What can we believe about international surveys?

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"...between 2000 - 09 British schoolchildren plummeted in the international league tables." Telegraph

"The PISA figures ... show that ... the standard of education ... offered to young people in this country declined relative to our international competitors. Literacy, down; numeracy, down; science, down: fail, fail, fail."

Gove



"Increasing the social mix in schools is the way to close performance gaps - Ministers should return to comprehensive ideals if they are serious about concern for the poor – and Britain's global ranking.
The results from the latest of the influential surveys in the Organisation for Economic Co-operation and Development (OECD) <u>Programme for International</u> <u>Student Assessment</u> (Pisa) makes this abundantly clear and is chilling reading."

Guardian



So is England undergoing its own 'PISA shock'?





"Probably the greatest risk in the use of large-scale international datasets is the ease with which it is possible to draw overly simplistic – or erroneous – conclusions"

Linda Sturman NFER, BERA Research Intelligence 119 2012



"Fundamentally the IEA's vision is the notion that diversity of educational philosophies, models, and approaches that characterise the world's education systems constitute a natural laboratory in which each country can learn from the experiences of others."

IEA



"Parents, students, teachers, governments" and the general public – all stakeholders – need to know how well their education systems prepare students for real-life situations. Many countries monitor learning to evaluate this. Comparative international assessments can extend and enrich the national picture by providing a larger context within which to interpret national performance."





- A yellow pages of policy tourism
- A Jane's Defence Guide to an educational arms race
- A national 'my education system's bigger than yours'



Why do we need to be careful how we use the surveys for policy development?

- They show only correlations the real reasons are very likely to be more complex and not transplant well into different soils.
- Most the top performers tend to be small can policy be scaled up simply and cost effectively?



What information do international surveys collect?

- Attainment data: PISA aims to be curriculum free whereas TIMSS and PIRLS are curriculum based
- Contextual information



Are international assessments rigorous?

- Frameworks
- Developing the materials
- Sampling
- Meeting the standards
 - School and pupil participation
 - Coding



Some issues with international assessments

- Cultural bias
- Full coverage of the population, for instance students with special educational needs



- Differing performance in international surveys
 - TIMSS 2011 maths ranking versus PISA
 2009 mathematical literacy ranking
 - Curriculum match
 - Do the questions assess what students learn at school?
 - Do the questions assess what students learn in that subject?
 - Familiarity of item types



- Rankings, statistically better and scale scores
- Use of achievement information for policy

 What are national priorities?
 What do the surveys assess?



The problem with rankings is that they convert complex data into a single non-parametric measurement





So what can we believe about international surveys?

As with any research:

- It depends what we want to achieve
- We have to understand the data
- We have to ensure the uses we make of the data are fit for purpose
- We need to ask the right questions



What do we actually want from an education system?





 What the policy makers say is happening, what teachers say is happening and what school management say is happening and what actually happens in the classroom might not be the same thing



Other problems - education is a long term game

- The surveys represent a snap-shot of each education system at a point in the past
- Most educations systems are in a state of constant evolution and flux
- The students entering the education system will not be leaving it for at least a decade
- If we are using the surveys for policy we should be predicting the future not looking back



Success requires at least three things





Opportunity, ability and engagement

In educational terms this translates into students needing:

- The ability to succeed in the subject
- Opportunities (both within the school education system and beyond)
- Incentives to ensure they are engaged with the subject



Play your cards right

In mathematics how well engaged do you think England's learners are compared to the following? 1. Singapore 2. Sweden **3. Hong Kong** 4. Korea 5. Finland 6. Chinese Taipei



How much do you agree that maths will help you get the job you want?





How much do you agree that learning maths will help in daily life?





A final quote

"Today's PISA report underlines the urgent need to reform our school system. We need to learn from the best-performing countries.
Other regions and nations have succeeded in closing the gap and in raising attainment for all students at the same time. They have made opportunity more equal, democratised access to knowledge and placed an uncompromising emphasis on higher standards all at the same time. These regions and nations – from Alberta to Singapore, Finland to Hong Kong, Harlem to South Korea – should be our inspiration.



While each of these exemplars has their own unique and individual approach to aspects of education, their successful systems all share certain common features. Many have put in place comprehensive plans for school improvement which involve improving teacher quality, granting greater autonomy to the front line, modernising curricula, making schools more accountable to their communities, harnessing detailed performance data and encouraging professional collaboration. It is only through such whole-system reform that education can be transformed to make our nation one of the world's top performers."



There is real wisdom in this quote but you need to make sure it is interpreted correctly

"It is only through such whole-system reform that education can be transformed"

...it is a combination of several autonomy and accountability policies, not just a single, isolated policy, that is related to better student outcomes.

PISA IN FOCUS 2011/9 (October) OECD 2011



What can we believe about international surveys?

"Statistics is like a lamp post. Used more wisely for illumination than for support"





Thank you

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