What can rich countries tell us about measuring learning inequalities?

Anna Vignoles
University of Cambridge
• How are inequalities in learning measured in developed countries?
• Is there scope for measures to be aligned across contexts?
Inequalities between groups

- Gender
- Ethnicity
- Socio-economic background
- Disability
- Sexuality
How are inequalities monitored?

Census data tracking individual children through the system

Rich survey data, e.g. the UK birth cohorts

International data: PISA, TIMSS, PIRLS etc
What measures of learning are used in the UK?

**Achievement tests**
- National tests of reading, writing and maths at ages 7 & 11, linked to the curriculum
- National tests of range of subjects at 16, GCSEs

**Measures of non-cognitive development**
- Exclusions
What measures of learning are used in the UK?

<table>
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<th>Measures of longer run outcomes</th>
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<tr>
<td>• Participation in HE</td>
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<td>• Participation in elite HE</td>
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<td>• Vocational qualifications</td>
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<td>• Employment</td>
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<th>PISA</th>
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<td>• Some countries have developed their own tests modelled on PISA</td>
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<td>• UK has linked PISA data to administrative data</td>
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<td>• Assess grade inflation claims, despite misalignment of measures</td>
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<td>• Common metric would help here</td>
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What measures of SES are used for system monitoring?

**Free school meal eligibility**
- Measure of welfare receipt
- Closely correlated with single parenthood (50% of those eligible are in single parent households) and workless or low income households

**Neighbourhood data (from population Census)**
- Neighbourhood HE participation rate (HEFCE’s POLAR2)
- IDACI (Income Deprivation Affecting Children Index)
- IMD (Index of Multiple Deprivation)
In the UK the system is very well monitored.

• For example you can do this…..
• Linked individual-level administrative data
  – School and HE records
• State and private school students
• Combine FSM and neighbourhood measures
  – In Year 11 in 2001-02 or 2002-03
Male HE participation, by deprivation quintile

![Bar chart showing HE participation by quintile for state school pupils and state and private school pupils.](chart)

- State school pupils
- State and private school pupils
- Least deprived quintile
- 2nd quintile
- 3rd quintile
- 4th quintile
- Most deprived quintile

% participating in HE at 19/20
• When do inequalities in learning emerge and hence at what points in the education life-cycle should we track learning?

• We know…
  – Socio-economic gaps in cognitive skill emerge very early indeed
  – Strong intergenerational component to education
The situation in the UK

Goodman & Gregg (2010)
SES gaps are evident from age 7 onwards in census data.
• What are the possible unintended consequences of measuring learning and how can some of these can be averted?
What has the UK learned?

If measures are used in a strong accountability system they will be manipulated.

Policy response in the UK has been to redesign metrics to avoid gaming.

- GCSE scores
- Value Added, CVA
- 5A*-C GCSE
- Progress 8
What has the UK learned?

Value added measures are needed to measure quality of schools but not to monitor progress.

Teacher reports cannot be used for accountability. Appropriate for formative assessment.
What has the UK learned?

- International surveys as distinct from national census data can help measure real progress in achievement.
- Some caution using national high stakes tests to measure progress.
- Dangers of excessive testing.


