Learning Assessment at the primary level: a commentary

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The assessment of learning has many purposes. These include, inter alia,:

The measurement of the achievement of learners, often known s summative assessment

The measurement of the achievement of learners to assist the teacher and/or student in improving his/her achievement, often known as formative assessment

The generation of information for the selection of learners for further education or occupations by others

The certification of learning

The provision of information for the monitoring and evaluation of institutional or system-level performance. Here the information is used to make decisions not about individuals but about institutions, subsystems or whole systems

The provision of a means of holding teachers and institutions accountable to those who fund them

Most assessment experts agree that 'assessment must be fit for purpose'. The technical requirements of an assessment system designed for each of the above purposes will vary. For example, where the avowed purpose of an assessment system is selection, then assessments should include items that discriminate between learners. Where the purpose of the system is the monitoring of standards over time the items do not need to discriminate sharply between individuals. One may be more interested in knowing what most learners know at any given point in time, and in comparing these common knowledge bases over time. Fine discriminations between students are not required.

Current purposes for the new India assessment programme

The concept note prepared for the conference sets out the purposes of the new assessment programme linked with the National Curriculum Framework are several and include:

The overall development trajectory of the child. This implies assessment over time and across all curricula domains (page 1)

The creation of credible feedback on the extent to which the system has been successful in imparting education that prepare children for meaningful and productive life (page 1)

To build on the learners' ability to draw upon and construct their own knowledge to develop their capacities in relation to the environment around them, both physical and social... provide opportunities to try out, to manipulate, to make mistakes and undertaken self correction for better learning (page 1)

To improve the teaching learning process and materials (page 2)

To review the objectives identified for different school stage s by assessing the extent to which the capabilities of learners have been developed (page 2)

To provide a comprehensive report that certifies the completion of a course of study providing information regarding the quality and extent of learning (page 2)

To assess 'attitude to learning, interest and the ability to learn independently as well as achievements in specific subjects (page 2)

To provide learners with feedback and set standards for them to strive toward continuously (page 3)

To provide reference points for parents and to the system at large about the quality of learning, development and progress of learners at a particular stage of school education (page 3)

To provide feedback to the system (page 3)

To empower the child to undertake self-evaluation, with the teacher as facilitator (page 3)

The same concept paper outlines four purposes that new forms of assessment are *not* intended to serve. The purpose of new forms of learning assessment is:

Not to motivate children to study under threat

Not to identify or label children as 'slow learners' or 'bright students' or 'problem children'. Such categories segregate children placing the onus for learning solely on them, and detract from the role and purpose of pedagogy

Not to identify children who need remediation (this need not wait for formal assessment; it can be directed by the teacher through the course of the teaching and attended to as part of pedagogic planning, through individualised attention)

Not to diagnose learning difficulties and problem areas – while broad indications about conceptual difficulties can be identified via evaluation and formal testing, diagnosis requires special testing instruments and training. It is also specific to foundational areas o literacy and numeracy, and is meant for subject areas. (page 3)

Innovations elsewhere

The conference invited experts on assessment to learn from experiences worldwide. Interestingly, none of the systems presented would claim to be able to meet all the purposes defined above within a single assessment system. Most of the systems and programmes presented at the conference had been designed to provide information for system managers and national policymakers. They had not been designed to provide information for teachers for the improvement of their teaching and the learning of the students who have been assessed. They support the needs of those who monitor standards and hold systems to account. They meet some but not all of the objectives for assessment stated in the concept paper. For example they would not claim to provide information that assisted the learning of the assessed learners, to improve their learning materials or to empower the child to undertake self-evaluation.

For example, the Programme for International Student Assessment (PISA), presented at the conference by Dr Nugaan Yulia Wardhani Siregar, was launched by the Organisation for Economic Co-operation and Development to

monitor the outcomes of education systems in terms of student achievement in a regular basis and within an internationally accepted common framework. It aims to provide a new basis for policy dialogue and for collaboration in defining and implementing education goals, in innovative ways that reflect judgements about the skills that are relevant to adult life. (OECD, 2004, foreword)

PISA focusses on learners who are approaching the end of the compulsory cycle of education (defined in the participating countries as 15-16 years). Assessment content is not tied to the structure and content curricula of participating countries. It reflects content but goes beyond a mastery of techniques and skills conventionally taught at school. Rather PISA assesses how this knowledge might be used outside school to address real-life problems. For example in mathematics PISA starts with a concept of mathematical literacy that may not appear in any single national curriculum framework. Negotiated among the participating countries, mathematical literacy is defined as the

capacity to identify and understand the role that mathematics plays in the world, and to make well-founded judgements and to use and engage with mathematics in ways that meet the needs of that individuals life as a constructive, concerned and reflective citizen (OECD, 2003 quoted in OECD, 2004).

PISA assesses knowledge and skills along the three dimensions of mathematical content, processes and contexts. Content dimensions are fourfold: space and shape,

change and relationships, quantity and uncertainty. In recognition of different content emphases of national curricula, results are reported separately for the four dimensions.

PISA is not designed for the primary cycle. It is not tied to a national curriculum. It provides feedback to whole-system policymakers about the preparedness for life outside school of young people approaching the end of the compulsory cycle. PISA is not intended to provide feedback to teachers or individual learners.

The conference also learned from Professor Beatrice Avalos about *Sistema de Medicion de Calidad de la Educacion* (SIMCE). This is the quality of education assessment system implemented in Chile since 1988 for the basic system of education (6-13 years) and from 1992 for the intermediate (14-17 years). SIMCE's objectives are to evaluate performance of the education system and to provide feedback information to different levels (central, regional, provincial, community and institutional) to aid decision making about economic resources, technical support, supervision and plans for remedial action (Olivares, 1996). Like PISA, SIMCE focuses on feedback to whole-system policymakers. It is not intended to provide feedback to individual teachers and learners. Unlike PISA, the SIMCE assessments derive from the national curriculum. Professor Avalos explained how SIMCE information about school–level performance was intended to help parents choose schools linked with a voucher system for payment of school fees. Professor Avalos also explained how the system had had little effect on teaching practices.

In England too we have seen how difficult it is to combine a wide range of assessment objectives within a single and comprehensive reform. The national curriculum assessment programme in England, involving assessment of performance across the core subjects of the national curriculum at ages 7, 11, 14 and 16, was intended

to measure the performance of pupils against the national curriculum; to provide accountability data for schools and local education authorities so as to raise standards or performance; and to support the teaching-learning process. (Broadfoot and Gipps, 1996, p.138)

Implementation of the scheme resulted in several modifications resulting from tensions inherent in the competing assessment purposes. Throughout its implementation, the technical requirements of the national assessment reform for ensuring reliability and comparability have been in tension with those ensuring validity in terms of curriculum objectives. The two general functions of assessment – formative and assessment – were difficult to reconcile within one system. The original conception of the National Assessment programme as one that could fulfil the diagnostic, formative, summative and system evaluation/monitoring purposes of assessment was far too ambitious. In practice 'assessment for measurement purposes has triumphed over assessment for the support of learning itself' (Broadfoot and Gipps, 1996. page 145).

Assessment fulfils many purposes and the needs of many stakeholders. To date no single assessment system has been designed to meet all purposes. Were they to follow the implementation of reforms closely, policy-makers and politicians would see that, in practice, one set of purposes come to be emphasised while another is undermined.

Different types of assessment are required for different purposes. Assessment must be *fit for purpose*.

The Current Indian Reform

The conference opened with the ambition of creating a readable, usable source book on learning assessment at the primary level for the 'average primary school teacher'. The focus on the average teacher is laudable. But what is 'average' in the Indian context?

An outsider is struck by the many challenges faced by the average Indian teacher, especially in the primary classes from I to V. In contrast to most other systems in the world, the proportion of schools with very few teachers is extremely high. Recent data from the Indian District Information System for Education (DISE) indicates that in primary schools with Classes I –V 61% had two or less teachers while almost 80% had three or less. In rural areas where the vast majority of teachers are working, 63% had two or less teachers and 82% three or less. Even in urban areas just under one third of schools (32.3%) have two or less teachers and almost half (47.78%) have three or less (Mehta, 2006, table B23, p. 64). Yet the primary school curriculum is organised around the assumption that students are organised and taught in five separate classes. Given the numbers of teachers per school (and the fact that few teachers appear to teach double shifts), one can only conclude that teachers divide the classes between them and teach classes in combination (unless, that is, they cope by ignoring some classes for some of the time).

To its credit, the National Curriculum Framework sets common objectives for some class combinations. In the subject of English for example the curriculum objectives for Classes I and II are common. So too for Classes III, IV and V. In mathematics the syllabus is organised in 'five very natural streams flowing from Class I to Class V, which overlap very often, not only with each other but also with themes developed in other subjects that are being learnt simultaneously (NCERT, 2006). Hence the concepts of 'shapes and spatial understanding' and 'number operations' appear in the syllabus for each Class at increasing levels of difficulty. Environmental studies which starts at Class III is woven around six common themes for Classes III-V – family and friends, food, shelter, water, travel and things we make and do.

In principle then the curriculum structure and content is amenable to some reorganisation that would support the multi-classed teacher in its delivery, without compromising overall curriculum objectives. Currently there is no recognition in the NCF documentation of the curriculum implementation reality facing the multi-class teacher. Yet the national figures suggest that the average Indian primary school teacher is a multi-class rather than single class teacher.

The design of assessments to support learning in a multi-classed setting requires two lines of action. First, the NCF needs to be translated into multiple formats that support the work of a one-teacher, two-teacher, three teacher and four teacher school. Second, the role of assessment in supporting learning in these settings – which typically involves more self-learning and peer learning than is found in the single class setting – needs to be considered carefully and designed in relation to learning objectives. In so doing the multiple ambitions for the new assessment reforms will need to be

reviewed and choices made. Assessment that supports the learning of primary class children needs to be linked closely with the content of materials being learned and their learning objectives. If assessment is to have any chance of feeding back to the learning process at the level of assessed learner, then feedback needs to be fairly immediate. Assessments for the purpose of certification, selection, the monitoring of standards and accountability need to be designed separately. One assessment system will not serve all purposes.

References

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