In constructivist learning environments, assessment becomes part of the pedagogical process rather than remaining isolated from instruction, thus enhancing learning. Teachers express concern about being too subjective when implementing performance assessments in their classrooms and need specific training to modify traditional beliefs. Social constructivist learning theory suggests that development and learning are social processes which emphasize that all students can learn. Classroom assessment uses must be changed by: modifying traditional belief systems attached to measurement-driven classroom assessment and changing the form and content of assessments to align the purpose of improving learning for all. In social constructivist environments, teachers enhance learning by encouraging students to problem solve rather than using assessment for punishment and reward. Productive instructional assessment involves aligning assessment with the purposes of instruction. Assessment tools must relate to the task at hand. Validity should be taught from the perspective of decisions made instead of more psychometric viewpoints. Defining validity shifts from focusing on assessment for measurement to assessment for instruction. Applying instructional assessment strategies in social constructivist learning environments creates challenging curricula that embed assessments to support learning for all. Teachers' practices aligned with these theoretical views follow closely with standards-based reform rhetoric. (Contains 20 references.) (SM)
The Standards and Integrating Instructional and Assessment Practices

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The Role of the Standards for Teacher Competence in Educational Assessment
Of Students in Developing Quality Teacher Association
Integrating Instructional and Assessment Practices

In her recent manuscript, *The Role of Assessment in a Learning Culture*, Lorrie Shepard (2000) advocates that teacher educators and practitioners need to re-conceptualize classroom assessment by linking it to contemporary visions of pedagogy. Shepard contrasts an emergent paradigm of learning theory to a 20th century dominant paradigm where representations of scientific measurement were closely aligned with traditional curricula and beliefs about learning. This traditional paradigm is identified with associationist and behaviorist learning theories. Shepard continues to introduce a need to dissolve the old paradigm by re-thinking new views of instruction that rely on what she calls a “social constructivist” conceptual framework, which integrates cognitive, constructivist, and sociocultural theories. Shepard summarizes contemporary understandings about learning that differ from the views of the traditional paradigm,

From cognitive theory we have learned that existing knowledge structures and beliefs work to enable or impede new learning, that intelligent thought involves self-monitoring and awareness, about when and how to use skills, and that expertise develops in a field of study as a principled and coherent way of thinking, and representing problems, not just as an accumulation of information...[From Vygotsky (1978) we learn] that cognitive abilities are “developed” through socially supported interactions (p. 6).

The impetus for contrasting these paradigms came from Beth Graue’s (1993) manuscript, *Integrating Theory and Practice through Instructional Assessment*. Like Shepard, Graue claims that students create meaning in a learning context of social, cultural, and economic issues. Graue proposes that teachers depend on their philosophies about teaching, learning and assessment when responding to students (Graue, 1994). Thus, in a constructivist learning environment, teachers value enhancing student learning when assessment becomes part of their pedagogical processes rather than remaining isolated from instruction.

Both Graue and Shepard argue that teacher educators and practitioners who view learning from a traditional perspective create barriers for student learning when they approach instruction and assessment as separate processes. Traditional measurement strategies fail to consider the kinds of assessment activities needed in constructivist learning environments (Shepard, 2000, Graue, 1993, Statyer & Johnston, 1996). In traditional environments learning is viewed as a mechanistic process of breaking knowledge into small units for students to absorb and memorize. In contrast, students who participate in a constructivist learning environment assemble their own meanings of knowledge that depend on the social and cultural context of a learning situation (Mislevy, 1993, Shepard, 1991, 2000). Within this environment teachers choose assessment strategies that blend with their instruction to enhance learning.

Shepard (2000) claims to use assessment as an instructional strategy “we [teacher educators and practitioners] have not only to make assessment more informative, more insightfully tied to learning steps, but at the same time we must change the social meaning of evaluation” (p. 10). Statyer and Johnston (1996) argue that teacher educators and practitioners should oppose assessment being isolated from instruction and viewed as an “objective, value-
free, non-reactive activity” (p. 3). They encourage educators to position assessment as an involving, reflective process that purposefully enhances student learning and serves as a tool for enriching instructional practices.

**Barriers Teachers Face**

Dominant theories from the traditional paradigm continue to drive current instructional and assessment practices of teachers and belief systems of other educators, parents, and policymakers who experienced these same practices during their school-aged years. For example, when working with teachers, Bliem and Davinroy (cited in Shepard, 2000) reported that the teachers believed assessment needed to be an official event, separate from instruction. Furthermore, teachers thought assessments should be uniformly administered, targeted to common instructional goals for all students to ensure fairness, and viewed as “objective” information. These teachers worried about the subjectivity in their assessments and thus, preferred formula-based methods, such as counting mistakes. They reported being more impartial when using this technique.

Over the past few years, I have worked with teachers to design instructional assessment plans that align to state content standards. These teachers have continuously expressed concern about being too subjective when implementing performance assessments in their classrooms. For example, after delivering a workshop to a group of six middle school teachers, we met weekly for 3 months during their common planning periods. The workshop covered the design and implementation of performance assessment rubrics while the planning sessions included discussions on ways that they could instructionally assess their students. During these meetings we designed instruction by creating performance assessment rubrics that would be used to augment their students learning processes.

In one particular session we discussed issues these teachers faced when using performance assessment rubrics. The teachers were concerned about equating an assessment to a grade. For example, when using a five-point scale with narrative descriptions linked to numeric levels of performance, the middle school teachers could see logic in equating the five-point scale with five letter grades. However, when thinking about how they would apply the tool, they wanted to rate students between two ordinal ratings believing that they needed to comparatively evaluate students on their performance. Brookhart (1999) reported similar results when working with a group of teachers who could see logic in using rubrics that had a five level rating system because they could equate the five levels to letter grades. The middle school teachers thought that they arbitrarily made evaluative judgments when they applied performance assessment rubrics in their classrooms. Thus, these teachers believed that this method was subjective and that an objective method of grading was better determined by correct and incorrect responses. Teachers were more comfortable with assessments that included “right” and “wrong” answers, which in their minds left small margins of error in their judgment. These teachers preferred assessment strategies that allowed them to authoritatively “grade” student work and left little if any room for negotiation.

Statyer and Johnson (1996) claim that “when answers are simply right or wrong, a narrow form of assessment occurs that leads to an even narrower form of learning...In these environments students see assessment as something that is done to them” (p. 10), rather than as a way to use instructional feedback to improve their performance. Thus, these traditional purposes of classroom assessment fail to encourage students to problem-solve and construct meaning in an
instructional situation.

According to Graue (1993), prior to changing the purpose of classroom assessment to make it more fundamentally encompassing of the learning process, we must “acknowledge the power of these enduring and hidden beliefs” (p. 6). We must reform traditional measurement ideas of classroom assessment to blend instruction and assessment in a social-constructivist learning environment (Cole, 1988; Tittle, 1989; Shepard, 2000; Graue, 1993).

Importantly, Graue (1993) claims that teachers cannot modify traditional beliefs and understandings on their own. Although some teachers have been exposed to additional classroom assessment material in college classrooms or workshops, little instruction has prepared them to make the necessary shifts when applying instructional assessment procedures in a social-constructivist learning environment. Furthermore, a typical day entails teachers interacting socially and instructionally with large numbers of students; meeting with other teachers, school officials and parents; planning lessons and assessing student work; and participating in school improvement responsibilities. Given these duties, it is difficult for teachers to find the time and energy needed to produce new forms of pedagogical strategies that include assessment (Gomez, Graue, & Bloch, 1991; Pilcher, 1996).

Graue (1993) also claims that teachers “should not see a solution as make-and-take approach to assessment generation” (p. 296). These middle school teachers did not design or select assessment methods that augmented learning purposes. They often evaluated students by using assessment approaches that were convenient or available. In our group meetings, the middle school teachers liked the detailed descriptions of performance in the rubrics and believed that when they applied the rubric in their classrooms students would better understand their performance levels. However, the teachers worried about the amount of time it would take to develop and implement these types of assessments and were eager for me to develop sample performance rubrics for them to use in their classrooms. During our 3 months together the teachers continuously stated that they did not have time to implement performance assessments in their classrooms. They stressed that they barely had enough time to “teach,” and thus, mainly relied on assessments that were developed by book publishers or other teachers.

Working with teachers, educators need to view and study approaches they employ when blending instruction and assessment. Assessment and instruction are not learned in isolation of the other. The theoretical frameworks of learning drive our thinking about how students learn and what we need to do to cultivate their growth. In a social constructivist learning environment, teachers focus on developing instructional assessments that enhance each student’s learning potential, especially when students are in various learning stages.

Social-constructivist learning theory supports that development and learning are primarily social processes that underscore the slogan “all students can learn” (Shepard, 2000). Thus, Shepard proposes to change classroom assessment in two important ways. First, the uses of classroom assessment must change by modifying traditional belief systems attached to measurement-driven classroom assessment. Second, when instruction supports emerging pedagogical strategies, the form and content of assessments change to align to the purpose of improving learning for all students.
Instructional Assessment

Graue's (1993) description of instructional assessment endorses the social constructivist framework for learning proposed by Shepard and challenges traditional classroom assessment philosophies. In this framework, teachers view instructional assessment as a way to assess their own instruction by exploring the nature, structure and products of their teaching. Furthermore, teachers continuously explore and interpret student learning within their every day instructional processes. Thus, instructional assessment is a reflective activity that informs instruction and has a broader purpose than the summative evaluation of student performance or the assignment of a grade.

When participating in professional development, the team of middle school teachers broadened their viewpoints when examining the idea that defined expectations for learning should not be a mystery to students. Because of their own prior learning experiences, the teachers agreed that they often kept learning expectations from students. Some teachers labeled this action "cheating." These teachers admitted that they did not expect all students to perform well, and reluctantly acknowledged that including assessment as a component of instruction could conceivably enhance students’ learning. Admitting to the idea was difficult because this new way of envisioning instruction and assessment opposed their traditional teaching routines.

Enhancing Student Learning

In a social constructivist environment, teachers primarily focus on enhancing student learning by encouraging students to reason and problem solve as opposed to using assessment as a punishment and reward strategy. Teachers use assessment strategies that align with their instruction and provide students with continuous feedback that empowers them to evaluate their own learning processes prior to completing the final product. Students, thus, do not focus on deficits. Rather, they modify their actions to reach envisioned levels of expertise (Graue, 1993). In this environment, learning and assessment become more collaborative between teachers and students (Johnston, 1989) as opposed to students repeating information deemed relevant by the teachers. Graue (1993) claims "in the new learning framework, the student is an active constructor of knowledge...Students begin to take responsibility for understanding and communicating their own learning" (p. 298).

In many classrooms, teachers and others equate learning to the score students receive on external standardized tests and to the grade assigned in class even though measurement specialists have discovered discrepancies in the meaning of grades (Brookhart, 1993; Pilcher, 1994; Stiggins, 1989). Shepard challenges us to broaden our thinking about classroom assessment by viewing assessment as an instructional process that is used to support and enhance learning. Stiggins (1999) and Arter (1999) also support this viewpoint and recommend that the Standards for Teacher Competence in Educational Assessment of Students (American Federation of Teachers, National Council of Measurement in Education, and National Education Association, 1990) expand to include competencies on aligning assessment to instructional purposes. To establish this viewpoint, Statyer and Johnston (1996) argue that assessment and instruction cannot have separate goals.
From their discussions with each other, and me the middle school teachers clearly recognized that students learned more when they played a role in any assessment process. These teachers thought of this strategy as an instructional rather than an assessment activity. However, they were more comfortable practicing pedagogical strategies that were “objective” and teacher controlled and thus, shied away from practicing instructional assessment in their classrooms.

Alignment of Instruction and Assessment Purposes

Graue (1993) proposes that a key attribute of productive instructional assessment is the alignment of assessment with the purposes of instruction. She also advocates that alignment requires more than matching curriculum to objectives. Assessments that are aligned to the curriculum explore all topics as the teacher uses multiple delivery strategies and encourages students to problem solve and reason as they are making sense of information and knowledge. Many teachers, however, are not accustomed to threading the assessment process throughout their instruction. For example, the middle school teachers centered their lesson planning around selecting “neat” activities for students and then aligning state standards to these activities. The activities supported the daily topics and provided students with class exercises during a specified time period. Outcome or product-driven assessments usually selected from book publishers or from existing materials, were used to evaluate students and to assign a grade.

Statyer and Johnston (1996) oppose teachers’ current practices of isolating assessment from instruction. They claim that when teachers’ goals are to actively involve students in composing and applying meaning within a learning context, “the activities of the classroom need to provide students with opportunities to question, to rethink, to redefine their thoughts, and to extend their understandings” (p. 8). Shepards’ arguments support this need and emphasis that classroom routine and corresponding assessments must foster the development of students’ metacognitive abilities and social meanings they attach to learning. When teachers use multiple data sources to collect information on where students reside in a learning situation, teachers can then engage in a systematic analysis to monitor and modify their pedagogical strategies and ensure that students encounter opportunities for improving.

Validity

The selected strategies for collecting information on student learning shape the evaluative information. Dale Whittington (1999) recommends that the assessment tools must be relevant to the task at hand as she presents ways validity can be taught from the perspective of the decisions classroom teachers make instead of from a more purely psychometric viewpoint. Thus, defining validity shifts from focusing on assessment for measurement to assessment for instruction (Cole, 1988).

Graue (1993) claims instructional assessment calls for new epistemological approaches to knowing students and their learning. Teachers are concerned with equity in opportunity rather than equality of outcomes (Graue, 1994). In the social constructivist framework defined by Shepard, valid strategies must be useful to teachers and students. Graue explains that usefulness depends on how teachers apply varying assessment strategies to their students. She proposes that some assessment strategies fit some children better than others and that teachers should balance
the use of multiple assessment strategies against individual student strengths and weaknesses. Teacher interpretations of information should be made on patterns among information sources, while avoiding heavily weighting single sources of information.

When discussing the use of multiple assessments in classrooms, the middle school teachers exhibited frustration. This strategy opposed their traditional, daily practices for assessing students and challenged their views on assessment purposes. Traditional beliefs about teaching continue to influence the classroom actions these teachers exhibit, making it difficult for educators to shift from one paradigm to another, especially in the high-stakes accountability era of today. These teachers as well as many other educators abide by external measures of value rather than evaluating whether or not pedagogical strategies in classrooms are improving and supporting student learning.

**Instructional Assessment and Standards**

Applying instructional assessment strategies in a social constructivist learning environment create a challenging curriculum that embeds assessments to enhance and support learning for all students. Teacher practices aligned to these theoretical views follow closely with standards-based reform rhetoric (Shepard, 2000). Rather than solely aiming reform at outcomes, the focus is on the process of teaching while using student learning as a guide for modifying and adapting instructional practices.

Using student outcome scores on accountability tests, policy-makers of standard-based reform have placed immense faith in a heavy-handed system of rewards and punishments (McLaughlin & Shepard, 1995). Shepard (2000) advocates that externally imposed testing programs have prevented thoughtful classroom assessment practices. Graue (1993) claims “the prominence and political weight of these accountability tests in educational discussions have overshadowed ongoing assessment done by teachers, pushing it into the shadows” (p. 286). She promotes that reform needs to be aimed at the process of teaching rather than solely on student outcomes as measured by external tests. Similarly, Graue (1993) states, “instruction and assessment are part of the professional responsibility of teaching, and these responsibilities are not recipe-oriented” (p. 286).

The application of the measurement-driven paradigm in the standards-based movement has triggered teachers to coach students to pass accountability tests. This type of learning environment teaches students that the rewards and punishments of their performance depend on external measurements rather than on their processes for problem-solving and reasoning to construct their own meaning of new knowledge and information. In this situation of intense political pressure, test scores are likely to rise without a corresponding improvement in student learning (Whitford & Jones, 2000). Shepard (1989) explains that the form of the test can influence learning to the extent that instruction in the classroom becomes decontextualized and narrowly conceived, thus, potentially decreasing students’ conceptual understandings.

The middle school teachers expressed the need to design assessment tools that resembled the types of items on the state accountability test. Teachers claimed that they selected tests from textbooks because publishers presented a series of test items for each lesson that aligned to the format of the state test. The teachers did not feel that this type of assessment assisted students in learning. Rather, these assessments prepared their students for the state test that was used to assign overall school grades of A, B, C, D or F. Low grade assignments positioned schools to
lose students who elected to receive state vouchers and to eventually be overtaken by the state if failure continued. This past year, the two schools in failing situations included only reading, writing and mathematics in the curriculum (the subjects tested at the state level) and last July began preparing the elementary students for a March 2001 test. After experiencing success in the 1999-2000 school year by following this same strategy, the teachers at these two schools have expressed confidence that their students will perform at a level D or higher.

The standards-based movement began with the pre-supposition that all students can learn. As educators living in a time period of standards-based reform, we need to question the purposes and the consequences of this movement. Is the purpose to impose a punishment and reward system to hold teachers, schools, districts, and states accountable? Is the purpose to enhance and support student learning that improves students' thinking and reasoning to solve academic and content-based problems that arise in contextual learning situations? or do both represent purposes of standards-based reform and if so, can we apply the first purpose without providing the framework for the second? The way that we answer these questions determines the place of instructional assessment in today's classrooms and influences the extent to which educators and policy-makers chose to reform ideas of assessment and to emphasize assessment as an instructional process in classrooms.

References


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