Educational Assessment Modern Strategies

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Abstract
This study not only highlights the Authentic Assessment as replacement of the traditional approach; but its definition, objectives, principles and characteristics are stated, too. It shows that Authentic Assessment prepares students for real life by involving them in real world situations during learning. The study also explains the most major strategies of Authentic Assessment highlighting their main advantages and the activities they entail, and it provides examples related to each of them. The study also shows that these strategies unveil multi-facets of the student personality and identifies his main achievements and the skills he acquired or developed.

Keywords: Assessment Modern Strategies, Authentic Assessment,

1. Introduction:
One of the major tasks of education is to enhance teaching quality as well as improve learning in different school stages in order to prepare the students for real world to face the increasing complexity and take part in the development process in a century characterized with an accelerating technological sophistication, information and communication revolution and globalization.

This cannot be done without outstanding teaching quality, effective teaching-learning methodology through continuous development of the competency of school and university teaching staff, particularly in the assessment and monitoring process of the student performance and achievements.

Education assessment plays a basic role in directing the teaching process, class management at school or university, enhancing the student learning and progress and improving the teaching process out comes. Assessment is one of the rapidly changing aspects of education; its philosophy, approaches, procedures, methodology and tools have recently witnessed substantial changes rendering the traditional assessment practices futile (Allam 2007.13).

It is also a systematic process entailing collecting objective valid data from many sources by various tools according to already set targets in order to attain quantitative evaluations and descriptive evidence reliable for decision makings and related decisions that have substantial impact on the learner’s performance and abilities in carrying out certain jobs or tasks (Bruke, 1992).

2. Problem of the Study and its Significance:
The traditional assessment adopts a variety of tests that may be given once or several times every school semester to get information about the students’ achievement and present it to their parents or any educational authority. Such an assessment does not positively affect education, nor can it turn out individuals who can effectively enhance the development process. This is because traditional assessment measures simple skills and concepts in worthless numbers about the student’s learning progress and by no means can identify their learning outcomes. Therefore, this study will highlight the authentic assessment, and define its strategies, the education assessment modern strategies. The significance of this study stems from the need for the educational institutions, schools and universities to adopt the authentic assessment that take a greater part in accomplishing the major goals of the educational institutions in the Arab World, such as turning out good citizens capable of engaging positively in the development process by giving priority to providing the students with cognitive and higher mental and practical performance skills through educational curricula and utilization of these skills generating genuine realistic innovations.

3. Questions of the Study:
The study will answer the following questions:
What is the authentic assessment?
What are the authentic assessment modern strategies?

4. Operational Definitions:
• Authentic Assessment: it is an evaluation that measures the student’s performance in real world situations. It involves the students in real meaningful tasks as learning activities, rather than confidential tests. They implement higher order thinking skills and compromise a wide scope of knowledge in order to crystallize judgments for decision making or solving the real world problems they face.
Assessment Modern Strategies: They are the authentic assessment strategies. In this study, they are paper and pencil, performance assessment, communication, self - review.

**Answers of the Study Questions:**

**5. Answer for the first question (What is the authentic assessment?)**

**5.1 Definition of authentic assessment**

There has been a shift from the behavioral school which emphasizes that every lesson must have clear-cut objectives to be behaviorally observed and measured to the cognitive school which focuses on what goes in the learner’s mind and the mental processes, especially the higher thinking processes as reasoning judgments, decision-making, problem solving as mental skills which enable the learner to deal with the age of information inputs and knowledge revolution. Focus in the cognitive school has been on the learning basic outcomes that cannot be manifest in a measurable behavior realized in a definite educational situation. As a result, this shift has led to a change in the assessment process which should cope with this transformation (Thomas 1998). Assessment is no longer restricted to the student’s school achievement in different topics; but it measures the various facets of personality. It endeavors to develop the student’s real life new skills, the higher mental skills, thoughts, new creative responses. More over it focuses on education processes and outcomes that enhance the student’s self-assessment. Therefore, it uses a lot of assessment strategies and tools to measure various facets of the student personality. This means that significance is given to the discovered areas in the student’s personality rather than focusing on achievement only (Schell, McAlister, Scott & Hopeful, 2000).

Therefore, authentic assessment reflects the student’s performance and measures it in realistic situations by involving the students in real meaningful tasks as learning activities rather than confidential tests. Students use higher thinking skills and accommodate a wide spectrum for judgment and decision making or solving real problems they face (Petty, 1997). This assessment not only measures the students scholastic achievements in various subjects but measure multi-facets of their personality. It encourages the student to learn and realize his role in the teaching-learning process, directs him in a way that enables him to identify his strong points and enhance them and handles the weak ones (Earl & Lafleur, 2000).

**5.2 Objectives of the authentic assessment (Burke, 1992)**

**The authentic assessment objectives are:**

- Development of real-world skills
- Development of higher order cognitive skills
- Emphasizing the processes and outcomes in the teaching process
- Reinforcing the student’s self-assessment ability
- Collecting the data showing the degree of the learners’ achievement of the learning outcomes
- Measuring various facets of the learner’s personality

**5.3 Basics of Authentic Assessment:**

When implementing the authentic assessment, a number of basics and principles, the assessment based on, should be taken into consideration (Darling, Ancess & Falk, 1995), the most important of which are:

- Authentic assessment is a realistic procedure accompanying both the teaching and learning processes and connecting them together so that every student can achieve the performance standards required, and provide instant feedback of his accomplishments to ensure adjustment of his teaching progress and continuity of the teaching process.
- The authentic assessment is concerned with the mental processes, deduction and exploration skills through engaging the students with problem solving judgment, and making decisions proper for their ages.
- Authentic assessment entails activities, tasks and study material should replicate the student real world affairs.
- Authentic Assessments measures the students’ achievements and this entails that it should cover many aspects, fields, methods and tools, with limited space for tests.
- It takes into consideration the students’ individual differences in their abilities and learning models through a variety of assessment activities that identify the achievements done by every student.
- It requires cooperation among the students, because it adopts cooperative learning.
- It is single - criterion referenced; it avoids comparing students performance.

**5.4 Characteristics of Authentic Assessment:**

It focuses on the analytical and inter-disciplinary skills, it promotes innovation and replicates real-world skills and cooperative work (Burke, 1994)

It augments the written and oral skills (Crocker, 1997), and concurs with teaching activities and their outcomes emphasizing its lasting association with learning throughout life. It also believes in merging the oral and written testing, and depends on direct measurement of targeted skills (Hamayan, 1995) and fosters diverse thinking for generalization of the possible answer as well as it seeks to enhance the student life skills, directs the curricula (Fogarty & Bellanca, 1997).
Authentic assessment requires time to administer and monitor it according to the supposed standards of implementation, teacher training and gradual introduction to the students so that it becomes familiar to them as it needs application skills (Cronin, 1993).

6. Answer to Question Two:
   What are the authentic modern strategies?
   They include the following ones:
   . Pencil and paper
   . Performance based assessment
   . Observation
   . Communication

6.1 Pencil and Paper Strategy:
This strategy is used in various tests to measure the learner’s abilities and skills in various fields. It constitutes a significant component of school assessments programs though it was used to be the traditional basic strategy (Petty, 1997). It also measures the level of the learners’ mental and performance skills implemented in the outcomes of subject taught through carefully prepared choices (Archbald & Neymann, 1988). This strategy may entail re-teaching of the material and testing it again to enable the learner show his learning new knowledge of areas he did not master before (Marzano, Peckering & Metighe, 1993). The teacher has to discuss with his students the type questions and their importance, and acquaint them with test specifications list, because the basic objective of the test is to find out students’ achievement level, not to punish them (Parton, 1999).

6.2 Performance-based Assessment:
Performance-based Assessment means that the learner displays his learning through implementing his skills in real-world situations, or in situations replicating the real situations, or conducting practical shows to display the competency level of the skills he acquired in light of the targeted teaching outcomes for accomplishments (Learning Quest, inc., 2001). Thus, in this strategy he displays his learning through providing indicators of acquisition of certain skills in certain field. Performance gives the learner the chance to use physical material like; sport tools, visual aids, fashion design, typing and using the computer, growing some plants, maintenance tasks, maps, models, samples and food production …etc.

6.2.1 The activities of this Strategy:
The performance Based Strategy can be implemented through one of the following activities (Khatti & reeve & Kane, 1998):
   . Presentation
   . Performance
   . Demonstration
   . Exhibition
   . Speech
   . Simulation/ Role playing
   . Debate
These items will not be explained because they need a separate presentation.

6.2.2 Characteristics of the Performance-based Assessment:
It has a set of characteristics (Heartel & Linn, 1996). Some of are:
   . It is a direct assessment of real-world or replicated realistic roles, because it measures the cognition, performance and emotion skills.
   . It is an integrated assessment focusing on the content, processes and outcomes.
   . It produces a positive role for the learners and requires them to collect information from a number of sources and process it.
   . It enables the learner to carry out self-evaluation during the implementation of the task.
   . The teacher and the learner are involved in setting the assessment standards and performance levels.
   . It enables the teacher and the learner to modify the assessment procedures and tasks according to the feedback by either of them.
   . It enables the learner to defend his performance with reasons and proofs.

6.2.3 Performance-based Assessment Steps:
Builders the Performance-based Assessment may follow the following steps:
   . Identify clearly of the purpose of assessment
   . Identify the specific outcomes to be assessed.
   . Identify what to be measured as cognitive, emotional, social and performance skills
   . Ranking the outcomes according to priority and significance
   . Write the final list of the skills and processes to be measured.
. Select the proper assessment skills corresponding to the outcomes.
. Determine duration of the test
. Decide the performance levels and standards
. Select the proper assessment tool as checklist, evaluation ladder
. Identify the environment and conditions of assessment performance: tools equipment and the required material.

The teacher and the learner have their own roles in this kind of assessment. For example, the teacher is required to decide the learning outcomes, prepare and the list of skills required, inform the learner of them. Moreover, the teacher should decide the type of the performance: collective or individual. He should also involve the learners in building the assessment standards and provide them with the related feedback (Popham, 1999)

The learners can positively take part in setting up the performance standards and levels of performance. They can seriously respond to the teacher’s suggestions and remarks, carry out the performance required and display learning, and take part in the assessment program by providing feedback, collecting evidence, data information relevant to the task, communication with their colleagues and accepting others opinions (Lund, 1997).

6.2.4 An example of learner’s assessment performance in charging a lead accumulator:

Subject: Practical Training? Industrial Teaching:
The required outcome: Charging a lead Accumulator

Deciding what to be measured: the learner’s ability to prepare accumulator charging solution and adding it to accumulator cells, then charging it.

Steps order according to importance:
. Preparation of the charging solution
. Testing the solution density
. Adding the solution to the accumulator cells.
. Charging the accumulator

Time needed (duration): six hours
Performance Conditions: Lead accumulator, hydrometer, distilled water, condensed sulfuric Acid, charging device, connection table, pair of tongs, plastic gloves, safety goggles, overall, mask respirator, plastic funnel.
Assessment Tool:

<table>
<thead>
<tr>
<th>Performance Standards: Things learner did</th>
<th>yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 put safety clothes: gloves, overall, goggles and mask</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 prepared the distilled water and pour it in the container</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 added the acid to water gradually with the credited proportions (64% distilled water and 36% acid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Checked the produced solution (1027/cubic centimeter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 he let solution cool to (15-20) Celsius degrees.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Used a plastic funnel for pouring the solution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Observed the solution level to the specified limit mark.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Connected the two poles of the accumulator to the charging device.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Checked the solution density during the charging process.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Checked the accumulator voltage upon completion of the charging process (12 volts).</td>
<td></td>
<td></td>
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</tbody>
</table>

6.3 The Third Strategy: The Observation:

In this study, observation means that the teacher directs his different senses towards the learner to monitor him in active situation in order to get information that help judge the learner, assess his skills, values, behavior, and ethics and way of thinking (Stiggins, 1995).

Observation is a kind of qualitative assessment in which the teacher or the education counselor, mates or the parents record verbally the his/her actions of behavior. This type of learning requires repetition of observation during a specific period of time and diversity of sources that help identification of interests and attitudes of the learners and their interaction with their mates (Bouvier & Corley, 1999).

The observation gives direct evidence of the students’ learning, what they are doing and what they can do and can’t do. This information enables the teacher to set plan for utilizing the learners abilities and start reinforcing their points of strength (Simon and Gregg, 1993).

There are several kinds of observations (Lund, 1999), the most important of which are:
. Spontaneous observation; a simple forms of observation and listening in which the observer notices the activities as they spontaneously take place in real world.
The organized Observation: it is planned and precisely controlled and its time and observation standards are already identified.

6.3.1 Observation Features:
Observation has many features (Stiggins, 1990); the most important of which are:
. It provides information that can’t be attained by other assessment Methods.
. It provides quantitative and qualitative information about the learning outcomes that greatly influence education decision making and it make comprehensive assessment possible.
. It is so flexible that it can be adapted or designed according to both the various teaching outcomes and different age stages.
. It present information about the teachers potentials in real situations and gives a chance for prediction of learner’s progress and success in his future job.
Advantages of Observation (Bruke, 1992):
. It doesn’t scare the learners. Rather it provides information which other tools of evaluation are incapable of.
. Gives chance for the teacher to create learning contexts that facilitate observations of some of learners attitudes and skills.
. Permits discovery of problem as soon as they take place.
. It provides instantaneous feedback from the learners.

6.3.2 Observation Design steps:
Observation has steps to be followed (Darling et al, 1995). They are:
. Deciding the purpose of the observation.
. Identifying the outcomes of learning to be observed.
. Deciding the practices, skills, performance indicators in a table in logical sequence.
. Designing a recording tool for the practices and indicators such as (evaluation ladder, checklist, oral evaluation ladder ...).

6.3.3 An Example of Observation:
Using an evaluation ladder to assess the range of the learner’s discussion skills, and opinion expression and persuasion in a discussion session:

<table>
<thead>
<tr>
<th>No.</th>
<th>Performance</th>
<th>degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provides proofs and reason supporting his opinions</td>
<td>Always</td>
</tr>
<tr>
<td>2</td>
<td>Differentiate the main and the secondary points of the topic</td>
<td>often</td>
</tr>
<tr>
<td>3</td>
<td>Respects and accepts others opinions</td>
<td>sometimes</td>
</tr>
<tr>
<td>4</td>
<td>Contributes in enriching the discussion</td>
<td>rarely</td>
</tr>
<tr>
<td>5</td>
<td>Uses proper gestures and face expressions</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Uses sound and formal language</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Listen well to others.</td>
<td></td>
</tr>
</tbody>
</table>

6.4 The Fourth strategy: Communication:
It means collecting information through communication activities about the learner’s progress, nature of thinking and problem solving methods. Assessment through communication is interactive and based on sending problems and receiving thoughts and information by using language (Arter, 1989) and it can be done online (Butes, 1997). It is used as a building assessment during performance and final one upon completion. It enables the teacher to know the nature of the learners thinking and their problem solving methods. It is useful for teaching planning and diagnosing the learners’ needs (Darling et al, 1995). The learners can benefit from it through feedback, developing their reflection ability.

6.4.1 Assessment Communication Steps (Popham, 1999):
. Deciding clearly the assessment objective.
. Entirely Focusing on assessment.
. Deciding the right time for assessment.
. Creating the right environment for assessment.
. Using suitable language for the learners level.
. Coining the right questions.
. Attentive listening is required during assessment.
. Preparing a tool for recording assessment information whether it is interview or conference.
. Deciding the method of data analysis.
. Giving feedback to the learner after finishing data analysis.

6.4.2 The teacher’s role in developing and using communication strategy:
Deciding the task fixing the times of monitoring progress and meetings.
Preparing guiding questions for the learners to present their opinions. 
Holding a meeting to understand the learners viewpoints and their justifications.
Giving a lesson for the learners in the area of difficulty they face.
Monitoring the learners progress and ensuring that they can hold interviews or meetings with their mates.

6.4.3 The learners Role in Developing and Using The Communication Strategy (Makzona, etal, 1993):
- positive participation in the activities
- punctuality: observing time
- Eliciting the main idea of the activity
- Flexibility in handling the activity
- Describing the strategies used in the Strategy
- Putting forward hypotheses and predictions and verifying them
- Responsibility for displaying learning
- Self-assessment

Communication strategy involves three activities each one of them is a proper application model: the interview, question- and- answer, and the conference. Of course, there are other new activities, the e-mail, face book, etc.

The three Activities (Parnel,1995):
The Meeting: a pre-planned meeting between the teacher and the learner and it enables the teacher to get information related to the learner’s thoughts and attitude toward a certain topic, and it includes questions prepared for this purpose.
The question-answer-activity: unlike the meeting, this activity consists of spontaneous questions by the teacher to get information about thoughts and attitude toward a certain topic.
The conference: it is a programmed activity involving the teacher and the learner to assess the learner’s progress in a certain project up to specific date and then decide through discussion, the oncoming steps required for improving the learner’s performance.

These three activities need more elaborations like talking about various activities like the checklist, assessment ladder, rubrics and the like, time does not permit here.

<table>
<thead>
<tr>
<th>Performance</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>the learner is ready for questions and answers prepared questions task</td>
<td></td>
</tr>
<tr>
<td>the learners question are clear-cut</td>
<td></td>
</tr>
<tr>
<td>the learner’s questions are important</td>
<td></td>
</tr>
<tr>
<td>The questions are relative to the topic</td>
<td></td>
</tr>
<tr>
<td>The learner unhesitatingly ask questions adheres to rule set when asking for to talk respect others opinions comes up with conclusions</td>
<td></td>
</tr>
<tr>
<td>Attentively listen to others.</td>
<td></td>
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</tbody>
</table>

It is clear of the foregoing discussion that authentic assessment in our schools and universities, because it emphasizes, multi-facets of the students personality besides scholastic achievement. It really connects education and teaching together. Therefore a lot of educational facets will be extremely affected if properly implemented by involving the teacher, the student, educational administration, the relationship between the entire educational organization and the parents in additions the relationship between education and labor market. For example the diverse assessment strategies will control the teaching methods and select the ones that turn out students with specific standards in various fields such as the vocational, agricultural streams, and the academic fields.

Authentic assessment with its implications on the curricula and the teaching methodology will augment the student participation curtailing the traditional role of the teacher to the extent that the teacher is no longer taking the lion’s share in explanation and discussions of lessons in class. Rather, his role will be as facilitator who directs and activates the teaching learning process. Then, student will prove that they have much more than we expect of them.
References


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