

RISE

RESEARCH ON IMPROVING
SYSTEMS OF EDUCATION

RISE Annual Conference 2017

Center for Global Development,
Washington, DC

Thursday 15 June – Friday 16 June 2017

Conference Report



Oxford Policy Management



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BACKGROUND

RISE is a large scale, multi-country programme aimed at conducting high-quality research to build evidence to enhance children's learning levels throughout the world. Nations around the globe have been remarkably successful in making progress toward universal primary schooling, but in many places, learning levels are poor, or have declined. As a result, even when children finish many years of schooling, they still lack basic maths and literacy skills. The RISE agenda emphasises the need to make changes that can provide children with the education they need to be successful adults in their local, national, and global communities. RISE recognises the urgent need for education solutions beyond business-as-usual, incremental increases in materials, infrastructure, or other inputs. The vision of the RISE programme is to understand how school systems in the developing world can overcome the learning crisis by seeking holistic, practical answers about how education systems can innovate, improve learning outcomes, and better serve all children and communities on a global scale.

ABOUT THE EVENT

The RISE Annual Conference took place on 15-16 June 2017 at the Center for Global Development in Washington, DC. The event brought together high-profile academics and policy makers for two days of lively debate on education systems reforms. The conference brought together over 200 participants and 30 speakers during the course of nine engaging sessions. The conference was preceded on 14 June by a panel discussion, "Public-Private Partnerships for Education in the Developing World: Learning Gains, Regulatory Failures, and Other Lessons from Policy Experiments." The first day of the conference saw presentations on the Politics of Reform and RISE Country Team research, a keynote panel on "Why is Learning in Crisis? Diagnosing System Incoherence," and a lunchtime panel with representatives from Australia's Department of Foreign Affairs and Trade (DFAT), the UK's Department for International Development (DFID), and the US Agency for International Development (USAID) discussing "What a Systems Approach to Education Means in Practice." The second day of the conference had sessions on Alternative Modalities of Provision, Methods and Measurement, and Pedagogy. This day also featured a session introducing two new RISE Country Teams - Ethiopia and Indonesia.

This report provides a summary of the conference proceedings. Publicly available papers can be accessed by clicking on the presentation title within this document, as well as via the [RISE website](#). A number of the presentations, and a live-stream of the event, are also available on the [website](#). Conference participants were encouraged to use Twitter to post about the conference using the hashtag [#RISEConference2017](#). These tweets were displayed in the auditorium throughout the conference. In all, 764 comments were posted by attendees with a unique reach of 1.1 million people and an absolute reach of 4.4 million people according to the analytics from Twitter.



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THURSDAY 15 JUNE

Session 1: Politics of Reform

Chair: Clare Leaver, Blavatnik School of Government, University of Oxford

Barbara Bruns (Center for Global Development) and **Pablo Cevallos Estarellas** (UNESCO-IIEP): *The Politics of Transforming Education in Ecuador: Confrontation and Continuity, 2006-2016* (Lead author Ben Ross Schneider)

Alec Gershberg (University of Pennsylvania - as of September 2017): *Trying to Learn from Complex Education System Reform Processes: Guideposts for Navigating Political Waters from Case Studies*

Joseph Wales (Overseas Development Institute): *How are Education Systems, Reforms and Learning Outcomes Shaped by Political Context?*

This session presented insights from recent research on the politics of reform including the characteristics of political strategies and why reforms might happen.

Research highlights:

Barbara Bruns started the presentation by showing that test scores have improved in Andean countries in the last fifteen years and by pointing out that Chile, Ecuador, and Peru have been making faster than average learning gains. She suggested that Andean countries serve as good case studies because they have implemented major teacher policy reforms, including teacher hiring, evaluation and payment of salaries, and automatic promotions. For policy makers, however, it is frustrating that there is very little evidence of how these system-wide reforms work, and how the different elements mesh together. Introducing teacher policy reform can be technically challenging, and the impact of teachers in the classroom can be hard to monitor. A further problem in the region is that education reforms are concentrated towards teachers, directly affecting a group that is well organised and with strong political power (teacher unions).

Pablo Cevallos Estarellas focused the second part of the presentation on Ecuador, and began by highlighting several factors behind the reforms: a record low score in the student learning assessment (TERCE) in 2006

which created a sense of 'crisis' in the state of education; political leadership from Rafael Correa who presented an ambitious new education plan in 2007; and a dramatic rise in the resources invested in education. Pablo then went on to discuss the role of politics. The key reform opponent was the UNE (Maoist Teachers Union) which had developed clientelistic practices and initially supported President Correa, but then went against his "neo-liberal practices." However, unlike other countries in the region, no other major stakeholders (other than the Union) were influential in Ecuador, and President Correa managed to get public support by appealing to the fact that education was a fundamental human right, which takes precedence over other (labour) rights. Furthermore, there was a strong technical team in the Ministry of Education and stable leadership (only two ministers from 2006-2013). During this period, major reforms on teacher appointment, training, and evaluation were implemented. Pablo finished by stating that while Ecuador's recent education reform is a note-worthy case study, it remains one of the least researched in Latin America.

Alec Gershberg presented a study which reviewed complex education system reform processes with the original goal of looking for policy ideas for a new Nigerian government. The work looked at five case studies from South Africa, Brazil, India, Indonesia, and Nigeria; all large, low-income federal countries which were major emerging markets looking to generate skills for growth. For each reform, the review process looked at the past 25 years, taking into account the history of the reforms. Some of the key questions highlighted were: How do we think about strengthening the importance of systems? Are randomised control trials (RCT) too focused and difficult to scale up? Can an accountability framework help us with this? Alec then identified that the World Development Report (2006) basic accountability framework has been accepted by many, including RISE, and could be expanded into a complex document, yet it would still not incorporate the complexity of the world.



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Joseph Wales presented a review of eight education-focused case studies from Chile, Ethiopia, Cambodia, Ghana, Indonesia, Benin, Kenya, and Mongolia. The study investigated how education systems, reforms, and learning outcomes are shaped by political context. The conceptual framework used was one of “political settlements,” defined as the expression of a common understanding usually forged between elites. Joseph categorised political settlement in three types: (1) developmental settlements (e.g., Chile and Rwanda) where a few elites outside of the political establishment were organised around long-term growth rather than immediate gains; (2) predatory settlements (e.g., South Sudan and the Democratic Republic of the Congo) where elites outside the settlement were unstable and those inside wanted short-term gains; and (3) hybrid settlements (e.g., Kenya and Tanzania) where some elites were motivated by long-term gains and others by immediate spoils. The study found progress only in developmental or hybrid states, not in any of the predatory states. There was development in access to education in all the states studied but improvement in education quality was only found in Chile and Indonesia, contrasting states in terms of political settlement. Joseph concluded by applying the findings to the RISE conceptual framework.



Country Research Team Session I: Research Presentations

Chair: Justin Sandefur, Center for Global Development

Tassew Woldehanna (Ethiopia CRT /Addis Ababa University) : [*Is Preschool Education Instrumental for the Completion of Secondary Education in Ethiopia? Lessons Drawn from the Longitudinal Data of Young Lives*](#) (co-author Mesele W. Araya)

Alejandro Ganimian (India CRT/J-Pal): *Disrupting Education: Experimental Evidence on Technology-Aided Instruction in India*

Menno Pradhan (Indonesia CRT/VU University/ University of Amsterdam): [*Double for Nothing? Experimental Evidence on the Impact of an Unconditional Teacher Salary Increase on Student Performance in Indonesia*](#) (co-authors Joppe de Ree, Karthik Muralidharan, and Halsey Rogers)

James Habyarimana (Tanzania CRT/Georgetown University): *Electoral Incentives and Education Systems: Evidence from Tanzania Democratic Transition*

Paul Glewwe (Vietnam CRT/University of Minnesota): [*What Explains Vietnam's Exceptional Performance in Education Relative to Other Countries? Analysis of the 2012 PISA Data*](#) (co-authors Jongwook Lee and Khoa Vu)

This session featured research from the RISE Country Research Teams (CRT) on a variety of topics including pre-school, technology in school, teacher reforms, and political incentives.

Research highlights:

Tassew Woldehanna Tassew Woldehanna presented a study examining the correlation between completion of secondary education and preschool in Ethiopia in an attempt to determine if early childhood investment (pre-school) in low income countries has long-term effects. Giving the context of the study, he pointed out that in Ethiopia there is nearly 100 percent enrolment in primary education, but school completion is very low. There is a belief that a bad or limited foundation (lack of pre-school) contributes to unsuccessful completion. The study found

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that children who attended preschool between the age of three and six were likely to have a twenty-five percent higher school completion rate compared to those who did not attend preschool. The effect was higher for those who were in preschool for three years, showing there is a stronger impact if pre-school was attended for a longer time period.

Alejandro Ganimian presented results from an experimental evaluation of an education reform in India, a blended learning programme called Mindspark. The idea behind this reform is that technology has the potential to change the return on investment, with high-quality content being available to students, higher engagement by use of game-based technology, and a capacity to customise delivery, with feedback based on the analysis of the patterns of a students' errors. The evaluation found that: (1) when the students were assessed based on their enrolled grade, students performed substantially below grade expectations, their achievement increased more slowly than would be expected, and the performance varied widely within each grade; (2) over the period of the intervention, bottom performing students made zero progress in the absence of the programme, while the offer of the programme increased achievement by 0.36 standard deviation in maths and 0.22 standard deviation in Hindi; (3) the programme appeared to benefit students at all parts of the initial achievement distribution significantly and relatively equally, with no heterogeneous effects by gender and socio-economic status; and (4) the results showed the more a student attended the programme, the more the student benefitted.

Menno Pradhan presented a study of a reform which doubled teacher salaries in Indonesia. He noted the importance of teacher pay as a policy variable as it can help in the recruitment, motivation, and retention of quality teachers. However, teacher pay is expensive with a large

proportion of the budget spent on teacher salaries. The reform (a teacher certification programme) doubled the teacher pay and introduced minimum entry requirements. Strikingly, this reform moved teachers from the 50th to 90th percentile of the college graduate salary distribution. The study looked at learning impacts and intensive margin effects (the effects on existing teachers rather than the quality of teachers who were drawn into the profession). The study found that teachers were happy with the salary increases and some let go of secondary jobs. However, there was no shift in effort in terms of pursuing further education or on teacher test scores, and no impact on teacher absenteeism or teaching hours. For students, there was zero impact on test scores over a period of three years. The standard errors were very small, which ruled out any large positive or negative effects. Overall, Menno stated that no effects on test scores over a period of three years suggested that intense marginal effects on learning did not materialise. While the policy worked in terms of a welfare change for teachers, the behavioural mechanisms did not, resulting in a political call for rethinking teacher pay in Indonesia due to the expense of the programme.

James Habyarimana began by explaining that two of the streams of research undertaken by the Tanzania Country Research Team (CRT) are: to understand how the dramatic education reform Big Results Now (BRN) came about (how the consensus was built and maintained for reform); and to examine what the electoral incentives are in relation to various aspects of education reforms. The presentation focused on secondary education, where the tension between access and quality is stark in Tanzania. BRN was built on the basis of a wide consultation that brought together different stakeholders and was modelled on Malaysia's Big Fast Results programme. Teaching conditions were kept as the base of BRN reforms, with transparency, incentives, and support the driving forces leading to a step change in the quality of basic education.

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The CRT in Tanzania will study the impact of mobilisation on the political support for the incumbent government and the support of various aspects of the education environment (teacher education policies, etc.). It is believed that this is an access-driven policy that may provide long term support for policies that favour access over learning.

Paul Glewwe began by highlighting that Vietnam does well on many counts in terms of education, with high PISA scores ahead of both the UK and US. As Vietnam is the poorest country (GDP per capita) participating in PISA, the RISE research team in Vietnam is trying to evaluate how Vietnam “got it right” and if it really is a success story. In this particular study, the team focused on whether the PISA results are credible/representative and what can explain the success of the student assessment scores. During the study, the team realised that Vietnam had the third lowest enrolment rate of all PISA countries. Moreover, Vietnam students who took the PISA test were in the top half of the distribution. To make the comparison fairer, it was assumed that children around the world who do not take the PISA test would generally be in the bottom half of the distribution (if every child took the test). After applying this “fair comparison” matrix, Vietnam dropped in the rankings from 16th in maths and 18th in reading to 40th and 41st respectively. However, despite the lower ranking, it is still an outlier compared to other PISA countries. The study also looked at other available data and concluded that other factors explain a larger share of the variation in performance. Paul concluded by saying that, “Something in Vietnam makes it more efficient in translating days in school into learning, but we do not know what’s going on.”



Lunchtime Panel: Bilateral Perspectives: What Does a Systems Approach to Education Mean in Practice?

Chair: Mark Henstridge, Oxford Policy Management

Laura Savage (UK's Department for International Development - DFID)

Tjip Walker (US Agency for International Development - USAID)

David Coleman (Australia's Department of Foreign Affairs and Trade - DFAT)

Discussion highlights:

Laura Savage started the discussion by talking about the international aid paradigm. The broad premise of aid is to support education in such a way that change is fast. DFID understands that business as usual won't work. “We recognise the need for experimentation, so that there can be faster movement.” DFID has a strong enabling environment that helps and encourages research on education reform at a system level - reforms by reflection. Laura continued that DFID understands this is a complicated problem and has made a series of investments in education systems research, in addition to its investment in RISE.

Tjip Walker explained that USAID initially decided to invest in education system reforms in order to “promote sustainability through local ownership,” a key principle of the USAID Program Cycle. USAID felt the need to engage directly with the governance of education. It was acknowledged that when discussing “systems thinking,” we need to identify and understand the variety of factors that are involved: What do we understand as critical ideas? Who are the actors and what are their interactions? It is also essential to clarify that the term “system” is not a synonym for “sector,” - it is more of a conceptual understanding of how a social phenomenon occurs. Tjip noted, “System is a concept that is scalable. Size depends on what problem you are trying to understand.” USAID sees itself in the business of helping bring about social change. Therefore, it is important to ask questions such as: Why are kids not reading? Why are they not in school? These questions help

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USAID understand the status quo so the organisation can properly activate the opportunity for change (harnessing resources and opportunity). USAID sees technical details and systems thinking as complementing one another. The organisation uses a “5Rs Framework” that highlights five key dimensions of systems: Results, Roles, Relationships, Rules, and Resources. Collectively the 5Rs can serve as a lens for assessing local systems and a guide for identifying and monitoring interventions designed to strengthen them. Summing up his argument, Tjip noted that a system is not owned by disciplines. Education systems are complex and multi-dimensional and thus inherently lend themselves to multi-disciplinary research.

David Coleman began by explaining that Australia’s aid programme believes in promoting prosperity, reducing poverty, and enhancing stability. The organisation clearly identifies education as a critical sector for investment. Education that increases children’s ability to participate productively and meaningfully in their community is one of the best investments a society can make. DFAT primarily works in the space where it resides (Indo-Pacific region and countries which are in its immediate neighbourhood) and DFAT sees it as a place where it can make the most difference. David stated, “Their prosperity is our prosperity.” Moreover, he noted that small island developing states had low populations and easy-to-work-with bureaucracy. These countries often do not have many partners, and DFAT is able to work with them in a “systems way.” David advocated for investors, no matter how big or small their investment is, to try to keep the bigger picture (systems approach) in mind. Education systems are complex and interdependent and while DFAT may focus support on specific reform priorities, it always does so with an understanding of the impact on the whole. He also stressed the importance of engaging in policy dialogue. Sustainable change in education systems is a long-term endeavour requiring local commitment to reform and effective policy settings. DFAT investment prioritises laying the foundations for sustained improvement, “through politically informed dialogue, advisory and technical support, support for local coalition building and networks, and demonstration activities.” Concluding, David emphasised the importance of using evidence in decision making, “Whether supporting the development of an Education Management Information System, strengthening the knowledge-to-policy cycle, or supporting local, regional, or global efforts to improve learning assessment systems: it is important to use evidence to inform good policy and practice.”

Country Research Team Session 2: System Diagnostics

Chair: Lant Pritchett (Center for Global Development/Harvard University)

Alejandro Ganimian (India CRT/J-Pal)

Jishnu Das (Pakistan CRT/World Bank)

Andrew Zeitlin (Tanzania CRT/Georgetown University)

Jonathan London (Vietnam CRT/University of Minnesota)

Lant Pritchett introduced the session by stating that actions are always good or bad based on context. For instance, take the use of a defibrillator; there are certain things which are only good to do or use in a crisis. Using this metaphor, he argued that all evidence needs to be embedded in a careful diagnostic framework and for this reason, all the RISE Country Research Teams (CRT) have been asked to do a system diagnostic of their country; that is, what is it at a system level that is important for generating the observed symptoms?

Research highlights:

Alejandro Ganimian explained that the India CRT is focusing on governance, pedagogy, and large-scale state reform, and identified some of the challenges associated with undertaking the system diagnostic in India. The India CRT is drawing on the policy goals and levers of the SABER rubrics. The main challenge of implementing these rubrics in India is that many laws and regulations are promulgated by the central government and then ratified by the states, so each goal needs to be investigated at both levels. Using the example of teacher expectations, he also flagged that the decentralised structure of governance in India serves as a big challenge for adopting the **RISE 4x4 framework**. Alejandro concluded by noting that the significant role of non-state actors, such as private and unrecognised schools, in the education sector in India also poses a challenge for the RISE framework.

Jishnu Das started by talking about the history of the Learning and Educational Achievements Project (LEAPS) which took a systems approach. Here systems were

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defined as households and schools in a closed system, each maximising something subject to constraints with a research agenda around what can be achieved if the constraints were alleviated. Jishnu went on to discuss the literature on the “Anatomy of Reform,” which starts with a declaration of crisis, followed by a call to action which comes up with key strategies, resulting in one of two options: success - political group co-opted or failure - political groups block the reform. He pointed out that in this “Anatomy of Reform” framework, it is difficult to trace how a reform leads to improvement in the main outcomes (such as learning). In Pakistan, there have been multiple declarations of crisis, followed by calls to action focused on budget and accountability, but the results have been a small outcome response. Jishnu indicated that there are several possibilities as to why reforms are not successful: (1) incoherence of the reform “package” (reforms allocate control rights and financial rights in multiple ways); (2) unintended consequences (e.g., multiple assessments reduce the school year significantly); and (3) swimming against the tide: reforms may clash with some societal contracts on various fronts.

Andrew Zeitlin began by noting that Big Results Now (BRN), the education reform package previously introduced in Tanzania, has been changed by the current government. Although the CRT was originally due to analyse the BRN reforms specifically, they will continue to conduct system diagnostics along with political economy work around the current education reforms. Further, the team will look at the educational and learning impacts of the reform package in schools and will evaluate the pressure points, if any. The Tanzania CRT used the [RISE 4x4 framework](#) to establish the consequences of, and political conditions required for, reforms that are organised around the principle of making salient learning outcomes, both upward to political actors and downward to school stakeholders. The reforms have tried to move in a positive direction by: (1) ensuring school-level information is available to voters; (2) shifting motivation to delivery of learning outcomes; and (3) signalling an accountability role of parents. However, it was pointed out that there are elements of incoherence in the matrix, such as giving parents a voice without resources and a limited vote with their feet, particularly at lower levels (i.e., schools may act as gatekeepers to information about their performance, etc). The Team’s diagnostic approach involves a SABER-like instrument, collection of survey evidence (what people know and what are the necessary conditions for the theory of change), and investigation of data - looking for evidence

of outcomes that are consistent with the reform theory of change. Reflecting on the RISE framework, Andrew concluded that the focus is appropriately on systems, conceived as “determinants of the proximate determinants of learning,” but with less explicit apparatus to consider political economy of reform birth, sustainment, and death.

Jonathan London gave an overview of education policy in Vietnam, which historically has had an unusual political commitment to education. In general, there is high spending on education and a commitment to equity, but there are variations within country. It was pointed out that Vietnam has a highly fragmented and decentralised system, with provinces having a great deal of discretion on budget within a medium-term expenditure framework, but also an unwieldy distribution of responsibilities within the education system. The Ministry of Home Affairs is responsible for the education sector work force and the Ministry of Finance is responsible for managing the budget. These ministries often do not interact with each other at the province level, yet the country still seems to get the work done. Jonathan therefore argued that to understand how the Vietnam education system “works,” the interesting texture and local context needs to be reviewed. Using the [RISE 4x4 framework](#), he then described the design elements of the research programme, including delegation (principal specifies what she/he/they want done), finance (up front/ promised payments to agent upon delivery), information (used by principal to specify basis to assess outcomes), and motivation (what will happen if results are good/bad).



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Keynote Panel: Why is Learning in Crisis? Diagnosing System Incoherence

Chair: Lant Pritchett (Center for Global Development/Harvard University)

Claudia Costin (Center for Innovation and Excellence in Education Policies/Getulio Vargas Foundation)

Alec Gershberg (University of Pennsylvania - as of September 2017)

Jaime Saavedra (Education Global Practice at the World Bank Group)

Liesbet Steer (Education Commission)

In this keynote panel Claudia Costin, Alec Gershberg, Jaime Saavedra, and Liesbet Steer reflected on the learning crisis, drawing on their wealth of experience engaging with education reforms and mediating the space between research and practice.

Discussion highlights:

When confronted with a concrete situation, how should one decide on what to do?

Claudia Costin spoke about why education system reforms were complex. First, in comparison to providing access, learning is a more sophisticated idea, making it hard to establish a clear strategy. Investment in learning does not immediately translate into improved learning outcomes and results are not visible for some time. Building schools is tangible and therefore easier to get buy-in from politicians. Second, different education systems require different customised interventions: “You cannot emulate Finland or Korea, if you are Brazil or Tanzania.” Third, there is a significant impact from politics. It takes strong, stable, and committed leadership at different levels to transform education. Fourth, policy reforms related to teachers are particularly complex. For instance, citing the Indonesian example, the increase in salary might not significantly change the characteristics and behaviour of the current cohort of teachers, but it might affect teachers of the future and change the outlook of children in high schools about teaching as a job prospect. Great teachers are required to address the learning crisis and build a strong system of public schools.

Why do we have a learning crisis and do we know why we have a learning crisis in a way that creates guidance in how to move forward?

Alec Gershberg began by quoting the book “Anti-Crisis,” where the author observed that over the course of the 20th century, the word “crisis” became a term which could be used for a permanent state of affairs. The speaker mentioned the “I have a Dream” speech by Martin Luther King, Jr. was originally titled, “Normalcy, Never Again” and went on to quote other passages from the book such as, “Crisis is a historical super-context that raises questions rather than facilitating answers, if crisis denotes a critical decisive moment.” Alec observed that one gives something up when one can use a crisis, but one also gives something up by labelling something a crisis. This was connected to systemic reforms by stating there is nothing more long-term than systemic reforms, for which one needs to get out of the crisis mentality, otherwise there will never be long-term systemic reform. Alec concluded by stating that maybe education systems have been in a bad state for a long time and asking, but is it a crisis?

How does one come up with a political agenda for learning-oriented reform that combines the pressures of effectiveness and political sale-ability?

Jaime Saavedra served as Peru’s Minister of Education from 2013 to 2016 and described the method he adopted to reform the education system in Peru. Simplicity in communication while seeking the buy-in for education reforms was key. People who read long detailed “national education plans” are not the people who need to be



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convinced; one needs to convince those who do not know the education systems in great detail. Peru did this well by packaging the education system reforms in a way that could be easily understood. The Ministry divided the education reforms into four “pillars”: teachers, learning, management, and infrastructure. Interestingly, Jamie pointed out that an important factor in the success of the reforms in Peru was that the PISA results came out placing Peru last in the rankings, leading to a sense of crisis: “For journalists, we were last in the world.” This gave a sense of urgency. The speaker connected with the points raised by Alec and said the tragedy of education is that people get used to the standard of education, so sometimes a big crisis is required to make bigger changes to education systems.

In the context of the “Education Commission, is there a reasonable diagnostic in country context and guidance to invest money effectively?”

Liesbet Steer continued the theme of “crisis.” She noted that the Education Commission was established because there was a general consensus that education is in crisis. The real problem is we have not been able to communicate

how bad the crisis is and therefore the change has not happened in the way that would be ideal. She mentioned that while education is given some importance by global leaders, it does not get adequate attention. There has been no effectiveness at using the crisis to make a significant change, because we have not been able to communicate how large the learning crisis is and the costs of inaction. Liesbet stressed the need for better use of data to communicate and create a tipping point which compels the world into action, as it did in the case of Ebola. She also suggested that within the community looking at education reforms, there is a lack of coherence. There are groups which argue for more money, some for efficiency, others for socialism, and more still for privatisation, and so on. Liesbet praised the work being done by RISE, which through research, is able to show that previously we were not looking at all aspects of education. For a long time, focus has been on getting more money into education, and this has clearly not been enough. We need adequate, efficient, and equitable resources. She concluded by emphasising the four recommendations of the Education Commission: performance, innovation, inclusion, and finance.



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Session 2: Alternative Modalities of Provision

Chair: Clare Leaver, Blavatnik School of Government, University of Oxford

Farzana Afridi (Indian Statistical Institute): *Improving Learning Outcomes Through Information Provision: Evidence from Indian Villages* (co-authors Bidisha Barooah and Rohini Somanathan)

Felipe Barrera-Osorio (Harvard University): *Leveraging the Private Sector to Improve Primary School Enrolment: Evidence from a Randomised Controlled Trial in Pakistan* (co-author Dhushyanth Raju)

Natalie Bau (University of Toronto): *The Misallocation of Pay and Productivity in the Public Sector: Evidence from the Labor Market for Teachers* (co-author Jishnu Das)

Moussa Blimpo (World Bank): *Scaling Up Children's School Readiness in The Gambia: Lessons from an Experimental Study* (co-author Todd Pugatch)

This session featured research on leveraging the private sector, teacher value added in the public and private sector, and early childhood education.

Research highlights:

Farzana Afridi began by looking at problems with the lack of accountability in education services in India. Even with increases in the number of private schools, learning levels have not substantially improved given the high variation in quality. This study was carried out in the Ajmer district of the northern State of Rajasthan in India, where there are low levels of adult literacy, high urbanisation, high primary school enrolment, and a high prevalence of private schools. The design was a randomised experiment, which covered 159 (public and private) primary schools from 72 villages. The interventions were: (1) two types of report card for the parent (intra-school - which gave a student's score in each subject and rank in the class, and inter-school - which gave a student's rank in panchayat) and (2) two types of report card for the schools (intra-school -

which gave an average score of each grade level in every subject and proficiency in specific skills, and inter-school - which gave the rank of the school in panchayat). The results showed significant improvements in test scores of private school students in response to the provision of information on relative learning levels, to both households and schools. However, there was no improvement in the learning outcomes of public school students in any treatment. Farzana pointed out that there were strong and persistent effects on school choice as a result of information provision for both public and private school students. Parents and children exercised school choice with information, but there was little impact when fewer school options were available. The results suggest that the private sector can potentially be leveraged to improve service delivery in the long run.

Felipe Barrera-Osorio presented a study of an experiment in Sindh, Pakistan. In the experiment, entrepreneurs created schools in under-served areas and the government provided per pupil subsidies. This created a new market by establishing schools in places where they did not exist, potentially disrupting the dynamics of education in a market/locality. The study design allowed entrepreneurs to choose the inputs they wanted, such as: control of hiring teachers, the number of teachers, and how many toilets. The authors used a structural estimation approach to determine how the entrepreneurs chose the inputs, and then compared this solution with that of a 'social planner' (who takes into account private and social returns to education). The results showed a dramatic increase in enrolment rates and test scores, but no differential effect between the enrolment of boys and girls. There appeared to be no consistent evidence of a differential effect on girls' test scores and no effect for the differentiated stipend. When the authors evaluated the difference between these (intervention) schools and public schools in Pakistan, they found that one of the main drivers of change in intervention schools was having female teachers (who had less



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experience and less formal education). Felipe concluded that intervention schools had a huge impact on test scores and are generating most of the possible surplus in the environment, with female teachers being very effective at getting high test results with low costs.

Natalie Bau began her presentation by discussing the importance of teachers for improving learning outcomes and the belief that higher salaries attract and retain better teachers. To improve upon the lack of evidence in the area, a study was conducted in Pakistan which followed teachers and students over four years (matched data) to see what impact pay has on test scores. The paper used a unique dataset of both public and private sector primary school teachers and their students to present among the first estimates in a low-income country of: (1) teacher effectiveness; (2) teacher value added (TVA) and its correlates; and (3) the link between TVA and teacher wages. Natalie first showed that, for both private and public school teachers, education and teacher training did not have a significant impact on TVA. Besides experience, only content knowledge showed a strong and significant correlation with TVA. She then moved on to discuss the effect of pay on TVA. The paper studied the impact of a policy change that shifted public hiring from permanent to

temporary contracts and reduced teacher wages by thirty-five percent. Comparing teachers hired before and after this 'shock,' the authors found no correlation between TVA and wages in the public sector (although such a link was present in the private sector). The policy change had no adverse impact on TVA, either immediately or after the four years. Natalie concluded by saying that higher teacher wages, in comparison to teacher characteristics that do produce test score gains, do not incentivise teachers to work harder. Hence, if states increase teacher pay without any other interventions, it is not likely to improve test scores.

Moussa Blimpo started by distinguishing pre-schools in many African countries with those in other countries. In the US, for instance, school readiness is about head-start programmes which help children in learning letters and counting. In many African states, pre-school is where children learn the instructional language for the first time. Moussa stated that prior to the study, the Gambian government developed a comprehensive curriculum. The new curriculum set a standard across the board for the existing pre-schools. The study tested the application of this curriculum with two approaches to delivering pre-school services (kindergartens) nationally. In the first experiment, new community-based centres were introduced to randomly chosen villages that had no pre-existing structured services. Another group of communities, which did not receive the programme, served as a comparison group. In the second experiment, existing kindergartens tied to primary schools, known as Annexes, were randomly split into two groups. One group received the new curriculum along with comprehensive training for an effective implementation, while the other group received the curriculum only and served as control group. The authors found that both programmes showed heterogeneous impacts, while not significantly raising average levels of school readiness as measured by a standardised assessment of language and fine motor skills. Children from more advantaged households improved less when exposed to community-based centres, while more disadvantaged children benefitted from provider training in existing Annexes. Taking into account additional implementation-related considerations, the researchers advised that on both equity and efficiency grounds, the expansion of formal public kindergartens tied to primary schools would be more effective than the initiation of a community-based approach.



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Country Research Team Session 3: Overview of New Research Teams

Chair: Clare Leaver, Blavatnik School of Government, University of Oxford

Tassew Woldehanna (Ethiopia CRT/Addis Ababa University)

Amanda Beatty (Indonesia CRT/Mathematica Policy Research)

This session highlighted the two new RISE CRTs with the teams giving an overview of their upcoming research.

Research highlights:

Tassew Woldehanna started by discussing how Ethiopia recognises education as one of the main routes to achieve economic transformation and reach lower middle-income country status by 2025. There appears to be strong political will to improve the quality of education, which is expressed by a quarter of the total national budget being allocated to the sector. There also seems to be a remarkable improvement in access, albeit with a wide disparity in learning across regions, gender, and the urban/rural divide. For these reasons, the RISE CRT in Ethiopia is focusing on low and inequitable learning as a starting point. The Ethiopian government has sought to achieve improvements in learning outcomes via the General Quality Improvement Program (GEQIP). Tassew highlighted that, to date, there has not been any rigorous, systematic assessment of the impact of the GEQIP on raising learning outcomes equitably. To do so, requires a better understanding of the education system and identification of the impediments to raising learning outcomes for all. The CRT will assess the implementation and impact of reforms associated with GEQIP on student learning outcomes. In particular, the team will use the RISE conceptual framework to explore the coherence of accountability relationships within three key themes embedded within the GEQIP reforms.

Amanda Beatty started by giving the background of educational performance in Indonesia---while there is high enrolment and completion rates in primary school, very few students complete junior secondary school. Moreover, based on the current rate of progress, it would take Indonesia over two generations to reach the OECD

mean in maths, and three generations to reach the OECD mean in reading. Student achievement is very low, even though Indonesia spends a substantial sum on education, over half of it devoted to teacher salaries. There is also a widespread belief that there is a problem with teacher quality. Indonesia is a highly decentralised country with districts having a lot of autonomy. In this context, the RISE CRT in Indonesia, will attempt to answer the following questions: How do roadmap policies improve student learning? What are the district factors that contribute to the success of the roadmap? How are innovative districts improving learning? Do innovations spread across districts? What are districts teaching the national government about innovation? The CRT will also study innovation at school and district level. Amanda concluded by noting that the CRT will focus on a mix of past, present, and yet to be implemented system reforms at both national and district level, and that the team was hopeful that the relevant audiences would be open to the evidence that the programme will generate.



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Session 3: Methods and Measurement

Chair: Lant Pritchett (Center for Global Development/Harvard University)

Alejandro Ganimian (J-PAL): *Teaching, Not Talent: Identifying the Source of Poor Educational Performance in Developing Countries* (co-authors Abhijit Banerjee, Swati Bhattacharjee, and Raghavendra Chattopadhyay)

Julie Buhl-Wiggers (University of Copenhagen): *The Impact of Teacher Effectiveness on Student Learning in Africa* (co-authors Jason Kerwin, Jeffrey Smith, and Rebecca Thornton)

David Evans (World Bank): *The Economic Returns to Interventions that Increase Learning* (co-author Fei Yuan)

Shwetlana Sabarwal (World Bank): *Better Than Most: Teacher Self-Beliefs in Uganda* (co-authors James Habyarimana and Kanishka Kacker)

This session featured a range of methods and measurements looking at different problem-solving strategies, interventions in teaching, a new measurement tool, and teacher self-belief.

Research highlights:

Alejandro Ganimian started by noting that most prior research into maths skills has focused exclusively on whether children can remember and execute school-taught algorithms. Yet it has been observed that children often depart from taught procedures and devise their own, which could potentially inform mathematics instruction. In this study, the authors explore heterogeneity in maths skills, and in particular children's capacity to apply their arithmetic skills to unfamiliar situations. The results showed that children were unable to solve arithmetic problems as typically presented in school. However, the same children were able to perform similar arithmetic operations when framed as market transactions - children's performance on arithmetic improves when problems are anchored to concrete items or money. The authors found that when children tried to apply their market arithmetic skills to solve hypothetical transactions of goods, skills were transferred which lead to a higher probability of the children getting

the question right. Alejandro concluded by stating that we know from psychology and anthropology that children use different problem-solving strategies to solve arithmetic problems, and that now we should try to induce children to use more effective strategies.

Julie Buhl-Wiggers started by noting the importance of teacher quality in addressing the global learning crisis. The paper attempted to answer the following questions: (1) How effective are Ugandan teachers? (estimation of TVA); (2) What do good teachers do? (correlation of teacher effectiveness with teacher characteristics and behaviour); and (3) What is the effect of teacher training? (measurement of the impact of a randomised intervention on TVA). The results, consistent with previous literature, indicated that a 1 standard deviation increase in teacher effectiveness increased student learning by 0.14 to 0.19 standard deviations. Further, teacher effectiveness correlates with teacher behaviours such as observing performance, encouraging participation, and lesson planning, but not teacher characteristics. It was also found that teacher training increases the spread of the TVA distribution by making the good teachers better. The study suggested that an increase in teacher quality can make other education interventions more efficient. Julie concluded that in the future, the authors would try and use video technology to discover what the good teachers are doing and which teachers benefit most from such programmes.

David Evans began by noting that policymakers and donors can often struggle to interpret the impact of education interventions reported and communicated in terms of "standard deviations." David referred back to the comment made by RISE panelist, Claudia Costin, that we need to make learning visible for politicians. One of the ways to do this is to translate research findings into terms which wider audiences can understand (as is the practice in health research where effects are communicated in terms of number of years of life saved). This paper proposes two alternative metrics for learning gains: one in "equivalent years of schooling" (EYOS) and another in terms of the net present value of increased lifetime earnings. The usefulness of these metrics are illustrated for a number of education interventions. The results demonstrate sizeable learning gains from many interventions relative to business-as-usual schooling - a median structured pedagogy intervention increases learning by the equivalent of between 0.6 and 0.9 years

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of business-as-usual schooling. The results further show that even modest gains in standard deviations of learning - if sustained over time - may have sizeable impacts on the net present value of lifetime earnings. Conversion into a non-education metric enables the comparison of education interventions with those in other sectors, such as health and infrastructure. David concluded that, when applied, the metrics should help policy makers and non-specialists to better understand the potential benefits of increased learning.

Shwetlena Sabarwal began by highlighting two empirical regularities: most education systems spend more than seventy percent of their budget on teacher salaries, and (yet) teacher effort appears to be low. She characterised this as an incentive and accountability problem. In education systems in developing countries there is typically no reward for teaching well, or even teaching more, and no punishment for teaching badly or even not teaching at all. Despite this, studies evaluating stronger accountability mechanisms have shown underwhelming results. This paper explored whether teachers believe their effort is low (i.e., Do teachers believe that there are margins on which they could increase their effort?). Using a survey experiment in Public Private Partnership schools in Uganda, the authors investigated how teachers perceive their effort. Within the experiment, teacher self-beliefs were contrasted with their beliefs about other teachers in the same school. The results showed that, on average, teachers tend to rate ability, effort, and job satisfaction more positively for themselves than for other teachers - a tendency the authors call 'high relative self-regard' (HRS). There is no systematic evidence of HRS around perceptions of quality of student engagement and available support structures. These results provide suggestive evidence of potential cognitive biases that help teachers rationalise sub-optimal effort in classrooms, and point to the importance of providing objective feedback to teachers as one potential way to improve their performance.



Session 4: Pedagogy

Chair: Barbara Bruns (Center for Global Development)

Yared Seid (International Growth Centre): *[The Impact of Learning in Mother Tongue First: Evidence from a Natural Experiment in Ethiopia](#)*

Ingo Outes-Leon (University of Oxford, Blavatnik School of Government): *[Growth Mindset at Scale](#) (co-authors Alan Sanchez and Renos Vakis)*

Barbara Bruns (Center for Global Development): *[Can classroom observation and coaching improve teacher performance in Brazil?](#)*

This session contained presentations that highlighted what school systems can do to improve the interface with students' characteristics.

Research highlights:

Yared Seid presented a paper on the impact of learning in mother tongue during early primary school on achievements in secondary school (when teaching switched to English). The work builds on an earlier study that showed education in one's mother tongue during early primary schooling leads to improved learning outcomes. It is relevant for a wide range of low and middle-income countries, where language of instruction at higher levels is in non-native tongue, while early schooling is increasingly (but not always) in a child's mother tongue. The study exploited natural variation across states in Ethiopia which have discretion to choose when students transition to English instruction, and focused on the state of Southern Nations, Nationalities, and People's (SNNP), where this transition happens in Grade 5, in contrast to most other states in Ethiopia where the transition takes place in Grade 7 or 9. SNNP also has large ethno-linguistic diversity (more than fifty-three languages resulting in thirteen languages of instruction), which means this transition was observed for both language-majority and language-minority students. Using data from the Young Lives school survey, Yared estimated that learning in mother tongue early on (in Grades 1 to 4) increases student learning outcomes for mathematics and literacy in Grade 5 substantially (0.27 and 0.09 standard deviations, respectively). This trend

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carries on even after the language of instruction changes. Yared concluded by stating that future work will investigate whether the benefits of early education in one's mother tongue can go beyond secondary education and impact labour market outcomes in (young) adulthood.

Ingo Outes-Leon began by explaining the concept of "growth mindset" which sees training as key to developing abilities, and thereby starts from a different understanding of abilities than is dominant in most education systems. The approach relies on an alternative self-theory of intelligence and considers the brain to be like a muscle, which can be strengthened through training. The study investigated how a simple growth mindset intervention impacted learning outcomes for disadvantaged groups including the poor. The study design consisted of a randomised controlled trial in 800 secondary schools in urban Peru (400 treated and another 400 as control). Although the approach has been tested in the US (especially with minorities such as African Americans and Latinos), this is the first study in a developing country and the first study at a larger scale. The results showed large effects, with significant improvements in maths and reading (0.05 standard deviation) that were sustained over the longer term (fourteen months after the intervention). Surprisingly, the implementation of another reinforcement with half of the treated cohort had no additional effect on outcomes.

The authors reported evidence of changes in treated pupil beliefs and teacher behaviour in a more growth mindset way.

Barbara Bruns discussed a randomised controlled trial examining whether observation feedback plus coaching can improve teacher practice in secondary schools in Brazil. In treatment schools, teachers and parents were given detailed information via school bulletins, which contained class specific information regarding time on task. The teachers also received a 'Teach Like a Champion' book together with coaching sessions, and used video observations to enable reflective discussions. Control schools received no feedback or coaching. The results showed that teachers in treatment schools spent more time on instruction by lifting the bottom performers, and by improving efficiency in classroom management. Furthermore, students were found to be more engaged with better learning outcomes (in Portuguese and maths). The biggest learning gains occurred where coordinators mastered the programme. Barbara concluded by stating that the intervention was cost effective with a cost per student of USD 2.40 and that future studies in the area will be able to shed light on whether new teacher practises are internalised, diffused, and strengthened over time, or whether their effect eventually erodes.

