



# Informing policy in developing countries

**Petra Lietz and Mollie Tobin** discuss the impact of large-scale assessment programs on education policy in developing countries.



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Existing research shows a rise in the number of countries undertaking national, regional and international learning assessments, and that much of this growth has occurred in developing countries.

Assessment programs constitute a significant investment for these developing countries. However, little is known about how these assessments have affected policies and practices.

The Australian Government, through its international aid program, commissioned ACER to conduct a systematic review of the existing research in this area in order to better inform practice. ACER completed the work with assistance from the Joanna Briggs Institute at the University of Adelaide and technical support from the Evidence for Policy and Practice Information and Coordinating (EPPI) Centre at the University of London.

The review focused on the impact of large-scale assessment programs on education policy making, particularly policies regarding resource allocation and teaching and learning, in developing countries. It also sought to address the following sub-questions:

- What are the characteristics of the large-scale assessment programs that have informed education policy making in developing countries?
- How are the data from assessment programs used to inform education policy making in developing countries?
- At what stages of the policy process are data from assessment programs being used in developing countries?
- What educational policies in developing countries have resulted from the use of assessment data?
- What are the facilitators and barriers to the use of assessment data in education policy making?

Fifty-four existing studies were included in the review, representing 73 countries that fall under the review's definition of an economically developing country.

## Program types

Half of the included studies about the impact of assessment programs referred to national programs, followed by equal numbers of regional (involving neighbouring countries) and international programs, and only a small number of sub-national (state or provincial level) programs.

Most of the assessments involved a representative sample of students rather than a census approach. This is likely due to the financial and technical constraints that face developing countries, as census/population assessments are very costly to undertake.

Most programs assessed students in both primary and secondary school. The next most common assessments covered primary school only (up to Year 6). Assessments covering secondary school only (Year 7 and above) were the least common.

## Program goals and uses

Almost all assessment programs in the included studies examined reported multiple goals and uses. The most frequently cited goal was to measure and ensure quality of education and its strengths and weaknesses by examining student achievement over time.

Less frequently mentioned goals were ensuring equity and accountability. To measure and ensure equity, programs were often intended to diagnose issues and target interventions in order to improve the educational outcomes for disadvantaged groups. To measure and ensure accountability, assessment programs were often used to report assessment results to relevant stakeholders.

Other goals of assessment programs included: informing future assessments and building technical capacity; enabling broad international comparisons; providing inputs to be used at the local level for teachers, parents and students; and, evaluating and examining the effects of pre-specified policies.

In terms of education policy-making, across all types of programs, data from assessments were most often used at the agenda setting, implementation and evaluation stages of the policy cycle. They were less frequently used during the policy formulation stage.

## Impacts on policy

The most frequently occurring resource allocation policies that resulted from the use of assessment data were those intended to improve the quality of teachers and teaching materials used in schools, and those that made changes in education funding.

Assessment programs most frequently impacted education policies aimed at increasing teacher quality through in-service professional development and improved teacher preparation.

System-level policies regarding curriculum standards and reform, performance standards and assessment were also often affected by the use of assessment data.

A notable pattern was that three-quarters of the included studies on international assessments reported an impact on curriculum standards. Conversely, little has been reported on the impact of assessment programs on teaching and learning practices. From the limited available studies, the most commonly occurring impact on teaching and learning practices focused on reforms towards student-oriented pedagogy and the development of in-class learning strategies.

Changes to education funding were intended to improve educational outcomes by providing: funds for interventions and programs for low-performing and low-socioeconomic status schools; performance-based financial incentives for schools and teachers; and changed funding allocation between public and private schooling sectors.

## Facilitators and barriers

This review also sought to identify the facilitators and barriers to the use of assessment data to inform policy making in developing countries.

The most frequently cited facilitators to the use of assessment data were media and public opinion and the dissemination of appropriate results to stakeholders, followed by the soundness of the assessment program itself and how well the program was integrated into policy processes.

The most frequently reported barriers to the use of assessment data to inform policy were: low technical quality of the assessment program and associated analyses; financial constraints to maintain the program; weaknesses of the body responsible for conducting the assessment, particularly in influencing policymakers; and low technical capacity and experience in interpreting, disseminating and using the results of the program.

## Implications of this review

The findings of this review have a number of implications for those agencies involved in the design, implementation and analysis

of assessments in developing countries, as well as for education policy and decision makers seeking information on the quality and equity of the education system through assessment programs.

Generally speaking, the closer the link between an assessment program and education policy makers, especially in the design phase, the greater the impact of assessment on educational policy making.

The findings highlight the need to further increase opportunities for cross-fertilisation and cooperation between policymakers and those involved in large-scale assessment. Further, in-depth research can help stakeholders to better understand the obstacles to collaboration.

The findings also suggest that elements outside of the nature of the assessments themselves, such as the effectiveness of the education system, political sensitivities and conflict, the strength of civil society and public discourse, play a critical role in facilitating or impeding the usefulness of assessment programs. More research is needed in exploring how such system-level factors impact on the use of assessment programs in developing countries.

Finally, it would be of great interest to do the same study for developed countries. While some studies have been commissioned by the organisations that are undertaking large-scale assessments, an independent systematic review would provide stronger evidence of the existence or absence of links between large-scale assessments and education policy making.

*The impact of national and international assessment programmes on education policy, particularly policies regarding resource allocation and teaching and learning practices in developing countries, by Maura Best, Pat Knight, Petra Lietz, Craig Lockwood, Dita Nugroho and Mollie Tobin, is available from the EPPi Centre website at <http://eppi.ioe.ac.uk>*