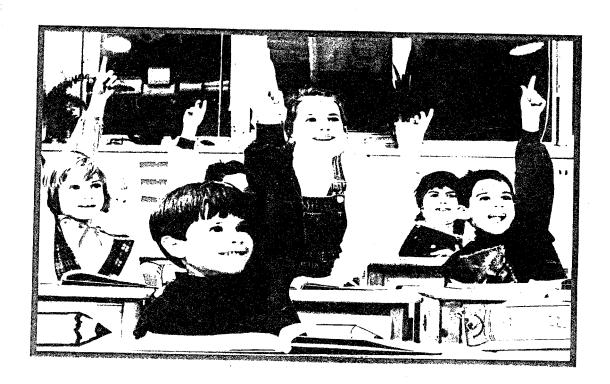
RETHINKING CLASSROOM **ASSESSMENT** " A CASE OF PARADIGM SHIFT " Dr. Yousef El-Husseiny El-Emam Professor of Mathematics Education College of Education, U.A.E University

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RETHINKING CLASSROOM ASSESSMENT "A CASE OF PARADIGM SHIFT"

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Abstract

A great deal of attention has been given recently to classroom assessment, acknowledging it as a natural component of the teaching and learning processes. Following mounting criticism of traditional exam- based assessment approach, the last two decades have witnessed a significant shift toward richer and more authentic performance – based assessments. These new emphases have been strengthened by emerging a new vision of assessment as means of helping students to become better self learners; and teachers to improve their teaching and instruction.

This paper presents an overview of the new innovations in classroom assessment and highlights a number of interrelated features that are conceived as characteristics of effective classroom assessments; and it discusses their impact on assessment practices and on professional development of the classroom teachers. The paper documents also the main features of the current assessment practices in our classrooms.

INTRODUCTION

Current educational reform emphasizes the notion that the fundamental purpose of assessment in education is to advance students' learning and inform teachers as they make instructional decisions. Assessment is conceived as of as an integral part of instruction for both students and teachers. For students, best assessment facilitates their learning by providing essential feedback about their progress, helping them identify their learning problems, and offering guidance and directions for correcting these problems (Guskey, 2001). Research indicates that making assessment an integral part of classroom practice is associated with improved student learning (NCTM, 2000 & Black & William, 1998). teachers, a full range of information is required in order to help them to establish, organize, and monitor various classroom features with the purpose of maximizing the effectiveness of their teaching. Thus, assessment should become a routine part of ongoing classroom activity rather than an interruption (NCTM 2000, p. 24).

The importance of educational goals such as higher-order thinking, reasoning, problem solving, communication, and conceptual understanding has been emphasized by reform movements. Nevertheless, research shows that the traditional paper and pencil tests fail to assess these goals; thus limiting assessment to this form results in distorted assessment (Warrent & Nisbet 2001).

A growing number of researchers and practicing teachers acknowledge the potential of performance assessments to drive instructional reform. Performance assessments require the student to carry out an activity or produce a product in order to demonstrate their knowledge and skills. They permit students to show what they can do in a real situation (Airasian 2000) The last two decades have witnessed a significant shift toward authentic/performance-based assessment and away from the reliance on tests as a unique method for collecting assessment information.

The principle aim of this article is to present an overview of the main features of this new vision and its impact on classroom practices as well as on professional development of teachers. The article is organized into three parts. First part discusses the current state of assessment practices by classroom teachers as evident from actual observation of classroom teaching. Second part summarizes a number of features that characterize a vision for effectiveness in classroom assessment. Third part presents the implications of this vision on professional development of teachers.

First: Current Assessment Practice: Evidence from the Classrooms

In UAE, as in other countries in the region, education community has witnessed much talk about reform in assessment. However, the question still remains: What type of assessment practices are currently employed by classroom teachers; and: To what extent have the current assessment practices in classroom changed?

Seventy five records of observation and interview of elementary classroom teachers were examined in order to get some evidence on current classroom assessment practices. Each record reports an observation and interview of a classroom teacher, conducted by a student teacher from UAEU College of Education as part of the requirements of the "Classroom Assessment in Elementary Education" Course. Each student teacher visited a class and observed one or two lessons in her specialty, then conducted an interview with the teacher. (Appendix A contains the guiding questions for observation and interview.) The focus of the observation was on assessment activities employed by the teacher during the lesson; the interview intended mainly to disclose the teacher's knowledge and views of assessment and its purposes. The student teacher had been prepared for conducting the observation and interview through their study of the "Assessment Course". They also received training on how to conduct their tasks.

The tasks (observations and interviews) were conducted during the first and second semester of 2004/2005 academic year, and the Spring of 2004. A record was selected for this study if it was graded "Excellent" or "Proficient". The observed teachers were of different specialty: Math, English, Science, Arabic Language, and Islamic Studies.

Results

This researcher acknowledges the limitations and problems that might affect the validity and reliability of the information gathered. However, the qualitative analysis of this information intended to be used only to provide indicators and some tentative evidence on the current status of assessment practices in classrooms. The researcher's own (field) experience and informal conversations with many school teachers tend to support the tentative evidence reported here.

First: Evidence from teachers' observations

The descriptive analysis of the teachers' observations revealed that the most frequently observed assessment techniques were: oral questioning, practicing worksheets, observation, and homework. However, serious problems with the use of these techniques have been reported.

- Oral questioning was the most common assessment techniques observed in classrooms. Teachers used this technique for both pre, and post assessment, as well as for monitoring students' learning. However, one crucial concern emerged, which is the quality, validity and reliability of the assessment information collected. First, most teacher's questions focus on factual knowledge and lower-level skills. Higher-level skills questioning was rarely observed in these classrooms. Second, it was commonly observed that only a small portion of the students dominate the questioning sessions, while many were just listening.
- Practicing worksheet was the second most common assessment technique observed in the classrooms. However, the content of the worksheet was always routine problems or typical-textbook low-level questions; nothing provided a challenging or quality task. Second thing about the use of these worksheets was the way teachers present it and the reluctance of many to follow up the students as they work. After students finish working, many teachers used to ask students to rework the solution on the blackboard, or even presented it themselves using PowerPoint or through questioning.

 Therefore, it is hardly to see how such activity could provide

teachers the opportunity to collect assessment information or to use it.

• Observers reported that many teachers used observation techniques, particularly in the case of teaching certain skills in

Arabic language and Islamic Studies. However, in most cases, teachers did not use any checklist of behaviors or certain method to record their observations.

- Homework was just a routine task that was not aligned with the teachers' instructional objectives. In fact, most homework assignments were used as summative assessment since many teachers were not able to provide summative assessment activities during the class.
- Only less than 20% of the observed teachers made changes in their teaching behaviors as a result of *feedback* from students. Most of these changes, however, took the form of "re-teaching".

Second: Evidence from Teachers' Interviews

The overall conclusion of examining teachers' interviews, as conducted by students teachers, is that the vast majority of teachers hold the conception of assessment as measurement. The teachers reported using a limited number of assessment techniques: mainly observation, oral questioning, quizzes, and tests; some of them indicated using portfolios. However, when it came to using and recording assessment information and the communication with students and parents, marks and grades of paper and pencil tests was the most frequently reported answer.

Obviously, most teachers were not acquainted with the use of a wide range of assessment techniques, such as performance-based tasks, projects, self-, and peer-assessment, and journal writings.

Third: Evidence from Personal Experience

Students in many secondary schools are subjected to monthly or unit tests/exams in every subject area. Scores that students gain on these tests are entered in an accumulating record system that assigns a final summative grade for each student. No matter the students' performances on these tests are, the class moves on to the next unit, and teaching proceeds the same way.

To sum up, observed teachers showed difficulties in implementing the assessment techniques in a way that could provide them with valuable assessment information for promoting students' learning. Moreover, a range of assessment activities that could be effectively used in advancing students' learning were missing. Paper and pen testing still dominate assessment practices in schools where summative assessment equates testing, and continuous assessment means more testing, while monitoring students' progress means teach and then assess.

Second: A Vision for Effectiveness in Classroom Assessment

This part of the article describes, briefly, a number of interrelated features that might characterize effective classroom assessment that can contribute to the development of effective instruction and, hence, promote greater learning.

I. Balancing Assessment "Of" and "For" Learning

Traditionally, assessment has focused more on providing evidence of students' achievement for public reporting. These "assessment of learning" practices reflect only the evaluative purpose of assessment. "Assessment for learning" is another form of assessment; its practices serve to help students to learn more.

Assessment for learning occurs during the instructional process rather than after it and has as its primary focus on the ongoing improvement of learning for all students. In assessment for learning both teachers and students use classroom assessment information to modify teaching and learning activities. That is, the crucial distinction between the two forms is between assessment to determine the status of learning and assessment to promote greater learning (Stiggins, 2002).

II. Multiple Sources of Information = Multiple Assessment Tools

Morgan & Watson (2002) indicates that multidimensional forms assessment can allow all students to demonstrate what they know and can do as well as to ensure that the full range of objectives are addressed. NCTM (2000) also assures that assembling evidence from a variety of sources is more likely to yield an accurate picture (p24).

Therefore, in Effective Assessments, decisions concerning students' learning should be made on the basis of a convergence of information obtained from <u>a variety of sources</u>. The quality of judgments about student's knowledge depends on the <u>consistency</u> of the results obtained as well as on the <u>alignment between assessment tasks and the knowledge they purport to measure</u>. Sound assessment requires <u>a crystal-clear vision or understanding of the characteristics</u> to be assessed. Only then we can select proper assessment methods.

- In order to tap students attainment on a range of course outcomes, teachers needs to apply different assessment techniques, such as:-
 - Performance-based tasks
 - Journal writing/Reflective Journal
 - Essay and interpretive exercises
 - Direct personal communication

- Portfolios
- Open-ended tasks
- Extended projects
- Observation
- Concept maps
- Seatwork and homework
- Demonstrations
- Oral questioning
- Quizzes and paper and pencil tests
- Projects
- Questionnaires
- Peer & self-assessment

Of course, no single method can serve all of our assessment purposes; we must learn to use all available methods.

II. Maintaining Authenticity

Authentic assessment can fully maximize the evaluation of students' application and use of knowledge in *real-life situations*. The following are some attributes of authenticity: (Martin-Kniep, 2000 & Tanner, 2001)

- Real purpose and audience
- Curriculum-embedded ness
- Contextualized, complete, and reality-based
- Subject/content area integration
- Disciplined inquiry
- Explicit standards and scoring criteria

In order to *maintain authenticity*, students are to be:

- assessed in what was taught and practiced
- assessed on tasks expected on professionals in the real world
- knew the standards or criteria by which an assessment was being made
- assessed overtime with opportunity to improve
- assessed under the same conditions that exist in the real world
- assessed with a hand-on exercise or problem

III. Explicit Performance Criteria and Rubrics

The shift of assessment practices toward authentic performance-based assessment has created the need for changing scoring methods. Some researchers believe that the designing of performance tasks must begin with developing scoring criteria, or rules for evaluating students' work;

these criteria identify the characteristics that high quality performance should have (Taylor & Bidlingmaier, 1998).

The performance scoring criteria are used to develop scoring rubrics – these are descriptive scoring schemes that are developed by evaluators to guide the analysis of the products and processes of a student's performance, and evaluate that performance (Brookhart, 1999). Maskal (2000) indicates that scoring rubrics provide at least two benefits in the evaluation process: First, they support the examination of the extent to which the specified criteria has been reached. Second, they provide feedback to students concerning how to improve their performances.

To sum up

Teachers should accompany their assignments with clear and descriptive performance criteria, and when necessary, accompany such criteria with rubrics and models that hold the attributes of exemplary work. Rubrics help students monitor their own performance and achievement on an ongoing basis (self-assessment). They are most effective when developed along with students. Exemplars are models that can be used by instructors and students to depict desired attributes of quality in product and performance.

IV. Self-and Peer Assessment

Self-assessment by students has been recognized as an essential component of formative assessment. It is the responsibility of the teacher to provide his/her students with the kinds of feedback needed to practice self-assessment (Brookhart 2001). Informational feedback, that is information students use to improve their performance, plays the very active role in helping students to:

- a) recognize that there is a gap between his/her current understanding or skill level and the desired understanding or skill level;
- take effective action to close that gap (Brookhart, 2001; Black & William 1998).

To sum up:

Teachers have the responsibility to assist all their students in improving their individual performance through self-analysis and an understanding of how successful products or performance look like. In this regard, rubrics and exemplars have a vital role. Once students have internalized attributes of quality, they should be responsible for using such knowledge to

evaluate their own work and the work of others and to use the results of this evaluation to improve their work.

Peer-assessment or peer-review is a process of evaluating performance and products on certain task by peers. Research indicates that effective peer-assessment/review in the classroom stimulates learning and critical thinking. Peer-review can be used in different assessment tasks (such as: journal writing, reflection papers, reports, as well as essay tests) in which students comment on each other's work.

Researchers indicate that practicing peer-review skills in the classroom is very useful in several ways: (Liu, Pysarchik & Taylor, 2002)

- By reviewing others' work, reviewers enhanced their *critical* thinking, which makes their own work better.

- Reviewees benefits from the reviewers comments which improve their work.

V. Differentiated (Diversified) Assessment

Classrooms increasingly are populated by students who are diverse in a variety of ways. Lawrence-Brown (2004) states that "... in order to maximize achievement of curriculum standards, we must increase our effort to differentiate instruction and assessment.

Diversifying instruction and assessment is not an option – it is a must. Teachers must realize simple basic fact, that is students are individuals with different personalities, learning styles, multiple intelligence, etc. Therefore, any single approach to instruction or form of assessment will not work for everyone, but will tend to favor certain style over others (Airasian 2000).

The notion of aligning instruction and assessment assumes that the more you know about what and how students are learning, the better you can plan learning activities to structure your teaching (Angela & Cross, 1993). For example, understanding students' learning styles can help teachers address students' strengths and weakness as learners.

Diversified assessment should meet certain criteria to support the learning of all students: (Martin-Kniep, 2000)

-Elaborate communication. Communication is provided through written, artistic, oral performance exhibitions, and/or opportunities for students to teach (presentations).

-Meaningfulness A task or an assignment will be considered to be meaningful if students can see its real-life applications.

-Metacognition/Reflection The assessment includes measure that guide student's self-assessment and reflection on both process and products.

-Individual and group work. Students formally evaluate their own and each other's projects or performances throughout the learning and assessment experiences.

-Flexibility Allowing students to select a specific form of representation for producing the work and/or demonstrating achievement.

-Ongoing feedback and revision Providing students with elaborate and specific feedback throughout the learning process from both the teachers and peers

Implementing an assessment framework that accounted for different learning styles and intelligences of the students requires a transformation in practice for both the instructor and students. These changes may be centered on: (Walters, et.al., 2004)

- increase the level of active student participation
- establishing and sharing the expectation of success
- increasing the role of student's in decision making
- providing for a variety of student options for positive interpersonal interactions, and
- modifying the role of the teacher from director to facilitator.

To sum up:

Assessment should be sensitive to the diverse needs and background of students. A diversified assessment system includes a collection of measures that can be used to tap multiple intelligences, and different learning styles. This collection combines both authentic performance and product assessments of student's application and use of knowledge, and process measures that monitor learning as it unfolds.

Third: Implications for the Professional Development

Changing culture from testing to assessment and making the shift from measurement/testing-based assessment to authentic performance-based assessment requires a new vision of the professional development programs. Teachers need time, support, resources, and opportunity to understand the new innovations in assessment, and to practice its procedures.

Obstacles

Very few teachers are prepared to face the challenges of the new innovations. The current teacher training efforts appear to offer little to meet professional preparation for teachers. Why teachers are not ready? and why they haven't been able to adopt and apply these new assessment visions in their classroom? Based on reviews of literatures, indicators from the descriptive study reported in this article, and personal experience, here are some considerations:

- Teachers commonly lack the knowledge and understanding of the nature of the required paradigm shift. They also lack the experience to use effectively a variety of techniques in the classroom (Black & Dylon 1998, Stiggins 1999). Current professional development programs do not get the teachers involved in "first-had effective training."
- Teachers' conceptions of assessment and its purposes in the classroom affect his/her assessment practices in the classroom (Adam & Hsu, 1998). Current professional development programs offer very little to help teachers confront their own beliefs and reflection on their conceptions of knowledge, learning, curriculum, and assessment.
- Grading and relevant decisions about the students are still based on exams and other forms of paper and pencil tests. This has tended to result in classroom assessment moving away from authentic formative practices and toward techniques that emphasize mastering skills and procedural knowledge. Some teachers might tend to limit assessment to what is easy to assess rather than what is important to assess. (Warren, Nisbet, 2001).
- Some teachers resist change because it can be threatening. For example, when students' grades are used for accountability purposes that affect the status or teachers' future (such as annual evaluation, promotion, or contract renewal) teachers are tempted to embrace narrow quick-fix methods of test-prep and teaching to the exam (Foster & Noyce 2004), rather than adopting inquiring or assessment for learning approach.
- Teachers are always busy. School day of the classroom teachers is very occupied by many instructional and administrative tasks. Inadequate amount of time is left out for the teachers to become actively and effectively involved in the professional development programs.

What is needed

If we are serious about reform, we need to acknowledge the complexity of the learning process, and stop trying to find the quick fix solutions to the assessment and other instructional issues. We cannot force classroom teachers to use performance-based assessments while testing culture still dominate our high-stakes decisions. On the other hand, it is not enough to make resources available to teachers; they also have to want to use them (Torrance & Pryor, 2001).

Teachers need to make a "paradigm shift": A new stance toward assessment and knowledge as well as a change in the actual procedures used. Serafini (2000) indicates that simply mandating new procedures for teachers to administer will not help teachers make the shift from measurement to inquiry paradigm. He emphasized that for teachers to making this "paradigm shift" they need "a supportive environment where administration and staff-development program provide time to collaborate with other educators, time to reflect, and the opportunity to work through the new purposes and procedures in the new assessment framework" (Serafini, 2000).

For teachers who have the impetus and motivation to change their practices and thinking, they need to become knowledgeable, reflective participants in the assessment process.

- They should commit themselves to learn from experience and to participate effectively in the professional development process.
- They should assume the role of teacher-researcher to better understand the experience and interactions in their classrooms.

Next step: How to Improve Professional Development

Perhaps, the best way to offer suggestions for improving professional development is to conceptualize two paradigms of this process: professional development as procedure and professional development as inquiry. (Borrowing the two terms used by Serefini in describing assessment paradigms). Most current professional development efforts focuses on training supervisions, how to develop and use performance-based tasks. Supervisions will then held the responsibility of training teachers. Without getting involved in detailed criticism of this process, it is hard to see how this can help teachers to understand the new innovations in assessment and make the necessary paradigm shift.

When we consider professional development as inquiry paradigm, we also expect that the process of supporting teachers will be based on constructivist perspective, teacher-centered learning and inquiry process.

Viewing professional development process as "inquiry" would shift the focus of this process to the teachers themselves.

Official Commitment

Ministry of Education and other concerned administrations should maintain their commitment to professional development, that concentrate on the development of teachers' understanding of the new assessment innovations and promote their skills in cultivating these innovations into their classroom practices. This commitments requires launching a comprehensive long-term professional development program at the national and local levels. Sufficient resources must be allocated to provide trained teachers with the opportunity to learn and grow professionally.

Support Collaboration

Developing authentic performance-based assessments is not an easy task that can be done by individual teachers (Foster & Noyce, 2004). Teachers need to collaborate and work together. They also need professional support. Establishing a network of coaches (for discipline) who work together to help teachers in their schools is one way to provide such professional support. Collaboration with university staff specialized in assessment is very important in this regard.

Spreading the new assessment culture

Parents, school administrators, and any other parties involved in the education of students must get acquainted with current reform in instruction and assessment. Keeping parents, in particular, out might hinder the process of reform.

Support professional dialogue among teachers

Teachers need to come together to discuss educational issues that are relevant to their practices. This could be in the form of "discussion groups", or "classroom Assessment Project". Studies of teachers working together suggest that professional dialogue is the key to ensuring quality in teachers' assessment (Morgan & Watson, 2002; Serafini, 2000).

Professional dialogue establishes shared language with which teachers can exchange knowledge, beliefs about the nature of learning and assessment, experience and expectations.

Action Research

Action research offers important contribution for teachers to get involved in the process of reform. Torrance & Pryor (2001) indicate that an action

research approach seems particularly suited to high quality development work on the interface between teaching, learning, and assessment. For teachers to be able to develop new approaches to assessment and relate them to different theories of learning, they must be able to investigate and reflect upon their own classroom practices. This type of research within classrooms in which teacher works as a researcher provides a good opportunity to understand how teachers accomplish their goals (Flick & Lederman, 2002).

In this sense, assessment may become more effective in improving classroom learning and instruction.

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CLASSROOM ASSESSMENT IN ELEMENTERY SCHOOL

Observation and Interview Task

1. Task Description:

You will observe an elementary classroom teacher for two periods in your specialty. You will report on assessment techniques used by the teacher how these techniques affected student learning, and how the teacher used the assessment information. You will also conduct an interview with the teacher, guided by some given interview questions in order to know her perceptions of the assessment techniques used. You will submit a complete report with analysis and reflection for the conducted observation and interview. Your analysis and reflection will include how effective were the assessments used for both monitoring the students progress and improving the teaching and learning process in the classroom. The report should be 5-8 pages of typing. This task worth 10% out of the course total score.

During lesson observation

The following questions will guide you in observing how the teacher implement assessment in classroom:

First:

- How did the teacher assessed the prerequisites of the new lesson?
- What assessment methods and techniques did the teacher use in pre assessment?
- What prerequisite knowledge, skills, and behaviors that were assessed?
- How did the teacher use the pre assessment information?

Second:

- What assessment methods and techniques did the teacher use, during instruction, to monitor her pupils progress towards the achievement of the learning goals?
- How did the teacher use the results of these assessments?
- How did she communicate with her students during assessment activities?
- Did the teacher employ questions?
- To what extent did the questions assessing understanding and thinking?
- How did the teacher uses the feedback? What type of feedbacks?

Third:

- How did the teacher use summative assessment for the observed lesson?
- What assessment techniques the teacher uses for this?
- What assessment information did she get?
- How did she communicate with her pupils about the results this summative assessment?

 Does the teacher for example identify the aspects of strength and weaknesses of her students' performance?

Interview

Use the following questions to guide your interview with the teacher:

- How did the assessment you used in the observed lesson are aligned with stated learning goals (objectives)?
- What assessment techniques, tools, and strategies do you always use to assess your pupils' learning? For what purposes?
- How do you integrate assessment with instruction?
- Are there specific classroom arrangements you follow as you conduct assessment in your classroom?
- How do you record assessment results?
- How do you communicate with pupils about their performance?
- How do you use assessment information?
- How do you communicate the results of assessment with school administration, parents, and pupils?