair), Michael O. Martin, Henry Braun, and Jan-Eric Gustafsson.

TIMSS and PIRLS are well known for measuring international trends in student achievement and background characteristics, and Dr Hooper’s dissertation proposes a new approach for analyzing subpopulation data longitudinally. Building on the difference-in-differences work of Professor Jan-Eric Gustafsson, the dissertation proposes a methodology to examine whether subpopulation trends in background data are associated with subpopulation achievement trends. To demonstrate the approach, Dr Hooper examined the relationship between early literacy activities and PIRLS reading achievement and found that increases in early literacy activities between PIRLS 2001 and PIRLS 2011 predict trends in PIRLS reading achievement.

Dr Hooper is the Assistant Research Director, TIMSS and PIRLS Questionnaire Development and Policy Studies, at the TIMSS & PIRLS International Study
Center at Boston College. He coordinates context questionnaire development and technical reporting across the TIMSS and PIRLS studies and recently co-authored the TIMSS 2015 and PIRLS 2016 International Results Reports and edited the TIMSS 2015 and PIRLS 2016 technical reports, *Methods and Procedures*. His research interests lie in questionnaire development, psychometrics, and causal inference for international large-scale assessments.

Dr Frank Reichert, Dr Jiaxin Chen and Dr Judith Torney-Purta received the Richard M. Wolf Memorial Award for their paper, *Profiles of adolescents’ perceptions of democratic classroom climate and students’ influence: The effect of school and community contexts* published in the *Journal of Youth Adolescence*. (https://doi.org/10.1007/s10964-018-0831-8)

Adolescence is important for the development of citizenship, including knowledge about politics, civic skills such as the capacity to think independently, and dispositions such as the support for democratic values. Schools can assist in this development by providing an environment where students freely discuss their opinions and actively contribute to decisions at school. Framed with the "developmental niches model" which suggests that adolescents’ citizenship develops in a particular niche shaped by multiple contexts, the paper analysed how such a favorable school climate may work together with broader aspects of schools.

The study used data from Nordic ninth graders who participated in ICCS in 2009. Latent class analysis identified five distinct patterns of students’ perceptions of school climate which were labeled “alienated,” “indifferent,” “activist,” “debater,” and “communitarian.” Membership in these groups was associated with broader aspects of the school. For example, compared to indifferent students, debaters and activists appeared more frequently at schools with relatively few social problems and where teachers acted as role models by engaging in school governance activities. The findings imply that adults at school could enhance multiple contexts around adolescents to nurture their development into democratic citizenship and that more attention needs to be paid to how contexts are associated with processes of civic development.

Dr Reichert received his PhD from the University of Kiel and held postdoctoral positions at the Leibniz Institute for Educational Trajectories, the University of Sydney and the University of Hong Kong. His research focuses on youth development, civic education, political participation, as well as social identity and immigration.

Dr Chen received her PhD from the University of Hong Kong and is currently a postdoctoral researcher at the National Institutes of Educational Policy Research at East China Normal University, Shanghai, China. She is interested in educational inequality and social injustice, with a strong focus on rural education, education for migration, and citizenship education.

Dr Torney-Purta is a developmental psychologist and Professor Emerita from the University of Maryland, College Park. She participated in the early political socialization research of the 1960s. Then her research interests moved toward the psychology of civic engagement, and she led the IEA CIVED cross-national study. She is currently an advisor to the CivicLEADS Project, which encourages secondary analysis of archived data.
The differences that make the difference: the 8th IEA International Research Conference 2019 in Copenhagen

CHRISTIAN CHRISTRUP KJELDSEN (AARHUS UNIVERSITY)

IEA and The Danish School of Education at Aarhus University in Copenhagen, Denmark, invites all researchers, policy makers and practitioners working with IEA data to participate in IEA’s 8th International Research Conference (IRC 2019) from the 26th to the 28th of June 2019 in Copenhagen.

The IRC 2019 in Copenhagen is an opportunity for the research community to exchange their latest findings and ideas through a critical, creative and open dialog between scholars and researchers to further advance educational research.

Something many IEA researchers share is a belief in the intrinsic role that education plays in the development of nations and the shaping of individual citizen’s trajectories and life-courses. The aim is to research education to provide knowledge that may improve learning in a broad and many-faceted way.

To stimulate this endeavour, the conference theme for 2019 is “The differences that make the difference”. While the conference invites contributions about any research using IEA data, the main focus of the conference will fall under this overall umbrella theme.

This focus may lead to questions like: What are the differences in school context that make real differences for pupils, teachers or school systems? Or, how may differences in educational policies, reforms, teacher training or curriculum make a difference in the development of democratic competences? Such questions open up discussions about which elements of education foster important differences. They also raise queries about the chosen dimensions of the comparative ranking of countries in the search for differences that are of substantial importance for fostering educational progress and learning.

Discussions may circle back to debates within educational research from the 1950s and 1960s, regarding the distinction between statistical significant differences and substantial significant differences. Even if a statistically significant result is found, should this then be a reason to be convinced that the difference is also of substantial importance or size? I would argue, that in order to improve evidence-based policies, two questions need to be answered: Evidence of what? And why it is of substantial importance to improve this or that?

Therefore, it’s time for the research community, practitioners and policymakers to meet and address the questions that the IRC 2019 theme offers. If not, educational research and policy making will risk falling into the trap that the German philosopher, Immanuel Kant identified a century ago. He warned against ending up in a means and ends confusion; switching the means for the ends. The end is not the assessed statistical significant ranking of countries. Following the changes, processes and development of countries in comparison over time is rather the means for another end, which is the improvement of learning and fostering better societies.

The umbrella theme of IRC 2019, furthermore makes space for the presentation of good examples or practices of applying IEA data in policymaking processes. An example of such a case can be found in the recent IEA Compass: Briefs in Education article entitled “The data makes the difference” which describes how Chinese Taipei used TIMSS data to make changes to their education policy. One of the outcomes of this case was that “the TIMSS results reminded Taiwanese policymakers and the research community to reflect on whether the appropriate efforts to improve mathematics education were being implemented.”

To sum up: by hosting the IRC 2019, we hope to provide the best conditions for a flourishing, interdisciplinary, critical, creative and open exchange of IEA findings and views on educational research, and thereby nurture a quantum leap forward in educational research for the 21st century.

We hope to see you all in Copenhagen in June 2019. If we are successful, it will perhaps be the conference that makes the difference.

PRACTICAL INFORMATION

As in previous years, the IEA international conference will be held over three-days, beginning on Wednesday, 26 June 2019 and ending on Friday, 28 June 2019. Registration closes on 24 May 2019. For more information, please visit https://www.iea.nl/8th-international-research-conference
8th IEA International Research Conference

THE DIFFERENCES THAT MAKE THE DIFFERENCE

26-28 JUNE 2019
DANISH SCHOOL OF EDUCATION, AARHUS UNIVERSITY, COPENHAGEN, DENMARK

KEYNOTE SPEAKERS
Dr Aaron Benavot, Professor of Global Education Policy, Department of Educational Administration & Policy Studies, University at Albany, SUNY, New York USA
Dr Christian Christrup Kjeldsen, Department for Educational Sociology at the Danish School of Education, Aarhus University, Denmark
Ms. Anna Rosling Rönnlund, Co-founder and Vice-President of Gapminder (www.gapminder.org), Stockholm, Sweden

PRE-CONFERENCE WORKSHOPS
Prior to the IRC, the IEA offers five optional, two-day workshops on specialized topics related to large-scale assessment. The workshops run in parallel from 24-25 June 2019.

Workshop 1: Using large-scale assessment data to inform policy and practice
Dr David Rutkowski & Dr Sabine Meinck

Workshop 2: Multilevel modeling with IEA data
Dr Agnes Stancel-Piątak & Dr Leslie Rutkowski

Workshop 3: Assessment design, item response theory and proficiency estimation
Dr Eugenio Gonzalez

Workshop 4: Response styles in large-scale assessment
Dr Fons van de Vijver

Workshop 5: Analyzing data from international large-scale assessments using R
Dr Emmanuel Sikali, Dr Paul Bailey & Dr Ting Zhang

FOR MORE INFORMATION: VISIT WWW.IEA.NL/OUR-CONFERENCE OR CONTACT US AT IRC@IEA.NL
Since our last newsletter, there were two major IEA study releases: ICCS 2016 and PIRLS 2016.

ICCS 2016
The international and European reports from ICCS 2016 were first released at a press event conducted in cooperation with the European Commission in Brussels in November 2017, and subsequently released as open access publications in cooperation with Springer in 2018. Similarly, the Latin American report was launched in Peru in April 2018, and released as an official open access publication in summer 2018. Current publications from the study include:


The rich data collected by ICCS 2016 are expected to generate many additional in-depth research publications in the future.

PIRLS 2016
Meanwhile, the PIRLS 2016 Encyclopedia appeared first in October 2017, and the international achievement results followed swiftly in December 2017, launched at a major press event hosted by our partner UNESCO in Paris. The electronic publication model, which proved so popular for the launch of TIMSS 2015, was again used for the major online publications: PIRLS 2016 International Results in Reading and the ePIRLS 2016 International Results in Online Informational Reading. This customizable format continues to provide flexibility and hosts more comprehensive and detailed data than could be accommodated in the printed volumes. The supporting technical report and user guides were released concurrent with the online data release. Interested readers can browse the complete set of publications at http://timssandpirls.bc.edu/pirls2016/.

These include:
In parallel with the international releases of these two studies, participating countries also released their national study results. These combined efforts garnered significant publicity and discussion in the media and more widely, creating an unprecedented level of public attention and interest in IEA’s research.

IEA COMPASS: BRIEFS IN EDUCATION

IEA has relaunched its policy briefs series under a new title: IEA Compass Briefs, and we hope that our audiences will appreciate the redesign. The briefs ably demonstrate how secondary analysis of data from IEA studies can address issues of particular interest to policymakers. These are all currently freely available on our website at http://www.iea.nl/our-publications.

Releases since our last newsletter include:
- How Chinese Taipei used TIMSS data to reform mathematics education. By Fou-Lai Lin (National Taiwan Normal University, Chinese Taipei).
- How systematic is international bullying and what relationship does it have with mathematics in the fourth grade? By David Rutkowski & Leslie Rutkowski (Indiana University, USA).
- PIRLS for Teachers: making PIRLS results more useful for practitioners. By Therese N. Hopfenbeck & Jenny Lenkeit (Oxford University Centre for Educational Assessment, UK).
- The role of teacher quality in fourth-grade mathematics instruction: evidence from TIMSS 2015. By Nathan Burroughs & Amita Chudgar (Michigan State University, USA).

Impressive download figures indicate that the series is already established as respected scholarly analyses to support informed policy advancement. Details of all volumes in the series can be found via our website. Four further thematic volumes are at various stages of commissioning and development, and the IEA publishes calls for proposals for the series twice a year.

LARGE-SCALE ASSESSMENTS IN EDUCATION

The IEA-ETS Research Institute (IERI) journal Large-scale Assessments in Education is thriving and completed a special article collection on methodological aspects and advancements of the Programme for the International Assessment of Adult Competencies (PIAAC) earlier this year. Another new aspect for 2018 has been the recent launch of a “software corner”: articles in this section will showcase the latest tools for educational assessment and research. The Editors are especially keen to encourage submissions from a broad diversity of international large-scale assessment projects and hope that in the future the journal will become a solid platform to encourage capacity building and quality research in developing education systems. Would-be authors should note that all articles are published open access, and that the publication costs for Large-scale Assessments in Education are covered by IERI, so authors do not need to pay an article-processing charge. Full submission guidelines are available from the publisher’s website, and the Editors are always delighted to answer any queries.

As always, IEA publications are freely available for download and non-commercial use, provided full acknowledgement is given to the source. IEA is committed to ensuring that the results of its comparative research projects reach a wide audience of researchers, policymakers, technical experts, educators, and all others working to enhance teaching and learning around the world. Publications are widely promoted through email alerts, social media postings, and press releases to the general and scientific press. Only by sharing insights and ideas, can the IEA community truly inspire and improve educational research and opportunities to learn for all.

If readers are interested in collaborating on an upcoming Compass Brief, have a submission for the IERI journal or have a thought-provoking concept for our IEA Research for Education series, please contact the respective Editors or the IEA Publications Officer, Dr Gillian Wilson.
News updates

NEW COLLABORATIONS

In April, IEA Director, Dr Dirk Hastedt signed a memorandum of understanding with the Directorate of Elementary Education of Haryana, India indicating a commitment for IEA and the Directorate to work together on future research projects. A series of productive meetings were held with Mrs Jyoti Chaudhary, Director of the State Council of Education, Research & Training in Haryana and senior members of the education department.

IEA JOINS WORLD EDUCATIONAL RESEARCH ASSOCIATION

IEA is proud to join the WERA network, opening new opportunities for us to build new partnerships with other organizations committed to improving educational research. IEA is pleased to have sponsored the WERA 2018 World Congress held in Cape Town, South Africa from 3-5 August.

IEA STAFF SUMMER EVENT

The IEA Amsterdam office hosted colleagues from IEA Hamburg for a joint summer event on Friday 29th June. The day was a great opportunity for staff from different teams to get to know each other while enjoying the beautiful Dutch sunshine and taking a trip through Amsterdam’s canals.
ILSA GATEWAY

One year since its launch, the ILSA Gateway (www.ilsa-gateway.org) is becoming established as a valuable information source for researchers working on international large-scale assessments. Gateway manager, Nathalie Mertes hosted informational stands at the CIES and AERA conferences which helped to attract increased attention.

NEW COMMUNICATIONS TEAM

IEA has a strong reputation amongst researchers, but our work is also relevant for policymakers, media and the public and is receiving increasing attention from these groups.

In recognition of this demand, IEA has expanded its communication activities by welcoming three new colleagues: Sive Finlay (Communications Officer, joined in February 2018), Jennifer Ross (Media and Outreach Officer, joined in June 2018) and Mirjam Govaerts (PR and Events Officer, joined in November 2017). They work closely with the IEA’s Senior Publications Officer, Gillian Wilson, who is continuing to provide editorial support for IEA’s technical and academic publications.

Based at the IEA Amsterdam offices, Sive, Jennifer and Mirjam look after IEA’s internal and external communications and dissemination activities, supporting the goal of making IEA’s research and results accessible and relevant for all stakeholders. Their experience includes roles in education, research communications, public engagement, international policy, media relations and event management so we are confident that IEA will benefit from their innovative ideas and expertise.

Please check the IEA website or follow us on social media (Twitter, LinkedIn, Facebook and YouTube) to keep up to date with our latest activities.
In response to the increasingly global nature of educational research communities around the globe, IEA has endeavored to broaden its scope of offerings while tailoring activities to the needs of a more diverse set of potential partners. These activities include preparations for the new Literacy and Numeracy Assessment (LaNA; www.iea.nl/lana).

Designed especially for education systems where IEA's TIMSS & PIRLS are unfeasible for administration due to scheduling constraints, the difficulty of the TIMSS & PIRLS assessments or other reasons, LaNA has continued to grow in visibility over the past year.

Following successful pilot activities in the Punjab, Pakistan in 2017 and in Haiti in 2016, LaNA pilots are once more planned in Sub-Saharan Africa.

Capacity building is an important goal of the upcoming LaNAs and it aligns with IEA's goal of improving and enhancing education on a global level. The inclusion of participating country teams in each step of the assessment – from reviewing the international instruments to survey operations – will be a main focus.

To build up education systems in a holistic manner, it is important for IEA to support participating countries with a variety of tasks such as how to set up national sampling frames, data analysis, and report writing. Countries will also have the opportunity to add or suggest questions for the contextual questionnaires, allowing them to tailor the gathered data to include key aspects of their national contexts. By explicitly focusing on capacity building in the planning and design of LaNA, IEA strives to ensure that national researchers and policymakers are equipped with the tools they need to analyze and interpret the results of the study. This approach helps to build a sustainable knowledge base which can then be applied to other assessment or research activities in a national or regional context.

Additionally, linking LaNA results to IEA's main assessments, TIMSS & PIRLS, offers the potential to derive the percentage of students reaching pre-defined benchmarks relating to the United Nation's Sustainable Development Goals (SDGs). This is especially pertinent when considering the SDG 4, which is to "ensure inclusive and quality education for all and promote lifelong learning". Target 4.1 specifies that by 2030, all youth should complete "free, equitable and quality primary and secondary education" and the proposed indicators should be based on "credibly established national benchmarks" such as the percentage of girls and boys who achieve literacy and numeracy (among other factors) by the end of primary school. 1 By providing such benchmarks for this target age group, the IEA could assume an important role in the monitoring of global advancement towards the SDG4.

Both capacity building and support in measuring the SDGs, therefore, are key aspects of LaNA's strategic significance for the international educational research community. The IEA looks forward to a new chapter in its long history of working with - and responding to the needs of - diverse education systems around the globe.