

# The Case for Longitudinal Datasets

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# Why do we need to evaluate education quality?

- **Accreditation** – to formally regulate desired levels of quality of educational outcomes and provisions
- **Accountability** – to hold education systems accountable for their functioning and performance and support democracy in education
- **Improvement** - as a mechanism to stimulate improvement in education and organisational learning

Also enhanced evaluation processes are required alongside decentralisation policies (Scheerens, Glas & Thomas, 2003)

# Measuring Educational Quality – some issues to consider

- From whose perspective is quality judged?
- Which area of activity within an organisation determines quality?
- At what level of the organisation is quality analysed?
- How is quality defined in terms of time?
- What data are used to form an opinion of quality?
- What standards or measures are used in order to make quality judgements?

(adapted from J. Scheerens, 1992, **Effective Schooling: Research, theory and practice**, London: Cassell)

# Lessons from two ESRC/DFID projects: **Improving Educational Evaluation and Quality in China (IEEQC)** and **Improving Teacher development and Educational Quality in China (ITDEQC)**

**IEEQC Study 1:** Exploring stakeholder views and issues of local context and priorities (and sustainable capacity building) in relation to educational evaluation and quality in China

**IEEQC Study 2:** Examining the nature, size and extent of school effectiveness in China using longitudinal value added measures (120+schools; 90,000+ students). Entrance examination to HE matched to Entrance examination for senior high school and student and school background factors

**New ITDEQC Study:** Multilevel modeling analysis to examine trends over four years in the nature, size and extent of school effectiveness in China using value added measures. Student and school surveys will be used, as well as a teacher survey to examine the impact of teacher development factors on student outcomes

# Rationale for Value Added Approach

- Improving education quality is a major goal of countries worldwide
- School effectiveness research has stimulated and focused educational policy makers' attention on the potential to raise overall levels of educational standards and student achievement.
- For example, western governments such as the UK have placed a strong focus on encouraging schools and teachers to use innovative evaluation methods and these approaches have been linked to improved educational outcomes.

# Rationale for Value Added Approach

- However, in China, raw measures of pupils' academic outcomes and HE entrance levels are frequently viewed as the key indicators of school quality. As a result schools with disadvantaged intakes tend to be judged unfairly, while complacency is possible amongst schools with more able pupils and it is difficult to identify best practice.
- An alternative **longitudinal data** approach examines the relative progress of pupils during their time at school and this methodology - often referred to as value added - is widely regarded as providing more accurate measures of school effectiveness than the raw results.
- Therefore, it is important to look closely at the opportunities and potential for enhancing educational quality in China via innovative school evaluation methods and school effectiveness research.

# IEEQC lessons learned so far

- **Significant differences were found both between and within schools in terms of “Value Added” measures** and almost all stakeholders agreed this approach would provide an important and welcome addition to current school evaluation systems in China - but need to be aware of limitations such as measurement error.
- **The evidence suggests that a range of “value added” measures are required** – eg for different subject outcomes and groups of students. Also many stakeholders consider it important to extend evaluation to a broader range of educational outcomes including non-academic outcomes such as vocational and attitude measures
- **A new government focus on school self evaluation and school improvement** would be welcomed by stakeholders, as well as reform of HE entrance requirements to reduce narrow focus on raw examination scores.

# IEEQC lessons learned so far

- **Data quality is crucial** - rigorous and systematic longitudinal data collection procedures are required to ensure data quality, as well as explicit agreements between schools, administration and research organisations taking responsibility for data collection
- **Differences in examination systems between provinces** (particularly at lower educational levels) means that creating a national “value added” system would be very difficult in China. However “value added” evaluation systems are feasible now for regions or cities. Consider the possibilities for regional student databases within a nationally agreed framework.
- **Widespread and comprehensive training** is required to enhance practitioner and policy makers knowledge and skills in evaluation concepts (eg value added measures) and assessment methodology (eg longitudinal approaches; statistical techniques including multilevel modelling)



# Improving Educational Evaluation & Quality in China

改进中国教育评价和质量

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# Lessons from “ School effectiveness and school self evaluation in Zanzibar” EdQual PhD project

To harness the benefits of longitudinal data analysis and value added measures for school evaluation and improvement purposes, a reliable and valid national assessment system is required to provide appropriate baseline and outcome measures of student attainment.

One key issue is the policy and practice of student assessment:

- Quality of assessment instruments
- Match between curriculum and assessment
- Teacher’s capacity, knowledge and skills in student assessment
- Record keeping of assessment results
- Alteration of pass marks so as to cope with political pressure
- Language of instruction and assessment