Globalizing educational accountabilities:
The case of the OECD and PISA

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**Tuesday 4 December 2001: PISA shock**

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Outline

Questions:
1. What is PISA and how does it work?
2. How is the OECD’s education work developing?
3. How do PISA comparisons get used in reform debates?

Structure:

Background
Part 1: The OECD and the expansion of PISA
Part 2: PISA inside nations
Conclusion: Making comparison public...

Acknowledgement:
Background and data

Research funded by an Australian Research Council Discovery project led by Professor Bob Lingard: **Schooling the Nation in an Age of Globalization: National curriculum, accountabilities and their effects.**

More than 50 interviews with policy makers, bureaucrats and academics in England, Australia and international organisations (OECD and IEA) and with edu-businesses.
Comparison affects everyone ... 

“[P]erformativity is defined by an input/output ratio...”

(J-F Lyotard 1984: 44 & 54)

“Performativity is a technology, a culture and a mode of regulation that employs judgements, comparisons and displays as means of incentive, control, attrition and change based on rewards and sanctions (both material and symbolic).”

(Ball 2003: 216)
... because it is seductive ...
... and can have high stakes.
Submitting to comparison

“Technoscience is in the process of redefining our worlds in terms that make them available for its comparative operations. The relative passivity of the academic world in facing the ranking systems and ‘objective’ productivity comparisons that are reshaping academic life radically is sufficient to demonstrate how simple it is, even for people who are not naïve or easily impressed or overpowered, to submit to questions that are not only irrelevant but that indeed sound the death knell for all that matters most to them.”

(Stengers 2011, p. 78)
PART 1

OECD AND EXPANDING PISA

“The broadest possible picture of the global talent pool” (OECD interviewee)
International large-scale assessments

• UNESCO sponsored discussions about assessment of educational outcomes in the 1950s.
• Pilot Twelve-Country Study conducted by International Association for the Evaluation of Educational Achievement (IEA) in 1960.
• A Nation at Risk in 1983 strengthened the focus on systematically conducting ILSAs.
• PISA methodology drew from previous national testing programs, such as the US National Assessment of Educational Progress (NAEP).
• So why settle on 2001 PISA shock as the definitive event in the emergence of global educational accountabilities?
What does PISA mean to you?

1. What comes to mind when you hear the term PISA?

2. Where do you hear this term?
What is the OECD?

Established in 1961 from the Organisation for European Economic Cooperation.

An intergovernmental organisation.

Promotes economic growth, expansion and world trade.

Liberal-economic response to communism → global centre of calculation.

Ahead of the curve in terms of policy development and new technologies.

Internal politics and contestation along multiple fronts.
The rise of PISA

A brief history:

- 1961: Education had no structural location.
- 1975: Directorate for Social Affairs, Manpower and Education.
- 1990s: Growing demand for regular and reliable data on comparative performance of education systems.
- 2000: First round of PISA.
- 2002: Directorate for Education established.

Tests reading, mathematical, scientific literacy of 15 year olds. Focus rotates between reading, mathematics and science. Conducted every three years with a sample of students in participating nations/systems.

OECD’s biggest media event and one of its most popular policy products.
Enhanced standing of Education in relation to other parts of the Organisation:

"For these past four or five years we have increasingly been working with the Economics Directorate, also with Employment, with Science and Technology ... So it is now one big OECD family and we have conquered a major pillar in it."

(Interviewee, Education)

Emphasis on quantitative work at the expense of qualitative policy reviews.

Strong presence in education policy forums globally.

New relationships with commercial and philanthropic interests:

- Pearson Foundation sponsoring PISA videos
- Pearson has contract to develop PISA 2015 framework
- CTB/McGraw Hill contractor for PISA-based Tests for Schools in US
‘[G]lobal education is a once-in-a-generation opportunity and Pearson is uniquely placed to grasp it’.

(Pearson plc 2012, p.8)
The expansion of PISA

Widening the scope to measure a broader set of skills and capacities.

Changing the scale to include more countries, economies and schools.

Enhancing explanatory power or use by policy makers, educators and others.

The long-term future lies with multi-layered assessment systems that extend from classrooms to schools to regional to national to international levels [scale], that measure not just what students know but also how students progress, that are largely performance-based, that make student’s thinking visible, and that allow for divergent thinking [scope]. Also, these assessments must generate data that teachers, administrators, and policy-makers can act upon [explanatory power].

(Schleicher 2010: 434)
Expansion of the capacities measured as human capital or skills:

*We need to embrace a broader range of competencies ... you need to build in interpersonal competencies, problem solving, intrapersonal competencies and motivation, self-concept and so on, and these are things we just need to do better and need to work hard on to broaden the horizon.* (OECD interviewee)

PISA is a measure of human capital flow from compulsory schooling.

Basic human capital → wider human capital (OECD 2002).

Cognitive performance, schooling and parental SES only partially explain earnings differences: individual behavioural traits.

Growing interest in developing broader measures and indicators in relation to the Beyond GDP agenda.

Growing focus on educational assessments of non-cognitive skills: trust, civics and citizenship, motivation, collaboration, political efficacy and so on.

Measuring more dimensions of people as skills
“characteristics that allow a person to build, manage and deploy basic human capital”
Wider human capital

“[T]here is more to human capital than the readily measurable—and very important—literacy, numeracy and workplace skills.

One motivational characteristic which may play a particularly important role is the willingness to trade current for future benefits — “future directedness”.

A question arises of how and if education might seek to encourage desired motivational characteristics, in addition to cognitive skills. ... an educational institution can act to encourage behaviour based on desirable motives, and discourage others.”

(OECD 2002: 124)
Scale

Expansion to widen the pool of human capital by including more countries and sub-national sites in PISA and related programs.

[W]e aim to have the broadest possible picture of the global talent pool and I think China has greatly enriched the PISA program. [OECD interviewee]

Expansion of participants in main PISA:

- PISA 2000: 28 member countries; 4 non-member countries.
- PISA 2012: 34 member countries; 31 non-member countries/economies.

PISA for Development

PISA-based Tests for Schools

Programme for International Assessment of Adult Competencies (PIAAC).

Teaching and Learning International Survey (TALIS).

Assessment of Higher Education Learning Outcomes (AHELO).

Development of Early Childhood Education and Care (ECEC) indicators...

Measuring the skills of more people more often
PISA Tests for Schools

Aims to provide school-level data to facilitate school improvement.

Results comparable with main PISA data.

Funded by US philanthropic organisations and supported by America Achieves.

Trialled in 2012 in US, UK and Manitoba.

Officially launched in April 2013.

CTB/McGraw Hill the exclusive US administrator.

Allows schools to differentiate performance from national and system results.

Allows OECD to have greater policy influence at sub-national levels.

Measuring the skills of more people more often
### PISA-based Tests for Schools

*Measuring the skills of more people more often*

#### MATHEMATICS (PISA 2009)

<table>
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<tr>
<th>PISA mathematics scale</th>
<th>Your School</th>
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<th>Schools in Shanghai-China</th>
<th>Schools in Mexico</th>
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<td>700</td>
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<td>600</td>
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<td>50% of schools perform above and also below this point</td>
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<td>10% of schools perform above this point</td>
<td>25% of schools perform below this point</td>
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<td>500</td>
<td>Your School</td>
<td>25% of schools perform above this point</td>
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Explanatory power

New sources, analyses and representations of data to strengthen explanation of relationships between policy settings and educational outcomes, increasing the potential influence of the OECD’s education work.

Improving the explanatory power ... it’s nice to see you’re sort of doing well on this and well on this, but what is driving those kinds of outcomes? [OECD interviewee]

Improving the quantity/quality of data

Log file data generated through online assessments (‘big data’).

Connecting to the work of other Directorates.

Expansion and linking of education data sets (e.g. PISA + TALIS).

Education GPS and OECD data visualisation tools.

Better explaining performance to influence policy
Global governance

Government → governance
“Change in the meaning of government, referring to a new process of governing. ... governance refers to self-organizing, interorganizational networks”.
(Rhodes 1997, p. 15)

Data
“Data production and management were and are essential to the new governance turn; constant comparison is its symbolic feature, as well as a distinctive mode of operation.”
(Ozga 2009, p. 149)

Global governance
“The sum of the informal and formal values, norms, procedures, and institutions that help all actors—states, intergovernmental organizations, civil society, transnational corporations, and individuals—to identify, understand and address trans-boundary problems.”
(Weiss, 2013, p. 2).
Global governance II

OECD exerts influence through ‘soft’ power:

- **cognitive governance**: ‘embodiment of the values the members hold sacrosanct and which stitch them together as a community’.
- **normative governance**: ‘challenging and changing the mindsets of the people involved’ in its work, both in Paris and within nations; and
- **palliative governance**: the ‘bundle of ways in which the OECD greases the wheels of global governance by providing a sanctuary for issues that do not sit easily elsewhere’

(Woodward 2009: 6-8; also legal).

**Informatic power**: ‘ties systems of incentives and sanctions [strategic power] to measurement and computing technologies [logistical power; see C. Mukerji]’.

(Anagnastopolous et al. 2013: 11).

Globalization as the creation of global **infrastructure**.

(Sassen 2007).
Epistemological governance = normative + cognitive:
A global policy community and peer-pressure resulting in converging dispositions of policymakers regarding the need for and trustworthiness of quantitative data for measuring and comparing the performance of schools and systems.

Infrastructural governance = palliative + informatic:
The production of global testing infrastructure that articulates and makes comparable the performance of nations and systems tied to media and political debate about performance.
PART 2

PISA AND POLICY REFORM

‘Big deal, an A in math. That would be a D in any other country’
Global comparisons and PISA shocks

The OECD encourages the articulation of international and national large-scale assessments:

‘You need to have those perspectives: a perspective that looks inward and one that looks outward’ (OECD interviewee).

Creation of global space of educational measurement and comparison.

Nations, systems and schools anxious to be seen as performing well and continually improving; benchmarking against multiple references globally.

PISA shock occurs when countries are not seen to be performing well compared to others: e.g. Germany in 2000.

Media play a very important role in creating expectations and highlighting ‘poor’ performance.

‘Externalisation’: the use of policies in other systems to justify and legitimate the necessity of domestic reforms.
Catalyst data

‘The data that we put out is what I call catalyst data. ... What we do say is that we'll show you what's happened in terms of the data and its catalyst for you - governments, the media, the community, academics - to ask the question why. Why is this so? What happened?’

(Senior Australian bureaucrat)

Provokes politicians, policy makers, the media, educators and publics to ask about how schools and systems are performing and what needs to be done to improve that performance.

But, catalyst data does not necessarily specify the direction of change.
Making reform happen

Evidence suggests that international pressure and competitive environments are more likely to diffuse a sense of ineluctability of some reforms among the various stakeholders and the public at large.

(OECD 2008: 315)

Experience shows that more comprehensive reforms are possible when there is a widespread recognition of the need for a change to take place – e.g. in case of external pressure, competitive threat or common enemy.

(OECD 2008: 335)

PISA is designed to unsettle perceptions and create a sense of crisis.
Shanghai’s top performance

Carefully managed representation of Chinese education performance. Singapore, Hong Kong, Taiwan, Japan and South Korea also perform well.

Mix of cultural and historical factors and policy settings explain Shanghai’s performance on PISA:

- Long history of exam driven education.
- Tiger mother phenomena, disciplined study habits, private tuition, education commitment associated with Confucian values.
- Questions about sample.
- Framing of the test situation.

OECD plays down cultural factors and plays up policy as driver of success.
Testing context matters!
Australia’s response

US, UK and Australia all ‘looking East’: global PISA shock. Australia performed well in PISA since 2000, but now a narrative about decline in reading and mathematics.

Australian Government focus on Asia and comparative performance:

>[F]our of the top five performing school systems in the world are in our region and they are getting better and better'; we don’t want ‘workers in an economy where we are kind of the runt of the litter in our region and we’ve slipped behind the standards and the high-skill, high wage jobs are elsewhere in our region’

(Julia Gillard, The Australian, 24/01/12)
Australia’s response

Significant media reporting and opinion pieces following report:

- *The Australian* (18/02/12): ‘Shanghai success a lesson in delivery’
- *The Australian* (17/2/12): ‘Lessons from Asia show the way forward for our schools’
- Sydney Morning Herald (17/2/12): ‘A class above’

Australia in the Asian Century White Paper—PISA targets:

- By 2025, Australia will be ranked as a top five country in the world for the performance of our students in reading, science and mathematics literacy and for providing our children with a high-quality and high-equity education system.

Focus on learning policy lessons from East Asia, which presupposes that top performance is due to systemic policy settings
The influence of culture

Table 1. Mean math scores of students who live in Shanghai, Australia and New Zealand.

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<th>Country/province</th>
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<td>102.04</td>
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<td>Non-Chinese origin</td>
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<td>515.01*</td>
<td>91.28</td>
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<td>614.77</td>
<td>101.89</td>
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<td>Non-Chinese origin</td>
<td>3,862</td>
<td>520.71*</td>
<td>95.21</td>
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<td>Chinese origin</td>
<td>45</td>
<td>571.45</td>
<td>97.09</td>
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*The mean is different from Shanghai’s mean at the .05 level of significance.

(Source: Journal of Education Policy, Feniger & Lefstein 2014: 5)

How not to reason with PISA
The importance of socioeconomic context

“Less egalitarian societies have lower average achievement, lower percentages of very highly skilled students, and higher percentages of very low-skilled students. In direct contrast, egalitarian societies have higher average achievement, higher percentages of very highly skilled students and lower percentages of very low-skilled students.”

(Condron 2011, p. 53)
But, there is another side to the story …

**The tower of PISA is badly leaning. An argument for why it should be saved.**

OECD has also done far more than emphasize differences in overall performance. It has become a strong advocate of *equity in education* by reminding policymakers that the highest-performing education systems combine quality with equity. It has put equity high up on the reform agenda. Without the data that PISA has generated over the years, calls for enhanced equity would not be part of the education policy conversation in the countries that have suffered from inequitable education systems, including the U.S.

Pasi Sahlberg and Andy Hargreaves:
Equity and resources

Students perform better when school systems allocate resources more equitably

- After accounting for per capita GDP
- Fitted line after accounting for per capita GDP

$R^2 = 0.19$

Equity in resource allocation (index-point difference)
CONCLUSION

MAKING COMPARISON PUBLIC
Three key messages

1. The OECD’s education work is expanding to make more aspects of education comparable across multiple scales.

2. Media and politicians use PISA data to provoke crisis and justify reform; however, the best directions for reform are given in the data.

3. Comparisons can skew our view of important issues by making some factors visible and hiding others.

How should we respond?
Building data literacy

“Wariness toward the corrupting potential of interest group politics has led us to harness data tightly within administratively designed incentive systems; in the process, are we missing opportunities to inject data more forcefully into the public sphere, encouraging democratic accountability by parents and citizens who become, over time, more confident and knowledgeable about how to use data to collectively define priorities and select educational strategies?”

(Henig 2013: xii)
Thank you

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Some references