Guiding Classroom Instruction Through Performance Assessment

Carol Oberg
University of La Verne

Abstract

Current research indicates that students need authentic, meaningful curriculum to remain involved with the learning process, that this type of learning has positive results on high stakes exams, and that teachers require prior knowledge of students’ skills and interests to develop high quality and effective instruction and curriculum. To “front load” the curriculum with authentic performance (pre)assessments offers the teacher as well as the student a way of examining current skills and knowledge prior to instructional decision making, and presents a direct link to authentic instruction. How best to do this within the confines of a school district is a significant dilemma. This paper will provide evidence and examples of the use of performance assessments as alternatives to traditional paper-pencil tests to be used as pre-assessment measures to assist teachers in learning as much as possible about their students as they create lessons prior to instruction. Teachers can use performance assessment to obtain a rich and complete picture of what students know and are able to do (Elliott, 1995). With these data, teachers can enhance the quality of their lessons by create appropriate and engaging lessons, and involve students within the entire learning assessment process.

Keywords: Performance Assessment, Pre-assessment, Student Data, Engaging Lessons, Student Motivation, Linking Assessment and Instruction
Introduction

“Teachers, make it your first task to know your students better, for you surely do not know them” (Jean Jacques Rousseau in Ellis, 2001, p.67). Today’s classrooms provide unique challenges for teachers. Teachers must know content matter as well as state standards. They are accountable to multiple constituents: students, parents, administrators, and community members, and are expected to demonstrate appropriate yearly progress. Teachers of special needs students are expected to teach to state standards while aligning students’ IEP goals to these standards. In addition, district assessment demands may consist of exit exams, district benchmarks, and high stakes state assessments, often times with results made public. Teacher accountability, student achievement, progress monitoring, and analyzing testing data are key phrases in today’s educational culture. Our educational system is driven by student outcomes as measured through standardized assessments.

Today’s pluralistic, inclusive classrooms demand a sharp lens of understanding and awareness from our teachers to reach and teach all students. This lens must serve as a microscope to magnify teachers’ understanding of individual student’s talents and skills as well as a stethoscope to listen deeply to their students’ daily experiences, unique interests, and individual dreams. In short, teachers need to know their students to teach them and align “thoughtfully directed curricula” to them as much as to standards (Stanford & Reeves, 2005). They must carefully consider not only what to teach, but also how to teach and how to assess.

When teachers are fully informed about their students, they are better prepared to make appropriate instructional and curriculum decisions, and adapt, as necessary, their teaching practice to ensure success for all students. To learn about their students, teachers must rely on data collected from their students through a variety of methods. Student data must be rich enough in detail and breadth to provide teachers with necessary information to connect instructional strategies to their needs and skills. These data must provide information about students’ current ability and knowledge within the subject matter as well as information about students’ interests, learning styles, and pace.

Assessments used to collect student data for both information and diagnostic purposes are termed pre-assessments. Pre-assessment helps teachers “front load” their lesson preparation by utilizing knowledge (data) about students in the instructional planning stage. However, traditional pre-assessments such as paper-pencil tasks or question and answer formats may leave teachers “data-deprived” as they offer limited information about students. Performance assessments, on the other hand, offer a variety of ways for students to demonstrate what they know about content, as well as elucidate students’ additional skills sets within the classroom. These additional skills are related to attitude, creativity, ethics, perseverance, honesty, teamwork, sense of fair play, and many other behaviors and dispositions needed not only in the classroom, but also in the work force (Sternberg, 2007). When performance assessments are added to teachers’ current repertoire of pre-assessment tools, they help refine teachers’ knowledge of their students so they can create robust, motivating lessons attuned to their students’ strengths and needs.
Statement of Problem

Finding adequate and appropriate assessments is a constant challenge for teachers (Rulon, 2002). Purpose, time, results, and how results will be used contribute to determine the type of assessment that best fit teachers’ needs. Front loading instructional planning by pre-assessing students’ skills and knowledge prior to the lesson gives teachers access to students’ prior knowledge and skills. Brain research and best teaching practices indicate the importance of using prior knowledge as a tool to assist the learner in attending to, understanding, and storing new information in both working and long term memory to be retrieved at a latter time (Blaz, 2008, Jensen, 2005, Wolfe, 2001, Tileston, 2005). Using students’ prior knowledge encourages student involvement in the learning process. “Using examples from students’ experiences…allow students to bring previous knowledge into working memory to accelerate making sense and attaching meaning to the new learning” (Sousa, 2006, p. 68). Without appropriate and comprehensive understanding of students’ prior knowledge and skills, teachers may find it problematic to ensure classroom progress for all students, including improved results on high stakes exams. Teachers may also be wasting precious instructional time by either repeating information students already know or beginning at a level too difficult for students to digest. Students, therefore, may be bored or “lost” in the lesson if the teacher has not carefully crafted an instructional plan based on rich and comprehensive student data that reflect those students’ abilities.

Front loading instruction with pre-assessments is critical to avoid the “embarrassment of realizing that a student had no idea what I was talking about…or of having a student answer a question in class early in a unit that made it clear he already knew more about the topic at hand than I was planning to teach” (Tomlinson, 2008). For diagnostic and instructional planning purposes, pre-assessment may be accomplished in various ways. For students with special needs, for example, the special education process requires specific standardized assessments to be administered for eligibility and placement decisions. Special educators front load their instructional decision making with these specific tests by creating goals that define expected yearly student outcomes. These standardized tests provide adequate information on students’ current academic skills compared to same age or same grade peers. Specific instructional practices and strategies may be gleaned from these assessments and viewed as an added benefit, but the intent of these assessments is not to guide instruction but rather to guide the focus of instruction. They provide little information that is useful in creating classroom instructional practice.

The traditional classroom paper-pencil assessment offers a quick and simple method of learning about students’ subject knowledge. These tests have a standard delivery and response format, typically one correct answer using a forced choice response format, mainly that of multiple choice, matching, or true/false. Students are scored according to response with little attention paid to the process or method used in reaching the response. The benefits of these tests are that they are relatively easy to create, quick to administer and score, and may be given to small and/or large groups of students simultaneously. In addition, they are appealing to teachers already burdened by constraints of time, standards, and district benchmarks.
However, there are significant difficulties with traditional assessments. Certain learners may find these tests prohibitive in demonstrating their knowledge and skills. “The negative consequences of norm-referenced tests used for students from non-dominant cultures and language groups are well-documented” (Estrin, 2002, p. 2). Students with special needs and those from culturally and linguistically diverse backgrounds may not be able to “show all that they know” with traditional, paper-pencil assessments, or even through whole class question/answer tasks. These tests require an ability with language comprehension and expression that may be problematic. Test items may have content unrelated to previous knowledge, or the presentation style of test items may be different from class experience, which may directly impact a learner’s ability to answer questions correctly (Estrin, 2002). In order to respond to teachers’ queries and demands, these students may guess and provide random, quick-think answers not truly indicative of their abilities, skills, interests, or prior knowledge. Students with scant prior experience and/or understanding of traditional tests may find them irrelevant, unmotivating, and may perform poorly and be judged as having inadequate skills in a subject, when, in fact, they may have a great deal of background knowledge and ability within that subject area. Teachers, therefore, may receive inaccurate or incomplete information about their students, create assumptions about these students, and plan inappropriately for them. Sternberg suggests a further idea related to traditional multiple choice questions: “We learned something important about multiple-choice problem solving: Multiple choice tests, no matter what they were supposed to measure, clustered together. Students who were better at one multiple-choice test tended to be better at others as well. This result suggested that using multiple-choice tests consistently tends to benefit some students and not others” (Sternberg, 2007, p. 22). If teachers want more student information to guide daily instruction to engage all learners, they will have to test in a different manner. “Expanding the repertoire of assessment strategies will help teachers meet the needs of every learner in the classroom” (Stanford & Reeves, 2005.)

Discussion and Solution

In her 2007 article Tomlinson writes, “Over time, I became aware of students who did poorly on tests but who showed other evidence of learning. They solved problems well, contributed to discussions, generated rich ideas, drew sketches to illustrate, and role-played…when one form of assessment was ineffective for a student [it represented]…a poor fit between the student and the method through which I was trying to make the student communicate” (p. 19). Fitting assessment to students, linking assessment to instruction, and differentiating both instruction and assessment is crucial in our classrooms. Though traditional paper-pencil assessments can offer specific information regarding students’ concrete, factual knowledge, these assessments provide little if any information about student culture, attitudes, learning styles, learning rate, social skills, problem solving abilities, and other critical information needed by teachers to make informed judgments regarding appropriate instructional strategies and practice.

Performance assessment is an alternative assessment method to pre-assess students and provide important information to teachers so that are not “data-deprived” as they create their daily lessons. There is an acceptable definition of performance assessment in the literature; however, differentiating performance from authentic
assessment becomes problematic. “Performance-based assessment describes one or more approaches for measuring student progress, skills, and achievement…one way of looking at performance assessment is to think of it as the ultimate form of linking instruction with assessment” (Cohen & Spenciner, 2003, p. 165). Another form of alternative assessment, authentic performance assessments, however, “…is similar to performance assessment except that the student completes or demonstrates knowledge, skills or behavior in a real-life context and real-world standards measure the student’s knowledge, skills, or behavior” (Cohen & Spenciner, 2003, p. 166). Authentic assessments are considered tasks of “real-world” application of content knowledge, rather than contrived problems for the classroom setting, and are therefore different from other forms of performance assessment. Though some researchers use the terms “performance assessment” and “authentic assessment” interchangeably, others continue to differentiate them, including real-world application of content knowledge as part of authentic performance (Rulon, 2002). A performance task, therefore, may not necessarily be “authentic” (Estrin, 2002); however, and combines the multiple forms of alternative assessments such as performance tasks, and student exhibitions, portfolios, and others as sharing a common notion of a meaningful product, performance, or way of communicating between student and teacher, and therefore need not be differentiated (Pierangelo and Giuliani, 2002). For the purpose of this paper, performance assessment encompasses authentic performance assessment to convey alternative forms of assessment.

A “primary purpose of standards-based classroom assessment is to inform teaching and improve learning…Classroom assessment is much more than tests, rubrics and giving grades. Assessment is an integral part of instruction…effective classroom assessment [is] …relevant to immediate learning” (Carr and Harris, 2001, p.35). Teachers include quality assessments in their instruction when they embed “…a wide range of ongoing assessments in instructional activities to provide consistent guidance for planning and instruction” (Moir, 2004, p.13). For all students, but in particular for students with special needs, students at risk, and students from culturally and linguistically different environments, focused lessons, varied instructional strategies, and different assessment practices linked to instruction can help students make connections and demonstrate their learning. Classroom instructors must do better than guess at students’ strengths. Students can participate from the very beginning of instruction by demonstrating their strengths through authentic performance assessments. Through the use of pre-assessing with alternative assessment measures, students can demonstrate their abilities, strengths, knowledge, likes, and desires that can guide classroom instruction that is relevant, challenging, and motivating (Tuttle, 2009, Benjamin, 2008). “Ideally, assessment and instruction are linked inextricably within any curriculum.” (Reading Language Arts Framework for California Public School, 1999) Formative assessments, assessments used to inform and guide instruction rather than evaluate results of instruction, assist teachers in creating baseline data on students that guide both teacher and learner through the instructional process (Tomlinson, 2007). “If the intent of teaching is to get students to think, the intent of formative assessment is to make students’ thinking visible to the teacher. Formative assessment should help determine what the students have mastered, what they still need, and what needs to happen next” (Blaz, 2008, p.29).

Performance assessments vary in style and content and are limited only by purpose and teacher creativity. In developing performance based assessments as pre-
assessments, teachers should consider the following: 1) what is important about the lesson that I want to know if the student already knows; 2) how can students demonstrate current knowledge in a unique way; 3) what are the criteria for competence and mastery of the content; 4) how will I judge student competence; 5) how will I provide feedback in a constructive manner; 6) how will I include the student within this process; and 7) how will the results be used to guide my instruction, and allow me to differentiate instruction as necessary (Elliott, 1995, O’Neil, 1996, Hall & Salmon, 2003)?

Ainsworth and Viegut (2006) define performance assessments as an “Activity that requires students to construct a response, create a product, or perform a demonstration.” (p.57). These tests are often “open-ended” with more that one correct answer, promoting critical thinking and problem solving skills. A rubric used as a scoring guide provides students with evaluative information as they are completing the task, promoting both peer and self-evaluation practice. Because these tasks or activities are unique they tend to be “highly engaging”, and motivating. They may utilize “collaborate learning” yet allow for “individual accountability” (Ainsworth & Viegut, 2006) that make them ideal as pre-assessments. In addition, these assessments encourage creativity for the teacher creating them, and the student in responding to the prompt.

Using a variety of assessment formats allows for different learners to demonstrate their knowledge and skills in the best way they know. Some examples of performance assessments are: learning logs, posters, experiments, debates, mock interviews, artistic work, and writing/performing music and/or dance. (Additional examples may be found in the appendix.) Specific tasks for performance assessments are created based on the subject area, grade level, and the type of information teachers need and want to learn about their students. For example, when teaching money, pre-assess by creating a “mock” store in the classroom, to observe how well students can count money when purchasing items as well as when receiving or giving change. Teachers observe adding, subtraction, and multiplication skills as well as problem solving skills, language skills, and social interactions. Depending on how “sophisticated” the mock store is, students may be asked to use “credit cards” and compute interest payments, do comparative shopping, or include returns and exchanges with money owed or money returned. Older students may review stock prices and make judgments about a stock inventory, do percentages, cost averaging, and other types of economic evaluations, and may create a PowerPoint to share with the class. In reviewing literature, students may read a short story and create a poster describing theme, character development, and plot construction. For government, students may be asked to work in teams or pairs to create a brochure on the three branches of government. Students then may present their knowledge to each other in small groups of the entire classroom. In learning about students’ writing skills, students may write a creative story on a given topic or specific title, or they may be given a picture or collage of pictures and asked to tell a story about it, describe and connect the characters, or create a caption for a newspaper about the picture. Students may be asked to write a letter of recommendation or a letter of introduction for a known musician, Disney character, or favorite teacher. As teachers create the appropriate prompts or tasks for these assessments, they learn not only about students’ specific skills in a content area, but, depending on the task and the objective of the lesson, they also glean important information about students’ creativity and technology skills, leadership skills,
interpersonal and social skills, compassion and empathy, and their ability to work in pairs or teams.

In addition to the performance tasks or activities, teachers need a method to reflect on and evaluate student output, performance, and products. One such method is the use of rubrics. Rubrics are scoring guides that formalize the evaluation process and provide fair and clear results to students: they “…delineate the teacher’s expectations for performance…” (Hall and Salmon, 2003, p. 8). As teachers determine the important specific components or objectives of a lesson, and provide performance tasks or assessments for students to demonstrate proficiency of these objectives, they must also develop a clear picture of what type of work is considered exemplary, proficient, passing, or needing more teaching. Rubrics are used to communicate teacher expectations as well as student assessment results. “Rubrics allow teachers to examine instruction and assessment in a matrix format. The rubric should clearly delineate the teacher’s expectations for performance…” (Hall and Salmon, 2003, p. 8). In addition, the disciplined use of rubrics formalizes their reliability and validity as evaluation tools.

Rubrics contain a semantic scale of categories or characteristics of behavior or output to be assessed, matched to a criterion or standard used for evaluation. Specific explanations are given for each standard, often with examples. The two basic types of rubrics are analytic and holistic. The analytic rubric is used to assess a product through a detailed description of various criteria, designating a score for each criterion. A holistic rubric assesses a product on the basis of an overall impression or its overall effectiveness. Examples abound in the literature of rubrics for many different subject areas. Whittaker, Salend, and Duhaney (2001), for example, created a rubric for web site development that contained four levels or performance: 1) beginning; 2) developing; 3) accomplished; and 4) exemplary; and three categories: 1) content; 2) design; and 3) literacy skills. The rubric matrix provides detailed explanations for each of the four levels of performance that would equate to a 1, 2, 3, or 4 within the categories of content, design, and literacy skills. Stanford and Reeves (2005) created a rubric for creative writing using a Likert-type scale of 0-3 to quantify results of five characteristics of writing: meaning, editing, organization, creativity, and spelling and punctuation. Hall and Salmon (2003) designed a 4 point Likert-type rubric for chocolate chip cookies using 5 semantic areas of: texture, appearance, taste, content, and smell. These three examples describe different evaluations for different performance assessments. In creating rubrics, teachers should consider course expectation and what qualifies for quality work. Rubrics provide students with the clear expectations, criteria, and attributes on which they will be evaluated, and once student work has been evaluated “…the rubric can provide a starting point for additional instruction” (O’Neil, 1996, p.2,).

Conclusions and Implications

As teachers develop professionally, they learn to assess wisely and begin to “distinguish between assessment of learning, [and] assessment for learning…” (Tomlinson, 2007, p.13). Pre-assessments are assessments for learning. They are assessments that “…inform teachers about how to teach students” (Allsopp, Kayger, Lovin, Gerretson, Carson, & Ray, 2008, p.6). Analysis from pre-assessment data is critical for teachers as they plan their instruction. Teachers need good student data to
create lessons that engage learners and are appropriate for their ability and skill levels. They need these data to analyze students’ strengths as well as error patterns within content areas, and to “pinpoint their students’ instructional needs, so that they can plan instruction that meets those needs as they teach the particular concepts/skills…” (Allsopp et.al., 2008, p. 7). Pre-assessing with alternative performance assessments allows students to demonstrate their abilities, strengths, knowledge, likes and desires in unique and motivating ways. This type of pre-assessment effectively links assessment to instruction and fits well with standards-based theory. A “primary purpose of standards-based classroom assessment is to inform teaching and improve learning…[and] is an integral part of instruction…”(Carr and Harris, 2001, p.35). Judgments based on scant information of students’ knowledge may lead teachers to be “data deprived” and may over or under estimate students’ abilities leading to ineffective instructional strategies and limited learning. Traditional paper-pencil assessments offer important but limited information for the classroom teacher to create instruction. By utilizing performance assessments as pre-assessments, and guiding students with clear expectations from rubrics, teachers can enrich their knowledge and understanding of their students and create appropriate, rigorous, meaningful, and motivating instruction. In order to provide focused lessons with multiple instructional strategies to help all learners, teachers may find it useful to adapt performance assessments as pre-assessments to guide their instructional process. In addition, for children with particular challenges such as children with special needs or second language learners, traditional assessments may be prohibitive in having these learners “show what they know”. Performance assessments may provide these learners alternative avenues of demonstrating their skills and knowledge to enhance their instructional program and provide a pathway to success in the classroom.

References


Gregory, Karie (2003). Good tests can lead to better classroom assessment. *Classroom Leadership*.


**Appendix**

**List of Performance Assessments:**

Below is a short list of Performance Assessments. These ideas have been divided into four areas: visual work, written work, oral/spoken work, and production/performance.

**Visual Work**
- Developing Portfolios
- Creating a collage
- Creating a picture postcard
- Creating a slide show/PowerPoint
- Creating a brochure
- KWL charts
- Creating a board game
- Illustrating a story or characters from a story

**Oral/Spoken Work**
- Presenting a political campaign speech
- Presenting a debate or a speech
- Reciting a poem
- Explaining or describing a poster, collage, art work, etc.

**Written Work**
- Writing a political campaign speech
- Creating a comic strip
- Writing a compare/contrast essay
- Writing a persuasive essay with pictures
- Journal response writing
- Writing an historical fiction short story
- Creating a resume

**Performance/Production**
- Creating a museum exhibit
- Performing a dance
- Performing a song
Creating an art work, sculpture, etc.
Constructing a playground, city, farm, etc.
Growing plants
Acting out a play

2. Student Teacher Comments:

The following comments were offered by student teachers and teaching intern candidates as they used performance assessments to guide instruction and curriculum development.

- I never knew he could draw or was even interested in art, but he demonstrated total understanding of the sequence of the story line through the drawings.
- He really showed his leadership skills. He was thoughtful and kind to all the team members.
- She was thoroughly involved in the project. Throughout the project she checked with me to make sure she was doing it correctly. She was on time with her work, which is unusual for her.
- He took a lot of time completing this project and was very proud of it.
- Her mother called me and told me she had never worked so hard on any other assignment. She didn’t want any help on it because she wanted me to know what she could do by herself.
- The interest level was very high. Students were totally engaged in the activity.
- Each student contributed to the group presentation – this surprised me.
- Students learned some things about themselves. They enjoyed creating their own rubric, and were stricter than I would have been.
- Through their drawings students were able to make predictions about the story, which told me that they had good comprehension.
- By illustrating the short story, students were able to be creative and recall specific incidents important to the story.