Can global learning metrics be pedagogically innovative?

Educational Prosperity: An assessment framework for global metrics that are pedagogically innovative

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The capacity of a society to develop young people’s literacy skills and well-being depends on its ability to provide the right kinds of human and material resources to support healthy child development from conception to adolescence, and beyond. Educational Prosperity is an assessment and reporting framework that can be used to evaluate the capacity of a school district, state, or country to develop children’s literacy skills and well-being, to set goals for increasing a school system’s capacity, and to monitor progress towards meeting those goals. The framework follows a life-course approach, with key outcomes for each of six stages of development. These outcomes are referred to as ‘prosperity outcomes’. The family, institutional and community factors that drive these outcomes are called ‘foundations for success’. The underlying premise is that if countries build strong foundations for success for each stage of children’s development, its children will thrive.

In most evaluation systems, the links between the construction of measures, the methods used to collect data, the analytics, and the reporting strategies are ‘loosely coupled’; that is, the elements are disconnected such that they have little impact on school policy and classroom practice.

First, and perhaps the biggest ‘disconnect’, is that the metrics lack relevance for classroom practice. For example, the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS), and many state and national monitoring systems, collect data on students’ reading, mathematics, and science skills. However, teachers usually teach subjects based on a fairly prescriptive curriculum. Language arts teachers, for example, do not explicitly teach reading skills.

Second, global learning metrics typically cover a narrow range of skills. National tests targeted to a particular grade level typically have test items for that grade level, and a few items at the adjacent grade levels. However, by the end of grade 3, the range of children’s reading and mathematics skills usually span at least four grade levels, and by the end of grade 8, they can span as much as eight grade levels. The distributions tend to be negatively skewed, with a large percentage of students scoring at the low end of the distribution. Many of these students have moderate to severe learning needs and are several years behind their peers in their development of basic skills. Most global learning metrics do not adequately capture the abilities of students with low skill levels.

Third, some critics argue that global learning metrics do not capture higher-order thinking skills. While this may be the case with some assessments, there have been considerable improvements in assessment design over the past twenty years. Many of these improvements are owing to the work of researchers who developed tests for large international studies such as PISA and TIMSS.
Fourth, some tests used for global metrics are culturally biased, yielding results that do not allow for fair cross-national comparisons. This is also a concern for assessments designed to measure the skills of students across language and cultural groups within countries.

The fifth ‘disconnect’ is that cross-sectional assessments are often used to hold school principals and teachers accountable. The contributions of school staff – the so-called ‘value added’ – cannot be adequately assessed with cross-sectional data.

The analysis and reporting strategy for Educational Prosperity has three explicit links to national and local policy and practice. First, it allows countries to align data collection with goals at all levels within the system. Second, the data collected within this framework have immediate implications for educational policies involving decisions about the allocation of resources or the assessment of interventions aimed at changing long-standing structural features of schools. Third, the approach enables countries to set targets that are consistent with state or national goals, or in the case of low- and middle-income countries, to set targets consistent with the United Nations post-2015 framework.

The Learning Bar has developed two assessments that are being used in national and provincial planning to measure prosperity outcomes and the foundations for success. These assessments not only provide global learning metrics, they are also designed for improving teaching and learning. In both cases, the data collection cycle is short and reports are provided immediately upon completion of data collection. The emphasis is on collecting data to provide leading indicators rather than trailing indicators. Leading indicators focus on the learning and teaching needs of students and teachers, looking forward, rather than trailing indicators, which are focused on past performance and issues concerning accountability.

One of these assessments is the Early Years Evaluation (EYE), which consists of two complementary assessment tools that help educators monitor the overall development of children as they prepare for and make the transition to school. They assess skills in five domains consistent with the framework for school readiness developed by the US National Education Goals Panel and currently used by UNICEF. The EYE-Direct Assessment (EYE-DA) is designed to measure the developmental outcomes of children aged 3-5 years using an engaging and play-based format of assessment. The EYE-Teacher Assessment (EYE-TA) provides a systematic framework that kindergarten teachers can use to structure their frequent observations and informal assessments. Results from both assessments are provided immediately.

The EYE assists teachers by providing formative, instructionally relevant information they can use to plan their day-to-day learning activities. Meeting this need has been the primary focus of the assessment. The reports are often used alongside other assessments to identify students who are encountering difficulty and may need extra support. Teachers use the results to involve parents in meaningful ways, such as providing suggestions of activities that parents can do at home to strengthen their children’s skills.

The second assessment that provides leading indicators is the OurSCHOOL evaluation system, which includes student, teacher and parent surveys that provide reliable data on factors known to affect student outcomes. At the school district level, a completely customized survey can be created by choosing from bank of over 50 measures. Many of these measures are metrics for the foundations for success at various levels of the Educational Prosperity model. In some jurisdictions, a senior educator ‘owns’ the measures for each foundation. The person who owns ‘quality instruction’, for example, is tasked with ensuring that stakeholders at all levels of the system – the Minister and senior staff, district superintendents, school principals, teachers, parents, and students – understand how quality instruction is being measured, the annual targets for improvement, and various strategies for improvement. The Ministry and the school districts direct their attention to providing the necessary professional development and support materials for school improvement. When the system is working well, the emphasis at the school level is on using data to build a strong foundation for student success.