

## MEASUREMENT, ASSESSMENT AND EVALUATION

### Measurement:

In general, the term measurement is used to determine the attributes or dimensions of object. For example, we measure an object to know how big, tall or heavy it is. In educational perspective measurement refers to the process of obtaining a numerical description of a student's progress towards a pre-determined goal. This process provides the information regarding how much a student has learnt. Measurement provides quantitative description of the students' performance for example Rafaih solved 23 arithmetic problems out of 40. But it does not include the qualitative aspect for example, Rafaih's work was neat.



### Testing:

A test is an instrument or a systematic procedure to measure a particular characteristic. For example, a test of mathematics will measure the level of the learners' knowledge of this particular subject or field.



### **Assessment:**

Kizlik (2011) defines assessment as a process by which information is obtained relative to some known objective or goal. Assessment is a broad term that includes testing. For example, a teacher may assess the knowledge of English language through a test and assesses the language proficiency of the students through any other instrument for example oral quiz or presentation. Based upon this view, we can say that every test is assessment but every assessment is not the test.



### **Evaluation:**

According to Kizlik (2011) evaluation is most complex and the least understood term. Hopkins and Antes (1990) defined evaluation as a continuous inspection of all available information in order to form a valid judgment of students' learning and/or the effectiveness of education program. The central idea in evaluation is "value." When we evaluate a variable, we are basically judging its worthiness, appropriateness and goodness. Evaluation is always done against a standard, objectives or criterion. In teaching learning process teachers made students' evaluations that are usually done in the context of comparisons between what was intended (learning, progress, behaviour) and what was obtained.



Some corresponding example for test, measurement and evaluation indicating inter-relationship among them some corresponding example for Test Measurement Evaluation.

### **Test.**

- i) Question paper of written examination.
- ii) Questionnaire of surveys
- iii) Weighting machine or Thermometer etc

### **Measurement**

- i) Answer book written by students are given scores by the examiner. individual paper.
- ii) Scoring by the researcher
- iii) Weight in kg. temperature in degrees etc.

### **Evaluation**

- i) Fail/Pass in individual paper
- ii) Assigning individual values bad, good, very good, excellent, to each answer.
- iii) Assigning status (above or below average etc. to each measurement).

## **Characteristics of Classroom Assessment**

### **1. Effective assessment of student learning begins with educational goals.**

Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values/ goals should drive not only what we choose to assess but also how we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.

### **2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.**

Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore, firm base for improving our students' educational experience.

**3. Assessment works best when it has a clear, explicitly stated purposes.**

Assessment is a goal-oriented process. It entails comparing educational performance with educational purposes and expectations -- those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus towards clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.

**4. Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.**

Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way -- about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

**5. Assessment works best when it is ongoing not episodic.**

Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress towards intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

**6. Assessment is effective when representatives from across the educational community are involved.**

Student education is a campus-wide liability, and assessment is a way of acting out that responsibility. Thus, while assessment attempts may start small, the aim over time is to involve people from across the educational community. Faculty plays an important role, but assessment's questions can't be fully addressed without participation by educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better informed attention to student learning by all parties with a stake in its improvement.

**7. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.**

Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to collect data and return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

**8. Through effective assessment, educators meet responsibilities to students and to the public.**

There is a compelling public stake in education. As educators, we have a responsibility to the public that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation -- to ourselves, our students, and society -- is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement. (American Association for Higher Education; 2003)

### **Principles of Classroom Assessment**

Hamidi (2010) described following principles of classroom assessment.

**1. Assessment should be formative**

Classroom assessment should be carried out regularly in order to inform on-going teaching and learning. It should be formative because it refers to the formation of a concept or process. To be formative, assessment is concerned with the way the student develops, or forms. So it should be for learning. In other words, it has a crucial role in "informing the teacher about how much the learners as a group, and how much individuals within that group, have understood about what has been learned or still needs learning as well as the suitability of their classroom activities, thus providing feedback on their teaching and informing planning. Teachers use it to see how far learners have mastered what they should have learned. So classroom assessment needs fully to reach its formative potential if a teacher is to be truly effective in teaching.

## **2. Should determine planning**

Classroom assessment should help teachers plan for future work. First, teachers should identify the purposes for assessment – that is, specify the kinds of decisions teachers want to make as a result of assessment. Second, they should gather information related to the decisions they have made. Next, they interpret the collected information—that is, it must be contextualized before it is meaningful. Finally, they should make the final, or the professional, decisions. The plans present a means for realizing instructional objectives which are put into practice as classroom assessment to achieve the actual outcomes.

## **3. Assessment should serve teaching**

Classroom assessment serves teaching through providing feedback on pupils' learning that would make the next teaching event more effective, in a positive, upwards direct. Therefore, assessment must be an integral part of instruction. Assessment seems to drive teaching by forcing teachers to teach what is going to be assessed. Teaching involves assessment; that is, whenever a student responds to a question, offers a comment, or tries out a new word or structure, the teacher subconsciously makes an assessment of the student's performance. So when they are teaching, they are also assessing. A good teacher never ceases to assess students, whether those assessments are incidental or intended.

## **4. Assessment should serve learning.**

Classroom assessment is an integral part of learning process as well. The ways in which learners are assessed and evaluated strongly affect the ways they study and learn. It is the process of finding out who the students are, what their abilities are, what they need to know, and how they perceive the learning will affect them. In assessment, the learner is simply informed how well or badly he/she has performed. It can spur learners to set goals for themselves. Assessment and learning are seen as inextricably linked and not separate processes because of their mutually-influenced features. Learning by itself has no meaning without assessment and vice-versa.

## **5. Assessment should be curriculum-driven**

Classroom assessment should be the servant, not the master, of the curriculum. Assessment specialists view it as an integral part of the entire curriculum cycle. Therefore, decisions about how to assess students must be considered from the very beginning of curriculum design or course planning.

## **6. Assessment should be interactive**

Students should be proactive in selecting the content for assessment. It provides a context for learning as meaning and purpose for learning and engages students in social interaction to develop oral and written language and social skills. Assessment and learning are inextricably

linked and not separate processes, Effective assessment is not a process carried out by one person, such as a teacher, on another, a learner, it is seen as a two-way process involving interaction between both parties. Assessment, then, should be viewed as an interactive process that engages both teacher and student in monitoring the student's performance.

#### **7. Assessment should be student-centered**

Since learner-centered methods of instruction are principally concerned with learner needs, students are encouraged to take more responsibility for their own learning and to choose their own learning goals and projects. Therefore, in learner-centered assessment, they are actively involved in the process of assessment. Involving learners in aspects of classroom assessment minimizes learning anxiety and results in greater student motivation.

#### **8. Assessment should be diagnostic**

Classroom assessment is diagnostic because teachers use it to find out learners' strengths and weaknesses during the in-progress class instruction. They also identify learning difficulties. If the purpose of assessment is to provide diagnostic feedback, then this feedback needs to be provided in a form – either verbal or written – that is for learners to understand and use.

#### **9. Assessment should be exposed to learners**

Teachers are supposed to enlighten learners' accurate information about assessment. In other words, it should be transparent to learners. They must know when the assessments occur, what they cover in terms of skills and materials, how much the assessments are worth, and when they can get their results and the results are going to be used. They must also be aware of why they are assessed because they are part of the assessment process. Because the assessment is part of the learning process, it should be done with learners, not to them. It is also important to provide an assessment schedule before the instruction begins.

#### **10. Assessment should be non-judgmental**

In the classroom assessment, everything focuses on learning which results from a number of such factors as student needs, student motivation, teaching style, time on task, study intensity, background knowledge, course objectives, etc. So there is no praise or blame for a particular outcome of learning. Teachers should take no stance on determining who has done better and who has failed to perform well. Assessment should allow students to have reasonable opportunities to demonstrate their expertise without confronting barriers

#### **11. Assessment should develop a mutual understanding**

Mutual understanding occurs when two people come to a similar feeling of reality. In second language learning, this understanding calls for a linguistic environment in which the teacher and students interact with each other based on the assessment objectives. Therefore,

assessment has the ability to create a new world image by having the individuals share their thoughts helpful in learning process. When learning occurs, this is certainly as a result of common understanding between the teacher and students.

### **12. Assessment should lead to learner's autonomy**

Autonomy is a principle in which students come to a state of making their own decisions in language learning. They assume a maximum amount of responsibility for what they learn and how they learn it. Autonomous learning occurs when students have made a transition from teacher assessment to self-assessment. This requires that teachers encourage students to reflect on their own learning, to assess their own strengths and weaknesses, and to identify their own goals for learning. Teachers also need to help students develop their self-regulating and met cognitive strategies. Autonomy is a construct to be fostered in students, not taught, by teachers.

### **13. Assessment should involve reflective teaching**

Reflective teaching is an approach instruction in which teachers are supposed to develop their understanding of teaching (quality) based on data/information obtained and collected through critical reflection on their teaching experiences. This information can be gathered through formative assessment (i.e., using different methods and tools such as class quizzes, questionnaires, surveys, field notes, feedback from peers, classroom ethnographies, observation notes, etc) and summative assessment (i.e., different types of achievement tests taken at the end of the term).