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## **Modern Student Evaluation Practices**

### Introduction

The last decades have witnessed reformed visions of curriculum, new conceptualizations of learning theories and accompanying assessment paradigms. Educational assessment has undergone a significant paradigm shift from a testing culture to an assessment culture (Gibbs, 2012). A deep transformation occurred away from psychometrics to a new conceptualization based on changing conceptions of learning, of evaluation, and what counts as student achievement. Initially, assessment had an anxiety evoking impact on students and teachers, leading to competition, de-motivation, ranking, and labeling. This needed to change to enable all students to believe that they can succeed in learning and they all must be confident in their expectation of success to be willing to take the risk of trying. Assessment practices had to be replaced with those that engender hope and sustained effort for all students.

The following sections will outline recent trends in educational assessment and the emerging role of assessment in a learning culture

with its broader conceptualization of what is assessment and how it is practiced. Key elements in the success of the new model is formative assessment and role of feedback, therefore the paper will describe characterizing features of formative assessment, its processes, benefits, challenges, and the role of teachers in these processes.

### Recent Trends in Educational Assessment

Educational assessment in the 21<sup>st</sup>. century witnessed remarkable changes. The ones with highest impact revolved around following practices and trends:

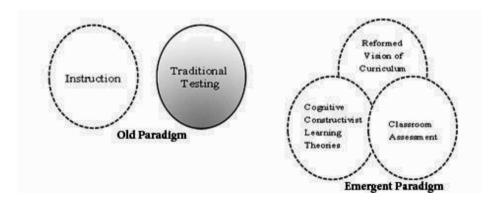
- Technological advances resulted in greater speed and accuracy of processing of high stakes tests, in addition to innovations like computer adaptive testing (CAT), use of simulations in assessment and others.
- Increased use of authentic and complex performance-based assessment to better reflect higher order learning outcomes.
- Increased interest in International testing and benchmarking with the spread of international tests like TIMSS, PIRLS, PISA, etc and their use as proxy indicators for quality in education.
- Call for public reporting and educational accountability especially for high-stakes testing.
- Use of formative assessment.
- Assessment of students with disabilities, taking into account social and cultural diversity.
- Professional support and development of teacher capacities in assessment.

# Role of Assessment in a Learning Culture

Changes in conceptualization of assessment and its role were greatly affected by changes in what is learning and how best to foster it. The belief that learning occurs by accumulating atomized bits of knowledge; that it is tightly sequenced and hierarchical; and that tests are isomorphic with learning (tests = learning), was gradually replaced

with new belief that learners construct knowledge and understanding within a social context and that new learning is shaped by prior knowledge (Shepard, 2000). Figure 1 graphically represents paradigm changes in views of instruction.

Traditionally, emphasis was on aassessment OF learning, i.e. Process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are, where they need to go, and how best to get there (Figure 2). With the emergent paradigm, the emphasis has moved to assessment AS learning and assessment FOR learning (Figure 3) where assessment makes up a large part of the school day as part of the learning process and not only in the form of tests. In assessment For learning, results of student assessment is evaluated against set standards or set expectations and goals and use is made of them to provide information for teachers to help them in instructional planning and what are the next steps. In assessment As learning, results are made use of by students to self-monitor their progress and adjust their learning methods to meet personal goals and target instructional goals (Earl, 2013). Table 1 summarizes features of each type of assessment.

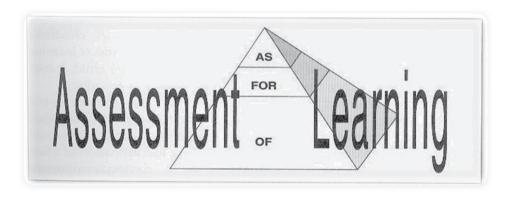


**Figure 1.** An historical overview illustrating changing conceptions of curriculum, learning, and measurement (Adapted from Shepard, 2000).

Table 1. Key Features of Assessment Types\*

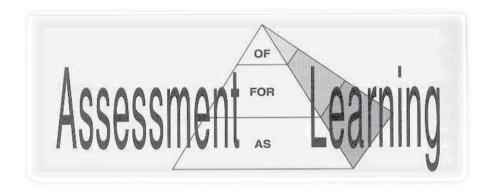
	Purpose	<b>Reference Points</b>	Key
Approach	_		Assessor
Assessment of learning	Judgments about placement, promotion, credentials, etc.	Other students, standards, or expectations	Teacher
Assessment <i>for</i> learning	Information for teachers' instructional decisions	External standards, or expectations	Teacher
Assessment <i>as</i> learning	Self-monitoring and self- correction or adjustment	Personal goals and External expectations	Student

<sup>\*</sup>Earl, 2013.



**Figure 2**. Traditional Assessment Paradigm. Assessment OF Learning (AOL) (Earl, 2013).

The ideal would be to adopt an assessment system that documents what students have achieved (AOL); helps to identify how to plan instruction (AFL); and engages students and teachers in worthwhile educational experiences (Aas L).



**Figure 3**. Reconfigured Assessment Paradigm. Assessment AS Learning (AasL) (Earl, 2013).

### **Educational Assessment: A Broader Definition**

To be compatible with and to support the social-constructivist model of teaching and learning and above mentioned paradigm shifts, a broader and newer definition of what is assessment needs to be adopted (Gibbs, 2012). Classroom assessment must be integrated with learning, used as part of the learning process, and it must change in two fundamentally important ways. First, its form and content must be changed to better represent important thinking and problem solving skills in each of the disciplines. Second, the way that assessment is used in classrooms and how it is regarded by teachers and students must change (Shepard, 2000).

Modern assessment follows the **fitness for purpose principle**. Same assessment cannot be used for a range of purposes as each is more useful and valid for a type of purpose and goal. As assessment procedures have their strengths and limitations, need to resort to using continuous multiple assessments thus leading to fairness and more reliable judgments, at same time reducing the stakes associated with any single one assessment.

Accordingly, modern assessment incorporates the following characteristics:

- Assessment should be against clear performance standards that should be shared with students. Students should be encouraged to self-monitor their work against these standards. Subsequent constructive feedback to students should emphasize individual student mastery and progress in relation to standard and/or previous performance, rather than comparison with peers.
- It incorporates quality tasks that encourage thinking, engage students, and are equitable. It includes concrete tasks that are within experience of students, are presented clearly, relevant to current conditions, and presented in non-threatening conditions.
- It is scored by trained teachers/raters who need to understand scoring categories, and use clear rubrics and exemplars. Scoring should provide multiple levels of success so that through repeated testing students can strive for higher levels of performance. Need to move away from notion of a single score or statistic and look at other forms of describing achievement including 'thick' descriptions of achievement and profiles of student performance.
- Teacher formative assessment is a key component of modern assessment. It can be interactive in order to fully engage students, support or scaffold learning process, and evaluates performance in a range of contexts. It includes observation and questioning, and provides feedback in relation to primary traits.
- Teachers have to be well in command of subject matter they teach to be able to assess it.
- Educational assessment should be low stakes and not high stakes, otherwise teachers will teach to the test rather than to the domain or higher levels. With high stakes there is loss of selfesteem and motivation.

### **Formative Assessment**

## **Definition**

Formative assessment exemplifies the current classroom culture of integrating teaching, learning and assessment. It is a collaborative process of continuous assessment using students' regular work rather than formal examinations. Evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers to make decisions about next steps in instruction (William, 2011). It takes place during instruction, provides feedback to both teachers and students, based on which correctives and instructional adjustments are done. It is characterized by absence of evaluation as its purpose is to adapt teaching to current and future needs of students.

The primary purpose is one of the following:

- identify strengths and weaknesses,
- assist in planning subsequent instruction,
- aid students in guiding their own learning and gaining selfevaluation skills,
- foster increased autonomy, engagement, and responsibility on part of student.

#### Processes

The key instructional processes involved in formative assessment are (Broadfoot, et. al, 2002):

- establishing where learners are in their learning
- establishing where they are going
- establishing what needs to be done to get there.

Figure 4, outlines formative assessment cycle and processes involved. Assessment is conducted during instruction using different approaches and sources (student, teacher, and peers), based on results specific immediate feedback is provided to students and instructional correctives are adopted by the teacher and the students.

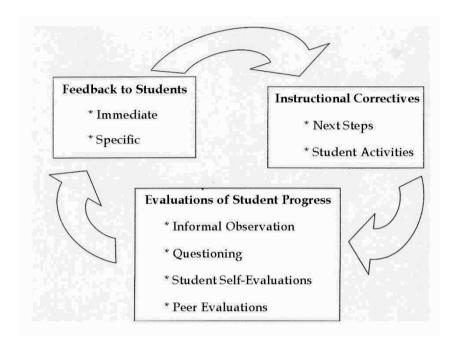


Figure 4. Formative assessment cycle. (McMillan, 2007).

## Characteristics and key elements of formative assessment

The goal of formative assessment is for students to develop their own "learning to learn" skills. To achieve the above goal and for a successful practice of formative assessment, several key elements and characteristics are required mainly on the part of teachers (Andrade & Cizek, 2010).

- Teachers need to change the culture of their classrooms, putting the emphasis on helping students feel safe to take risks and make mistakes and to develop self-confidence. Children who feel safe to take risks are more likely to reveal what they do and don't understand
- Teachers make the learning process more transparent by establishing and communicating clear specific learning goals, tracking student progress, and in some cases adjusting goals to

meet student needs. Specific grading criteria or rubrics for evaluating goal attainment are shared with students.

- Teachers focus on goals that represent valuable educational outcomes with applicability beyond the learning context.
- Teachers vary instruction methods to meet the range of student needs. They use different approaches to explain concepts, provide options for independent work, and encourage students to work with their peers.
- Teachers use a mix of approaches to assess student understanding. Frequent assessment is used including peer and self-assessment embedded within learning activities.
- Teachers provide verbal or written non-evaluative feedback on student's work. Most effective feedback is timely, specific, related to learning outcomes, and tied to explicit criteria. Students are provided with opportunities to revise, improve work product and deepen understanding.
- Teachers model effective learning behavior, teach students self and peer-assessment skills, and help students better understand their own learning and reflect on it.
- Teachers help students in developing emotional competencies and build confidence and thus take increasing responsibility for their own learning and progress and are actively involved in teaching learning process.
- It is important to focus students' attention on mastering tasks, rather than on competition with peers.

# Role of Feedback

Feedback is vital to formative assessment, but to be effective it needs to:

 Be timely and specific, and include suggestions for ways to improve future performance. Feedback that is non-specific (e.g.

- "needs more work") or "ego-involving", even in the form of praise, may have a negative impact on learning.
- Be tied to explicit criteria regarding expectations for student performance, making the learning process more transparent, and modeling "learning to learn" skills.
- Include specific suggestions for how to improve future performance and meet learning goals, i.e. prospective.
- "Scaffold" information— that is, to provide as much or as little information as the student needs to reach the next level.
- Be focused on the learning process rather than the final product and tracks progress over time.
- Attribute achievement to effort as opposed to ability.
- Be descriptive rather than evaluative, as research evidence found it more useful for improvement.

## Role of Teachers in Formative Assessment

Formative assessment places a heavy burden on teachers, but their role is central to its success. Teachers play different roles while conducting it ranging from mentoring, to guiding and modeling, and to reporting and directing. Table 2 below summarizes different roles exercised by teachers and the goals of each.

Table 2. Role of Teachers in Formative Assessment\*

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Role	Goal		
Teacher as mentor	■ Provide feedback and support to each		
	student		
	■ Work with students to develop clear		
	criteria of good practice		
	• Provide an environment where it is safe		
	for students to take chances and where		
Tanahar as madal	support is available.  • Model and teach the skills of self-		
Teacher as model	assessment		
	Provide exemplars of quality work that		
	reflect outcomes		
Teacher as guide	<ul> <li>Gather diagnostic information to lead the</li> </ul>		
	group through the work at hand.		
	■ Guide students in setting goals and		
	monitoring progress		
Teacher as accountant	<ul> <li>Maintain records of student progress and achievement</li> </ul>		
	<ul><li>Monitor students' meta-cognitive</li></ul>		
	processes as well as their learning		
Teacher as reporter	■ Report to parents, students, and the		
	school administration about student		
	progress and achievement		
Teacher as program	■ Provide regular and challenging		
director	opportunities to practice so that students		
	can become proficient		
	<ul> <li>Make adjustments and revisions to</li> </ul>		
	instructional practices		

<sup>\*</sup> Earl 2013.

## Benefits of Formative Assessment

Research has proven that formative assessment has been highly effective and gains associated with it were among the largest ever reported for educational interventions. If replicated across countries, it would result in an "increase in the score of an "average" ranking, as measured by the international Trends in Mathematics and Science Study (TIMSS) to ranking among the top five countries". Main effectiveness was reported in the following domains:

- Raising the level of student attainment especially for previously underachieving students thus increasing equity of student outcomes. Attendance and retention of learning also improved, as well as the quality of students' work.
- Improving students' ability to learn and developing invaluable skills for lifelong learning by
  - o emphasizing the process of teaching and learning,
  - o involving students as partners in that process,
  - obuilding students' skills at peer-assessment and self-assessment to judge the quality of their own and their peers' work against well-defined criteria.

# Challenges/Inhibiting Factors to the Use of Formative Assessment

Despite the effectiveness and positive outcomes associated with formative assessment, yet its practice faces many challenges, including

- There might be too many logistical barriers to making formative assessment a regular part of teaching practice, such as large classes, extensive curriculum requirements, and the difficulty of meeting diverse and challenging student needs.
- Teachers' tendency to assess quantity of work and presentation, rather than quality of learning (Black & William, 1999).
- Greater attention given to marking and grading, however, much use of it lowers students' self-esteem.

- A strong emphasis on comparing students with each other which demoralizes less successful students (Black & William, 1999).
- Teacher feedback to students often serves social and managerial purposes rather than to help students to learn more effectively.
- Resources. Formative assessment needs commitment of resources to support professional development, investment of teacher time as they need time for planning, administration and feedback, in addition to costs for supplies, space, etc.
- Preparation. Pre-service and in-service training for educators must evolve to provide two different competencies, skills required for developing and for interpreting classroom-based formative assessments (Andrade & Cizek, 2010).
- Time. Re-allocation of time and effort to support all formative assessments activities (Andrade & Cizek, 2010).

### Conclusion

Modern educational assessment is an integrated part of teaching and learning, and is a meaningful, contextualized, and purposeful activity that focuses on demonstrations of what students know and can achieve, rather than on students' shortfalls in knowledge and failure to achieve. Such practices will raise students' expectations of success and will engender hope and sustained efforts on their part. It involves a deep transformation in the classrooms of what is learning, evaluation, and what counts as achievement. Close collaboration is needed between all stakeholders (administration, teachers, parents, and students) to realize this paradigm shift, in addition to sustained effort, planning, professional development, and resources. However, the outcomes are worth the effort as evidenced by extensive research findings.