

### Executive Summary

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Assessment is for *teaching*. If assessment information is used appropriately, students will learn, teachers will be able to monitor learning, and students will have the opportunity to engage with relevant learning opportunities.

#### **Our framework: Developmental assessment, teaching and learning**

A developmental learning approach to assessment and instruction is designed to move the student's learning forward along a path of increasingly complex knowledge, skills, and abilities. This approach allows teachers to focus on students' readiness to learn, scaffolding and building upon their current stage of learning. It is opposed to a deficit approach to assessment and intervention, which focuses on describing, and then attempting to remediate the things that students cannot do.

We conceptualise developmental learning as a matter of acquiring qualitatively and quantitatively *more* knowledge and skills. Assessment of this learning is about measuring the degree of a skill achieved by a student. Progress towards higher stages of skill reflects new knowledge, linked to existing knowledge, and deeper understandings are developed from, and take the place of, earlier understandings. Thus, learning can be described and mapped as progress in the direction of qualitatively richer knowledge, higher-order skills, and deeper understandings.

This concept of developmental assessment and learning that underpins ACTRC assessment projects arises from an amalgamation of theory and practice from three scholars—Lev Vygotsky, Robert Glaser, and Georg Rasch.

Vygotsky conceptualized a “zone of proximal development” which defines the distance between the actual developmental stage as determined by independent activity and the stage of potential development as determined by action under adult guidance or in collaboration with more capable peers (Vygotsky, 1978).

Glaser described a theoretical framework of assessment interpretation known as “criterion-referenced interpretation.” Underlying this concept is

the notion of a continuum of knowledge acquisition ranging from no proficiency to high proficiency. Criterion-referenced interpretation of assessment data describes an individual's performance in terms of the tasks performed or competence displayed, and was created to encourage the development of procedures whereby assessments of proficiency could be referred to stages along progressions of increasing competence (Glaser, 1981).

Rasch (1980) formalised the measurement and location of students and test items together on a common scale. Using statistical programs to analyse student achievement data, estimates of student ability and task difficulty can be obtained.

Combining the insights of these three theories helps us understand assessment scores in terms of performance criteria that cluster at a stage of competence. If these are interpreted in a Rasch-like manner, they can indicate a point of intervention where learning can be ‘scaffolded’ for a student or groups of students.

The combined theories allow teachers' assessment practices to move away from the interpretation of a test score as a piece of summative information from the past or as a means of comparing students directly with each other. Rather, interpretation of student test scores becomes the starting point for planning and instruction.

The use of a developmental framework to assess and monitor learning helps us to think about student proficiency in a particular way. It directs our thinking and planning to the following questions:

- What does this student (or group of students) know how to do? What skills and understanding has this student already mastered? How can the student and teacher use this foundation to move forward to a deeper and richer understanding?
- What is this student (or group of students) likely to learn next? What is the student currently ready to learn? What sorts of skills and knowledge is the student likely to be able to demonstrate with the support of a more able peer or teacher? To this end, what goals or targets should be set for the student's learning?

## Our definition of assessment

We define assessment as a two-part process. The first is the collection of data and the second is the interpretation and its transmission. The first is based on the purpose for which the data is collected; the second is the audience for the information and the information needs of those audiences.

## The Philippine context

The Department of Education's National Assessment Framework that goes with the K to 12 Curriculum (DepEd, 2013) includes assessment, in the formal delivery system, at Kindergarten, Grade 1, Grade 3, Grade 6, Grade 8, Grade 10, and Grade 12. For the most part, this framework makes use of summative tests aimed at judging the merit of a program or practice, with the school system being the primary audience for the information. Data reported are used for policy formulation and evaluation.

The University of Melbourne study supported by AusAID (Care & Griffin, 2012) and a mapping of K to 12 assessment needs completed by SEAMEO Innotech for USAID (2013) identified a range of issues that should form the basis of an extensive research agenda for studies in assessment.

Recommendations from the ARC study include:  
Replace the use of summative tests in classrooms with formative assessment approaches

- Modify the national assessment program to include a combination of item types
- Train teachers in the use of a wider range of evidence of student learning than just test scores
- Develop assessment techniques and strategies that offer the opportunity to assess enabling skills in the sequence of the subject(s)
- Develop rubrics for assessment needs coincident with curriculum writing

The SEAMEO Innotech mapping study identified general assessment needs (in addition to specific ones) in relation to the K to 12 curriculum implementation, among which are:

- Train pre and in-service teachers on formative assessment
- Build capacity of local language experts on test item writing
- Develop a standard diagnostic tool to assess reading and writing competencies at the secondary level

## Role of ACTRC

The role of ACTRC within the assessment landscape of Philippine basic education is to complement the

summative nature of system-wide testing and replace the prevalent use of summative testing in classrooms with formative assessment approaches that can be used for improving the teaching and learning process at a teacher level. Using the developmental learning framework for assessment laid out in the beginning of this paper, ACTRC can work with teachers to develop models of formative testing across disciplines that enables them to target instruction to students' zones of proximal development.

Additionally, the assessment approaches to be developed can illustrate procedures and formats for collection of assessment data, metrics and coding systems for interpretation, and ways of reporting results. Likewise, assessment systems to be developed by ACTRC can demonstrate how technology can be used to minimise the problems presented by elements such as class size, which was identified as a major issue in a study on assessment practices (Nava & Hermosa, 2013).

Capacity building of teachers and other stakeholders is one of the mandates of ACTRC. The explicit integration of assessment with pedagogy and curriculum is one of the primary targets for influencing the practices of educators at both policy and classroom levels. Through a sequence of professional development, application in research activities in the classroom, and production of assessment and reporting materials, capacities of individuals in the classroom, in policy and academia will be drawn upon and enhanced.

## References

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