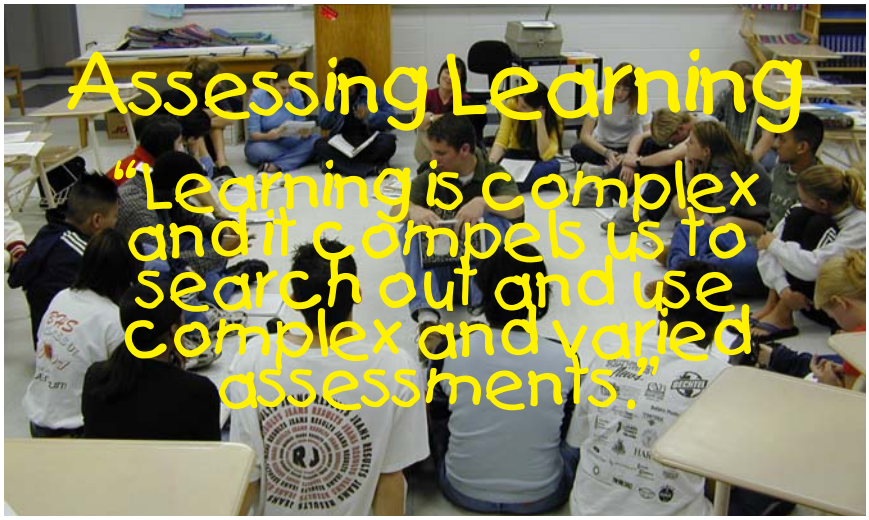
CENTER PIECE

Volume 8, Number 2 Fall, 2001

Assessing Learning



by Linda McNeil, CoDirector

"OK, we know now that the TAAS test is not good. So what do we need instead? How can we know how well our children are learning? And what can the Center for Education do to show us other possibilities? What is the positive message that can help people see the alternatives to these tests?"

These questions from a long-time friend of public schools inspired this issue of CenterPiece. In this issue you will find two simple but powerful messages:

1) **Authentic ways of assessing children's learning are widely available and time-tested in every subject, for every stage of children's development.**

2) **All of the programs of the Center for Education not only incorporate – but are built around – authentic teaching and assessing. Authentic assessments are so integral to all of our work with teachers that it, frankly, never occurred to us that we needed to shout about it. That was a mistake.**

It was a mistake because one of the claims used to justify high-stakes standardized tests (like the TAAS) is that "without these tests, we won't know if children are learning." It may be true that politicians and bureaucrats have been so far removed from classrooms that they do not have a clear picture of children's learning. But the claim that "if we don't test, we won't know" shows a lack of familiarity with the many ways we can, and must, ask children to demonstrate what and how they are learning. The articles in this issue of CenterPiece demonstrate powerful models for linking high quality teaching to assessments that capture on a deep level what—and how--children are learning.

Teaching that engages children's minds and helps them grow their skills and ideas is dependent on, and inseparable from, continuous assessment of those skills and understandings as they are developing. Every subject has a broad range of good, solid, visible ways to build a record of children's intellectual growth. For every subject there are assessments specific to the nature of knowledge and the ways of knowing in that field. For every phase of children's learning, there are assessments built on sound learning theory – developmental theory, theories of multiple intelligence and sensory and emotional learning, theories of cognition and brain development. Learning is complex and it compels us to search out and use complex and varied assessments.

Complex and varied do not mean cumbersome, technical or unworkable. In fact, authentic assessments are called authentic precisely because they document and evaluate children's work directly rather than rely on technical indicators which may or may not reflect children's learning. Terri Goodman's article about the School Writing Project (p. 6) offers an excellent example of assessment that is both complex in what it captures and simple in its usefulness: she takes us into a writing conference with a student struggling to build his *Beowulf* paper around an original insight he has into the characters. In Goodman's class the assessment of writing is inherently relational – a dialogue between the teacher and student writer that strengthens the student's voice, as well as formal skills, as a writer.

Very young children's grasp of language can also be accurately assessed, as Bernie Mathes describes with the story of four-year-old Victor in the Classroom Storytelling Project (p. 5)..

Assessments in science need to let the teacher and the student know whether the student is developing the skills to " think in science," to pose

continued on page thirteen

What's Inside

Assessing Science Understanding in the Model Science Lab

by Elnora Harcombe, Director, Model Science Lab

Assessment must occur continuously and at various levels to make learning most effective. In the Model Science Laboratory, we are concerned about the progress of the students (learning science concepts), of teachers (enriching their science knowledge as well as their science pedagogy), and of ourselves (coaching the teachers). Our mantra for the teachers is "science and children"—that is, what basic concept of science are you teaching within the mandated topic such that the students will still understand it ten years from now? And how are you engaging the students with that concept so that they can explain it in their own words and apply it to another situation?

The Texas curriculum guidelines and Houston Project CLEAR for the sixth grade starts with some concepts that are quite difficult for young people to comprehend—matter, physical properties, chemical changes, energy, and the interaction of matter and energy. The crucial example of all of these topics is photosynthesis. It is a chemical reaction that occurs only in the chloroplasts of plants. It captures the energy from sunlight and uses it to rearrange the atoms found in water and carbon dioxide to create a new substance, glucose. Glucose, in turn, can be sent to all cells of the plant to provide them with energy. Animals also need this energy that has been captured from the sun, so they must eat either plants or eat other animals who have eaten plants.

Assessment must occur continuously and at various levels to make learning effective.

The difficulty students have with photosynthesis was discussed in my book, *Science Teaching/Science Learning* (Teachers College Press, 2000). Using traditional assessment methods, Ms. Diamond was convinced that her students understood photosynthesis because they readily volunteered that, "Plants use photosynthesis as a process to make their own food," and " Plants contain chloroplasts" [p. 39]. However, when Ms. Diamond went back to probe their understanding more deeply, she found that the students had no concept of the capture of the sun's energy, the nature of the chemical reaction, the rearrangement of the atoms from water and carbon dioxide, nor the production or use of glucose. When pressured to explain further, the students proposed that photosynthesis was "the series of steps in a seed becoming a plant," and "a plant making a strawberry," or even "the steps of a bud opening out into a flower" [p. 40]. It was a shock to Ms. Diamond that even though her students could recite the definitions with great facility, they had little *understanding* behind those memorized words.

The "sad" plant was made "happy" when students provided energy from the sun, water for the roots, and carbon dioxide from their breaths.

Knowing this, the current eight resident teachers in the Model Lab were faced with a major challenge to effectively engage the students in the concepts associated with photosynthesis in ways that would assure they fully understood the processes of photosynthesis. Their responses are presented here as evidence that these teachers are learning what it means to teach and assess authentically.

In the first period class, Crystal DeLaney and George Morrison wanted to emphasize how the energy of the sun is captured and used to rearrange atoms. Entering sixth grade students had not studied atoms, molecules, or the periodic table. Student knowledge of chemical reactions was restricted to a sense that "something new" is made. However, students were familiar with water written as H_2O and with the diagram of two circles representing hydrogen connected to a larger circle representing oxygen. So students easily understood carbon dioxide written as CO_2 and consisting of one carbon and two oxygens. The teachers changed the model slightly from the familiar circles—they represented carbon as a square, oxygen as a wide ice cream cone and hydrogen as a half circle. They explained that the flat sides represented the number of places an atom could connect to another atom. Each child was given an envelope with 6 C (squares), 12 H (half circles), and 18 O (wide cones). They were told to build six water molecules and six carbon dioxide molecules on their desk. The students accomplished this task quickly. There was class discussion about how the plants can easily obtain the CO_2 from the air and the H_2O through the roots.

Next the students were to supply the energy from the sun and take apart all of their molecules and rearrange the atoms into glucose, $C_6H_{12}O_6$ by connecting flat side to flat side. The students were able to use creativity in arranging their atoms as long as they used the correct total number of each kind of atom and had an appropriate number of connections for each atom. The main point was that one large molecule could be made from the twelve small molecules. Students began noticing that making glucose did not use all the atoms. There was a pile of oxygen pieces left over. "Now what do you suppose the plant might do with that extra oxygen?" the teachers queried. More ah-ha reactions occurred. The teachers also supplied large sheets of green construction paper for the students to cut into the shape of a leaf and attach the glucose puzzle pieces. In later discussion, it was proposed that alternatively the puzzle pieces could have been sent home to be used in sharing photosynthesis with an adult. A return letter would merit extra credit for the student. The first period students now had expertise on photosynthesis worth sharing.

In the second period class, Sarah Rowles-Sewing and Demetria Rutherford used a creative art project to explore the level of understanding in their students. The homework assignment asked the students to represent the parts of a plant and the process of photosynthesis using a collage, model, or other artistic method. The students returned with great pride and enthusiasm about their creations. Many were scientifically accurate, but others indicated there was still some confusion about details. Building on her awareness of different modes of learning, Demetria generated a role-play. She donned a crown of leaves and sprouted rootlets from near the feet of her brown stem. She was wilting and unhappy and requested help from the students. Spontaneously students ran to get the empty watering can to pour pretend water on her roots, correctly ignoring water on her leaves. Another student began dancing around her, waving her arms and offering energy from the sun. Demetria prodded them that she needed one more thing—and they began blowing on her to provide carbon dioxide!

Photosynthesis provides glucose for the plant, but as animals, we are also interested in how we can eat the plant and use that same energy molecule. Children seem to grasp the idea of the food chain fairly easily, but they do not always associate it with the transfer of energy. Todd Gisler and Melina Zapon struggled with how they could convey the 10% guideline of the energy pyramid without having the mess of hundreds of beads transferred from cup to cup up the food chain. They hit upon a creative, yet simple, idea. They gave a piece of green paper to ten students, yellow paper to another ten students, blue to the next ten, and brown to one more. The sheets had all been creased before class to form ten sections. Todd called one student to bring his green sheet to the front of the class. He explained that the student was a plant and the sheet represented all of the glucose the plant had made during the whole time it lived. Then Todd led the class in a mental exploration of all the ways that glucose energy might have been used—to grow, to reproduce, to develop roots, to build cellulose, to transport water and glucose through the plant, and other "life processes." The plant used 90% of the glucose for its own life. Only 10% of the original energy converted into glucose was still available for the grasshopper that ate the plant. So the student tore off 9 sections of his paper and threw them into a bucket labeled life processes, then handed his one remaining section to a student with a yellow sheet who represented a grasshopper. The process was continued methodically with three more green-sheet plant students, but the grasshopper still had only a portion of the energy it needed to be able to live. By now the students understood the procedure, and each of the plant students came up to use 90% of their energy for life processes and transfer 10% to the grasshopper that ate them. Finally the grasshopper had enough to live. It then used 80% of its energy intake for life processes, 10% for wastes, and 10% went to the blue jay that ate the grasshopper. Nine more grasshoppers hopped to the front of the room where 80% of their sheet went into the life process bucket, 10% into the waste bucket, and 10% to the blue jay. Then the blue jays each used 80% for life, 10% for waste, and 10% went to the hawk. By this time, the process moved quickly and smoothly as each student took a place in the food chain. The small amount of original energy that was transferred up the chain was readily apparent. The energy sections that had been utilized for life processes were converted into heat energy, while the portions that were waste became available to decomposers. The lesson was elegant in its simplicity and directness.

Their (teachers') innovative creativity is especially impressive because they are concentrating on the science concept and on the students they are coaching in contrast to taking a generic lesson plan out of a book.

continued on page fourteen

These students are displaying the flow of energy through different trophic levels of a food web.

Alternative Assessments in the School Science Project Show Gains in Teaching and Student Achievement

by Wallace Dominey, Project Director, School Science Project

One of the best reasons to assess student achievement is to determine if students are learning. If students are not learning, then teaching practices need to change. Unfortunately, assessment sometimes dictates instruction rather than serving instruction. Students may be asked, for example, to memorize the names of the bones of the body simply because the assessment would be quite simple. Students either are able to match the names of the bones of the body to a diagram, or they cannot.

The Rice University/Aldine Independent School District's Science Collaborative (RASC) is now in its fourth year. This collaborative was created by the Center for Education's School Science Project and Aldine ISD to meet the teacher professional development needs of Aldine ISD's science-related magnet schools.

There may be many more interesting lessons that could be learned related to the bones of the body, but these lessons would be much more difficult to assess. For example, students could be asked to discuss the effects on the human body of removing particular bones. But for this more interesting activity, how would teachers assess student achievement? Appropriate assessments could be devised, but these assessments take far more time and expertise to create.

Standardized assessments are particularly subject to criticism based on whether or not something of value is being tested, whether the assessment was created mostly for the convenience of the testing authority, and whether the modality (usually multiple choice) is appropriate for all students. Standardized tests requiring students to regurgitate facts are becoming increasingly inappropriate as facts are now available to anyone with a computer and a few seconds to spare. Instead, students need to understand how facts can be associated to create novel solutions to difficult problems. Assessing this type of knowledge and skill goes far beyond a one-size-fits-all multiple-choice test.

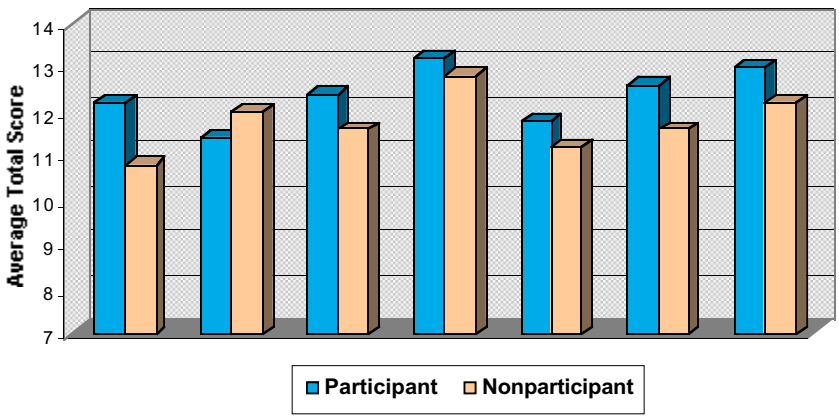
Standardized tests requiring students to regurgitate facts are becoming increasingly inappropriate as facts are now available to anyone with a computer and a few seconds to spare.

Recognizing the potential problems inherent in standardized testing, the School Science Project developed alternative assessments to supplement standardized assessments. Different alternative assessments were created for grades K-2, 3-4, 5-6 and 7-8. These, more authentic, assessments, required students to work in small groups to solve science problems. Students were required to think scientifically and, in the case of older students, to create and conduct their own scientific experiments.

Examples of the type of problems that students were given included "Why do certain plastic Easter eggs float while others sink?" for the lower elementary grade levels, and "What factors (size, weight, elasticity) affect how high balls bounce?" for the higher grade levels. Randomly chosen groups of students were given materials that would allow them to study the problem.

For younger students, students were asked to restate the question being investigated, to record data, to draw conclusions from their observations, and to apply what they learned to a new situation. Older students were asked to develop a scientific hypothesis, then design and conduct an experiment from the materials provided to test their hypothesis. Older students were also asked to record data, to draw conclusions, and to apply what they learned to a new situation. In addition to student work products (observation sheets, etc.), students were interviewed to determine their level of understanding.

Figure 1. **Student Alternative Assessment Scores, Spring, 1999: Paired Data for Participant vs. Nonparticipant Teachers**



continued on page fourteen

Authentic Assessments are Key to Meaningful Instruction in the Classroom Storytelling Project

by Bernie Mathes, Project Director, School Literacy & Culture Project

"My story has three dads," announced four-year old Victor, gazing intently first at his teacher's face, then at the blank paper in front of them. With his tightly creased khaki pants, faded polo buttoned to the neck, black hair slicked back and heavy gold chain around his neck, Victor's mother had dressed him for the serious business of school. His command of English had grown with each of the several stories he told to his teacher in the first months of school. "First, let's put your name. How does it start?" asked his teacher. "With a vuh-vuh- V!" he exclaimed. He then began, "One day my dad play with me. More dads play with me. A new dad taked me to WalMart. Dad read me a book. . . . " As he dictated his story to his Head Start teacher, Victor's eyes tracked the print his teacher wrote, with his head so close to the paper his nose nearly touched the pen. Once he finished dictating his story with a rousing, "The End," Victor asked, "Where are the dads?" After his teacher pointed out the first word "Dad," Victor scanned the page for others. "One, two, three, FOUR! I even have one more."

As a participant in the yearlong Classroom Storytelling Project, Victor's teacher was learning to use children's dictated and then dramatized stories to advance their literacy development. As she analyzed this seven minute interaction, she noted that Victor tracked print from left to right; he was aware of print-meaning associations; he knew both the sound and name of "V," indicating he was developing the alphabetic principle. With an initial model, he could recognize a simple word and find it imbedded in print. He had one-to-one correspondence up to four. And, the teacher knew that fathers were very important to this young boy who had no male figure in his life. The teacher recorded this information on a large self-sticking label, which she added to Victor's pages in her assessment notebook.

A "one-size fits all" curriculum is never appropriate, but is particularly misplaced in the early childhood classroom where children are at many different developmental levels.

According to the National Association for the Education of Young Children (NAEYC), assessment is "the process of observing, recording and otherwise documenting work that children do and how they do it, as a basis for a variety of education decisions that affect the child" (NAEYC & NAECS/SDE 1992). In order to ensure that instruction is appropriately matched to a child's changing educational needs, this process must be multifaceted and longitudinal. A "one-size fits all" curriculum is never appropriate, but is particularly misplaced in the early childhood classroom where children are at many different developmental levels.

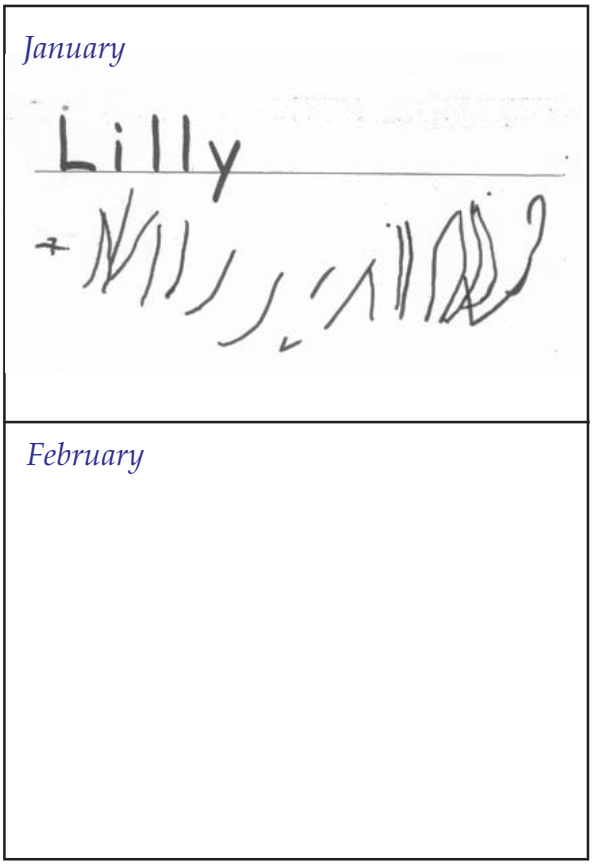


Figure 1: 3-year old Lilly sign-in sheets.

This is even more true with a "one-size fits all" assessment. NAEYC and the International Reading Association (IRA) believed the issue to be so important that they issued a joint position statement emphasizing that, "Group-administered, multiple-choice standardized achievement tests in reading and writing skills should not be used before third grade. The younger the child, the more difficult it is to obtain valid and reliable indices of his or her development and learning using one-time test administrations" (IRA & NAEYC 1998). Since formalized assessment is not only inappropriate but also unreliable for young children, early childhood educators have developed alternative, authentic, methods to monitor and assess their students' learning.

Anecdotal records, used by Victor's teacher above, are a powerful tool for documenting individual children's learning. While the recording mechanisms vary, teachers make scheduled observations of each child's involvement

continued on page fifteen

Crafting Conversations: Learning to Listen and Learning to Write in the School Writing Project

by Terri Goodman, Project Director, School Writing Project

It is lunchtime and senior David E. slides into the hard plastic desk next to mine for a lunchtime writing conference. It is really the best time to meet with me since I can give my undivided attention to the piece of writing at hand and spend more than the three to five minutes in conversation allotted to my almost 30 individual students in a fifty minute class period.

I forget during the summer just how much hard work is involved at the beginning of the year in framing the conversation around quality writing. In my classroom, just like the other School Writing Project classrooms around the district, I emphasize writing as a process that is as important in the conception of the ideas as it is in the execution of the final paper. (In fact, the standard line in my class is that there are no final papers only additional opportunities for rewrites.)

It is that conversation between the writer and audience (teacher, peers) that I believe defines real learning in the classroom. It is not the one-dimensional instruction contained in so many state-adopted writing manuals that seem to dictate so much of what happens between teacher and student. The process I engage in with my students is messy, inexact, frustrating, and real. To engage in real writing with students takes time, practice, patience, and conferences.

I never took my school journal seriously because it's related to school and school is bad. A school journal is a journal everyone has, and that's not what I wanted. I wanted a forbidden journal. A journal that I would have to hide inside my Eco binder so Mr. C couldn't see me, a journal that doesn't threaten to open its pages to anyone else. I've filled up three journals this year. Not a personal best, but I can save that for another year. My journals are full of conversations. That's what I love. Conversation. People tell me that even though I'm quiet, I always look like I'm absorbed in my surroundings. I think that is very true, because that's what I find I fill my journals with. Everyday normal things. I write about how Mr. K shakes his head, clucks his tongue, and calls me a failure every time I pass him in the hall, because I had to drop his class last semester. I write about Mr. R and the how he used to think that when people said, "it's da BOMB!!" he used to go calling security thinking the school was in danger. I write about how Andres sharpens his pencil every day in physics, and how Allison has yet to buy him a mechanical one like she promised. I write about the conversations we have during lunch in the choir room, and who broke the last chair. I write about the stories Mrs. G tells us, and how everyone hates my precal teacher. I write about what happens in Recess, my favorite cartoon. I write about my best friend's family and the background noise I hear on the phone when I talk to her. I dedicate poems to the songs I'm playing on the piano, lately I've cursed the 3rd movement of Beethoven's Moonlight Sonata. I write about the weekend parties that I go to, and the stupid no good parties that I don't get invited to. I write about the organ at my church, and Fr. Todd, I feel like I've run a marathon; I have to breathe after every other word.

Julian Villagomez
student, Bellaire High School

So on this Tuesday afternoon, I am looking at David E.'s *Beowulf* paper and at the Literary Analysis rubric that will be used as the grading criteria for this type of expository essay. I know that he has already invested in a number of steps before reaching this final draft stage. Many of the original ideas that he has formulated for this paper were generated in an earlier seminar discussion. His first draft has already been read and commented on by a small group of his peers. But as I look at his paper, I realize that the rubric will not be sufficient for our writer's conference today.

Instead, my comments will require all of the diplomacy of a United Nations ambassador because with student writers you often only get one chance to get it right in addressing what is most important in the writing of any piece-the message. In David's essay, I not only understand the central message, I'm quite excited about it. The one thing that I don't want to have happen by hurrying the conversation is for him to quit looking at literature in his special idiosyncratic way. The original idea that David has embedded deep into his paper, in fact somewhere near the third paragraph, is that the monster, Grendel, in *Beowulf* is actually a type of metaphysical physician divinely sent to reveal to the "townspeople" that evil is not an external manifestation but an internal condition of all men.

After 11 years of teaching seniors British literature, I am impressed. He has a compelling interpretation, but he has fallen so in love with his mixed metaphors of Grendel as physician and of Herot as a kind of Anglo-Saxon Tombstone, that he has failed to develop any text support. At this point in the conference, I realize how easy it would be to just go down the rubric with my pen and reveal to David all that he has missed. But if I do that he will never know all of the things that he has done right

continued on page seventeen

Assessing Pre-Service Teachers

by Lissa Heckelman, Director, Student Teaching at Rice University

"How do you know if a teacher is good?" I asked my daughter, fresh from her first week of high school. She did not hesitate. "You can tell if they have the information and can make you understand and you can remember it. And if they have good test scores in their classes."

It seems that even our students are being convinced that test scores, measures of mastery of some definitive content, are the bottom line for evaluating teaching. My daughter was referring to the TAAS (Texas Assessment of Academic Skills) and other state test scores so widely reported to evaluate schools. She will need to pass the TAAS to prove her competence to graduate from high school in four years and seems to be willing to evaluate her teachers on the basis of their teaching her to do that. This, despite the fact that recently she had a teacher about whom she complained almost daily because the teacher did not teach but merely assigned students sections of the text to complete. That teacher had a 100% passing rate on her section of the TAAS. Grudgingly, my daughter had to admit that by her definition, she was a good teacher. "But that's not all there is to it!"

A multiple choice test cannot measure all that teachers need to be before they are given the responsibility for their own classrooms.

That is not all there is to it.

We all know what good teaching is. We even know what outstanding teaching is. But we have difficulty describing the process to each other. An outstanding teacher for one student is not necessarily good for another. Teachers generally get better with experience. Some teachers burn out, then get renewed and become even more effective. How do we know how good a teacher is in the process? More to the point in pre-service education, how do we know someone is going to be good before he or she even stands in front of his or her first class of students? We need to define the criteria and then establish a way to determine if a teacher is effective.

Socrates described the position as teaching young men to "to think, speak, and act" (Monroe, 1905, p. 114). Noah Webster, the "Schoolmaster of America," was concerned with students learning nationalism and morality along with the 3 R's. Through the centuries people evaluated teachers based on their observations and what they thought education should accomplish. A teacher who did not meet expectations was replaced. With the advent of the common schools and the evolution of standardization, however, teaching became a profession and those who hired teachers began seeking more rigor in describing what a teacher should do and how administrators could be sure they were doing it. For first year teachers, administrators needed a way to know that the new teachers were prepared to teach from the first day. Normal schools, then colleges and universities took on the task of educating pre-service teachers. Soon states set minimum standards of course work and grades that led to state certification to teach. Requirements varied widely between institutions and between states. Institutions of higher education set up committees that allowed self-evaluation, often supplemented by committees established by states to provide some oversight. The process of certification was as complicated, intuitive, and difficult to evaluate as was teaching itself.

Preparation to teach must be evaluated as the multi-faceted, challenging, even intuitive process that is involved in human interaction.

In our modern orientation of business and products, with technology available for every need, the evaluation of teaching has been reduced to a bottom line that is easy to calculate, one that is not static so change can be observed over a short period of time. We have come to use standardized test scores to determine student achievement and worthiness to be promoted, to evaluate teacher effectiveness, to compare schools within districts and states, to list states according to literacy rates, and to name countries who are winning in the race to educate the most people the fastest. More recently, we have begun using the same bottom line to evaluate the competence of pre-service teachers and also the effectiveness of the institutions that educated them.

Within the last three years Texas has created a system for evaluation of teacher preparation institutions called ASEP (Accountability System for Educator Preparation), based on test scores. The tests are the ExCET tests (Examination for the Certification of Educators in Texas) and include one test of Professional Development, posing the kinds of decision-making situations that teachers face each day in the classroom, and tests of content mastery specific to the subject(s) a student wants to teach. Each test requires up to 4 hours to complete and the student must answer 70% of the questions correctly to pass the test. Institutions that prepare teachers are given the highest rating, "Accredited," if at least two-thirds of the students in each identified ethnic group pass each test. Though ASEP results do not appear on the front page of the paper as TAAS scores do, the results are meant to be public and readily accessible. As ASEP has

continued on page sixteen

Alternatives to High-Stakes Testing

by Laurie Hammons, Coordinator, .Center for Education

As students, teachers, and parents realize the shortcomings of high-stakes standardized testing, the question arises: How do we assess a child's educational progress? What are our alternatives?

First, we choose to ask: What is our vision of education for students? Do we want to move past the narrow focus of the standardized test? What is exciting, powerful learning – and how do we know it when we see it?

Good informative assessments are already available. They have been proven in school after school - not only to be better indicators of children's learning, but as guides to rich, substantive teaching. Reading and talking about any one of these books could give parents and teachers the ammunition they need to free their schools from the limits of standardized testing.

Authentic Assessment in Action: Studies of Schools and Students at Work, by Linda Darling-Hammond, Jacqueline Ancess, and Beverly Falk. (Teachers College Press 1995)

The authors provide examples of alternatives to standardized testing demonstrated at five public schools.. Each school's story is rich with examples of the ways that these reforms have a positive impact on student learning.

What are authentic assessments?

Common to these schools is a mission to encourage student learning that is richer than the typical school program. Curricular goals include ways to redirect students' energies toward challenging, performance-oriented tasks. These complex tasks require analysis of a problem, integration of knowledge, an inventive outlook, and highly developed skills in written and oral expression. These skills are much more useful in the real world than the typical focus on the recall and recognition of facts.

To assess these skills, students demonstrate what they can do in much the same way that workers do in life settings: they perform tasks that are complex and that require the production of solutions or products. "Rather than taking multiple choice tests in which students react to ideas or identify facts, these students engage in science experiments, conduct social science research, write essays and papers, read and interpret literature, and solve mathematical problems in real-world contexts."

continued on page eighteen

"A New Look at School Accountability" by Anne Wheelock in *Accountability, Assessment, and Teacher Commitment: Lessons from Kentucky's Reform Efforts*, edited by Betty Lou Whitford and Ken Jones (SUNY 2000)

The accountability discussion often boils down to who's in charge of critical decisions affecting student's learning. Anne Wheelock, in her chapter "A New Look at School Accountability," presents an alternative: a hybrid system of control, the "managerial/professional" model of accountability, which changes the roles of the major participants in the educational system. She proposes a larger goal than increased test scores: that of making every school a place where students produce work that meets standards of excellence.

In this system, teachers, as professionals, receive on-going, effective training in developing "the knowledge and skills needed to help an increasingly diverse student population learn at deeper levels of understanding." This would include professional reflection over practices and student outcomes. By changing the evaluation system from a "gotcha" system to one that supports professional development, teachers are free to make decisions based on the child's needs rather than looking good on a test.

The managerial function of the school district is to provide the leadership and guidance to focus on *capacity-building, not coercion*, Wheelock states. First, the district needs to support the professional growth of teachers as they move to more effective and authentic methods of assessing student learning. Second should be its mission to support the equalization of school environment – why should schools in affluent neighborhoods have nicer buildings, sufficient textbooks, and better paid teachers, while schools whose students need the most remedial work be shortchanged? The state's role becomes a mission to promote equity among schools, to provide technical assistance and facilitate the use of research-based practices, and to assist districts whose efforts do not result in improvement. This would lead, as Wheelock proposes, to an accountability system that reflects educational purposes.

Will Standards Save Public Education? by Deborah Meier (Beacon Press 2000)

In the first chapter "Educating a Democracy," Deborah Meier presents her views on the alternatives to the standardization of America's schools. (She is then joined by the comments of seven other educators.) Based on her experience as the founder of small public schools in both New York City and Boston, she proposes assessments which make children's learning clear and visible to all. She does not advocate the elimination of all traditional means to determine student progress and school success. In any case, she says, that would hardly be a danger; American school children are the most tested on earth!

At her Central Park East school in east Harlem, the students' work is collected in portfolios and is examined by reviewers from inside and outside the school in a process resembling a doctoral oral exam. Standards are easily accessible and clear to the community, to parents, and to students alike. In addition, the school itself undergoes reviews by educators from outside the school to examine the quality of the curriculum, instruction, staff development, and culture. The school is also examined in light of the school's effect on students' future success (in college, work, and so forth).

An important part of this system is local control. The community sets the standards, encourages creativity from teachers and students, and looks at authentic results. Meier states, "We are not debating the value of standards, but how to raise them and who should decide them."

In her chapter, "Habits of Mind," Linda Nathan describes the eighteen-month process by which the faculty of the Boston Arts Academy reached a consensus about that school's content and skill standards. This faculty also reached consensus on the habits of mind their students should attain before graduation: invention, connection, refinement, and ownership. Each habit helps shape the teachers' presentation of the subject matter. "If you possess the habits of a good learner, then the learning of content makes so much more sense."

Meier concludes with an explanation of the ways good assessments mirror strong realtionships between teacher and students:

> *My concern about standardization and high-stakes testing stems precisely from my conviction that what makes some schools overcome the limitations of time is the power of the relationships that are developed inside them: among members of the faculty, between young people and adults, and finally among young people. Only a very powerful faculty can build those enduring and rigorous relationships with the young; only a faculty that also accepts responsibility for developing its own standards will be tough enough to police its own kids and its own colleagues. Schools that do less cannot offer enough to overcome the odds facing too many youngsters.*

Standardized Minds: The High Price of America's Testing Culture and What We Can Do to Change It by Peter Sacks (Perseus 1999)

In the chapter "Authentic Achievement: Assessing Performance in American Schools," Peter Sacks points to the experiences of North Carolina schools after educators there realized that "the state's sole dependence on the standardized testing model as a measure of school quality could mean big trouble in the long run." Their Education Standards and Accountability Commission was charged with figuring out what North Carolina pupils ought to know and be able to do.

Through public meetings it became clear what the public wanted. "Of course, people wanted graduates who could read, write, do math problems, and possess a modicum of computer literacy. But state residents also wanted young graduates who could speak and listen well, work happily in teams, and apply their knowledge and skills to real-world problems and situations. The public wanted lifelong learners and graduates who cared about doing work of quality, no matter what the task."

Standardized tests were too blunt a tool to assess the complexity and nuances of this type of student learning. The commission recommended the use of performance assessments (also called authentic or alternative assessments). Assessing students' performance follows the findings of cognitive psychology that best learning takes place in an active context. These assessments could take many forms: open-ended questions which show whether the child understands the concept rather than just getting the right answer; the compilation of portfolios of student work to assess the child's progress and understanding over time; large projects which could last several weeks or months and bring together knowledge in several subjects followed by a presentation of the child's findings.

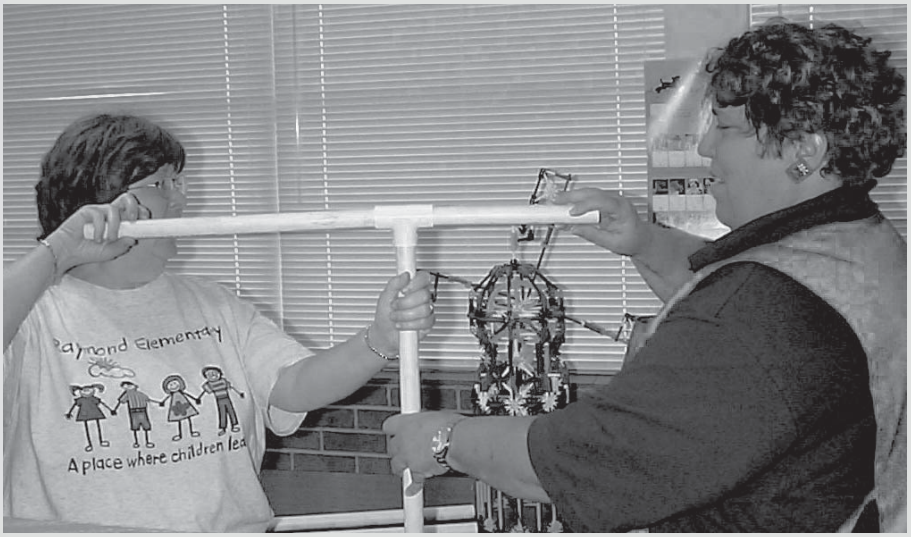
Children's learning improves dramatically when the project merits their efforts One multi-disciplinary project was a regional electric vehicle competition in which the students from a school with one of the state's lowest standardized test scores won by a large margin over teams from elite private schools and proceeded to win the national first prize as well. More important than the contest results were the changes in the students' learning habits.

continued on page nineteen

Learning at t

Professor Richard Smith leads a discussion on East Asia and "ways of world-making" during a session of the Faculty Development Institute on East Asia this spring sponsored by the Center's Asia Outreach & Global Education project and the Texas Consortium on Teaching about Asia. The Freeman Foundation provided funding.

Students from the Mode science experiment whic Model Science Lab year- highlighted the achievem participating in the Mod past and present Model



Teachers from Raymond Academy in Aldine I.S.D. work together to construct a display device using PVC pipe during the School Science Project Summer Institute.

Almost 60 teachers attend long Reading, Writing an Connections Summer Ins sponsored by the School L Culture Project in July. L Directors Judy Rolke and help teachers reflect on an classroom practices at one sessions.

the Center. . .

l Science Lab demonstrate their
h shows energy conversion at the
end celebration in May. The event
nents of students of teachers
del Science Lab, as well as honored
Science Lab graduates.

Classroom Storytelling Project teachers admire portfolios of their students' writings at the School Literacy & Culture Project's year-end celebration for the Classroom Storytelling Project in May. Over 75 former and current Classroom Storytelling Project participants came to Rice campus to share their children's language learning through stories.

led the week-
d Cultural
titute
iteracy &
Literacy Co
Karen Capo
d extend their
of the

Reprinted with permission from Education Week, Volume 21, Issue No. 8, October 24, 2001

The Trouble With Testing

by Jane Ehrenfeld , Education Week

On the last day of testing, in the spring of 1999, I faced a classroom of unhappy 3rd graders, and wondered what I could do to restore their self-esteem, which had been trampled by a week of taking tests they could not pass. Since September of the previous school year, which had been my first as a teacher, I had been asking myself this question. I had tried to teach them to the best of my ability, but with these highly disadvantaged students in a school that had been failing for many years, the limit of what I could do in a few short months seemed narrow.

The biggest obstacle to teaching well, however, was the tests themselves. They came in an endless stream. It seemed as if every time I turned around we were losing another week to testing. The irony to me was clear: We were taking these children out of their classes to test them, so we could find out that they couldn't pass the tests; and then we were testing them even more to familiarize them with a testing format, while neglecting the content that would actually allow them to raise their scores.

Although this was Maryland, where the state tests were given only in the 3rd, 5th, and 8th grades, we were overwhelmed with practice tests, county tests, and benchmark tests that seemed to come in a steady flow all year. And now, if President Bush's education plan passes, with its proposal to test children in grades 3-8 nationwide every year, that testing flow may become an unstoppable torrent. This aspect of the plan has broad bipartisan support. And despite a few passionate speeches detailing the harm such testing might cause, there does not seem to be enough objection to testing to stop the plan from being approved. I am terrified of what will happen to public education if it does.

One of the plan's most disturbing components is the decision to penalize troubled schools that do not show annual gains in their test scores. For those of us who teach, it is clear that threatening people, whether children or adults, will never compel them to do better. Our students will not magically sit up and start passing their tests just because their parents demand it. The same holds for our schools. And the strange and terrible logic involved in the decision to pay poor schools less and less money over time only adds the final nail to the coffin of the educational system we offer our disadvantaged students.

This education plan, as I see it, is a smoke screen. It shrouds the real and very complex problems of our school system in a haze of buzzwords. And it hides the fact that the most potent of these buzzwords—accountability—means nothing without concrete and logical remedies to fix our schools when we find out they are failing. Let's face it: It is cheaper to test than to commit the dollars to fix decrepit classrooms, lower class sizes, and pay teachers decent salaries.

The schools cannot simply demand that their students stop suffering from the overwhelming burden of living in poverty. And they cannot demand that all teachers cover the curriculum when they are either testing or practicing for the test all the time. The best teachers I know are frantic trying to do their jobs well in a system gone mad with testing. They came from college full of excitement and energy, ready to throw themselves into teaching and to take on the challenge of working in the most troubled schools. And now these teachers are discouraged; not because of the students, and not because of the poverty and all its attendant problems, but because to teach well in a world of standardized tests is not possible, and because these teachers could never be content to spend their years mindlessly instructing children on how to fill in circles with a No. 2 pencil.

How can Jen lead her students on a ride through the turbulent days of the civil rights movement when there is testing to be done? How can Tamie help them see the logic of fractions when there is testing to be done? How can Maureen take them deep into a Langston Hughes poem when there is testing to be done? These teachers are the best our school system has to offer: highly educated, well- versed in the latest educational research, and willing to spend evenings and weekends doing school work. Yet the same passion and intelligence that makes them such excellent teachers also ensures that they can get jobs doing anything they please. Teaching for them is a labor of love. But I predict that when an onslaught of testing prevents them from putting that love into practice, they will flee, leaving the system even more pressed for teachers than it already is.

Where are the voices of teachers in this debate? I hear the politicians loudly, but I haven't heard how those who actually educate our children every day feel about this plan for yearly testing. It would surprise me greatly if from classrooms across the nation a rousing cry was heard, "Give us more tests! Testing makes us better teachers." Those who best know the needs of our children, who are engaged every day in the struggle to educate them properly, are also the ones chafing under a system that wraps them in a stranglehold of testing. In my county, hardly a month went by without our losing a week to testing. No one in that school would have asked for more, and I'm sure the same holds true in school systems around the country.

continued on page sixteen

continued from page one, Assessing Learning

questions and experiment with possible answers and applications. Nonie Harcombe (p. 2), describes Model Science Lab teachers who at first mistake correct definitions for students' understanding and then shows us how those same teachers alter their instruction to assure that students' minds grasp complex concepts in ways that they and their teacher can readily see. Wallace Dominey takes an experiment of the links between teachers' learning and the assessment of students, with compelling results (p. 4).

To help teachers and principals create discussions around possibilties for authentic assessments of children's learning, Laurie Hammons has reviewed essential reading for school faculties, including Linda Darling-Hammond's studies of schools and students at work around authentic assessments, and Anne Wheelock's article advocating assessments which move beyond management "accountability" to promote the larger goal of making schools places of academic excellence.

We hope this CenterPiece shows very clearly that there are many rigorous and sound ways of assessing children's learning, methods which are grounded in theories of learning and in the subject fields. Each one presented here provides teachers a basis for discussing children's progress with the child and with the parents in ways that are intelligible, meaningful and directly reflective of what children are learning. Teachers participating in any program of the Center for Education become deeply knowledgeable about assessments that help foster powerful learning.

This record of using good assessments in the classroom goes back to the beginnings of our work, and we know that many teachers who have worked with Center projects will find the examples here very familiar. Our hope is that this issue will inspire faculties and administrators to take a new look at assessments being used in their classrooms. Teachers who have begun their careers in the past ten years, under the dominance of state high-stakes testing, may not know of the wide range of possibilities for assessing learning in the subjects they teach. We hope this issue enlarges their vision of what is possible.

Jane Ehrenfeld's piece (p. 12) speaks for those teachers who feel their teaching is compromised by the drive to produce test scores, to add a star to each school's ratings. One political justification for high stakes testing is that "we need these tests to help identify the failures." We hope that this issue of CenterPiece becomes a valued resource for those educators and parents who reject that negative goal and reach instead for assessments that open up wonderful possibilties for learning in our schools.

Making Assessment Authentic: The Policies We Need

- Provide every child with a well-educated teacher, who knows his/her subject well and knows how children learn.
- Make sure every classroom is well provisioned, full of a wide variety of high quality instructional materials.
- Make sure every teacher has an opportunity to learn, and to keep on learning, methods of assessment in the subject areas that capture the many ways children learn and the many things we want our children to learn.
- Create a system of record keeping that includes reading inventories, teachers' comments on a child's developing skills, records of children's work in the laboratory or studio or classroom, samples of children's work over time.
- Create adequate time for teachers to create a record of children's growth and to share this information with the child, the parents and the child's other teachers.
- Plan times during the school year when each teacher goes over the record of the child's work, and samples of the child's work, with the child and his parents or other important adult in his life.
- Make sure no single indicator like a score on a standardized test or one paper or lab experiment is used to make an important decision about a child. For placement in grades or courses, for retention or referral to special services, for graduation -- make sure all these decisions are based on a mix of criteria and assessments (to do otherwise violates professional ethics of the American Psychological Association and the American Educational Research Association).
- Encourage faculties to review assessments on a regular basis to assure that they are being used to enhance learning and to guide teaching, not just to create a record in the grade book or rate a school.
- Make sure assessments are appropriate to the subjects and skills being taught, to the developmental stages of the child, to the multiple ways children learn, and to the goals of instruction.
- Hold every assessment to the highest ethical standard: does this foster the growth of the child's mind, spirit and open up for this child important new knowledge and valuable skills?
- Work together to reject assessments that hinder instruction, that misuse tests or test data, that trivialize learning.

continued from page three, Assessing Science Understanding in the Model Science Lab

Another pair of teachers created a different approach to convey the same energy pyramid relationships. Morgan McKinley and Deborah Helton used a group art project in class. Each group received 100 pieces of grass (strips of green paper) representing the energy trapped by the grass in the form of glucose, 10 cut-out blue jays, 1 hawk drawing, 1 decomposer mushroom sketch, and two paper pockets labeled life processes and waste. Each group was to arrange these representations on a large butcher paper and add any written notes necessary to explain how there was less energy available to organisms further up the food chain. When I happened to walk into the class, some of the students eagerly saw me as an audience for their creation. They showed me the poster they had designed and excitedly explained how most of the energy was used to keep plants and animals alive, so that there was very little that was given to the animal that did the eating. These students had filled the pocket labeled "life processes" to overflowing with energy representations from each of the organisms on their poster. Their explanation was accurate and enthusiastic. These students knew what they were doing and why they were doing it.

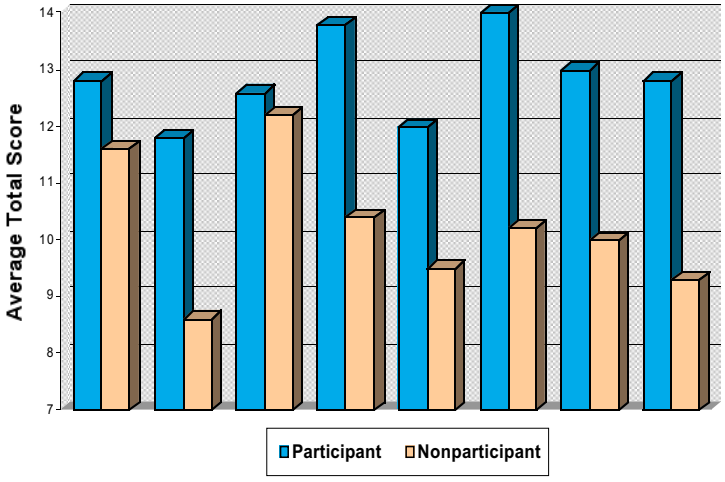
These are just four examples of the wide variety of assessments used in the Model Science Laboratory to monitor student understanding. More importantly, I offer these four creations as pieces of evidence for authentic assessment of the progress of the eight resident teachers in the Model Lab this year. In each case, the teachers had a clear focus on the science concept they were trying to convey. They were simultaneously providing a learning experience for the students and monitoring depth of understanding. Their innovative creativity is especially impressive because they are concentrating on the science concept and on the students they are coaching in contrast to taking a generic lesson plan out of a book. These are eight teachers dedicated to helping students become passionate learners and they are succeeding.

These eight teachers left their schools for a year of study and innovative teaching at the Rice Center for Education/HISD Model Science Lab at Lanier Middle School. Their schools, Williams, Fleming, Cullen, Attucks, Stevenson, Montgomery, Long, and Deady, can be proud of their representatives, and assured that the loss of a teacher for a year will be more than offset when the teacher returns next year.

continued from page four, Alternative Assessments in the School Science Project

These alternative assessments were given to students to determine whether teachers who had attended the 1998 and 1999 Rice University School Science Project Summer Institutes differentially impacted their students' science achievement. Teachers who attended the summer institutes were paired with non-participant teachers from the same school. These pairs of teachers taught the same grade level and subject and the same ability level of students. The students of these two groups of teachers (experimental and control) were tested using the alternative assessment instruments over a two-week period in May 1999 (Figure 1.) and then a new set of students of different experimental and control teachers were tested in May 2000 (Figure 2.).

Figure 2. **Student Alternative Assessment Scores: Spring 2000 Paired Data for Participant vs. Nonparticipant Teachers**



More than 200 students were tested in groups of three students per group in each year using the classes of seven and eight pairs of teachers in 1999 and 2000 respectively. Students were tested after spending nearly a full academic year with a participant or nonparticipant teacher, thus, any improvement in teaching strategies would have time to impact student achievement.

Pairs of Science Specialists conducted the assessments to ensure uniformity in test administration and evaluation. A script was developed and followed to explain the problem to the students and a scoring rubric was developed and used to reduce the subjectivity in scoring.

The data are shown in Figures 1 and Figure 2. These data demonstrate that student achievement in science as measured by these alternative assessments were positively impacted by RASC teacher professional development in both 1999-99 and 1999-00. In addition, these alternative assessment data are corroborated by standardized testing data (TAAS, TIMSS, ITBS) that similarly show that students of teachers that have undergone Rice University School Science Project professional development outperform students of teachers who did not undergo professional development.

Because of the positive impact of School Science Project teacher professional development on student science achievement, Aldine ISD has made a commitment to extend the Rice/Aldine Science Collaborative to include all 58 Aldine campuses. The vision of a science specialist on every campus across Aldine ISD working in collaboration with the Rice University School Science Project to improve science instruction is a powerful vision. We are currently seeking external funding to allow this vision to become a reality.

continued from page five, Authentic Assessments in the Classroon Storytelling Project

in literacy events. Often teachers quietly make their observations while the children are working. Other times teachers may ask a child questions about his current activity to assess his understanding. Anecdotal records are based on observable behavior, not teacher assumptions. Such careful observations, systematically recorded, form the foundation for planning meaningful instruction.

Developmental checklists are often used to guide teachers' observations for anecdotal records, ensuring that multiple areas and skills are monitored. Such checklists can also be used independently to track each child's progress. In 1995 teachers from the Classroom Storytelling Project developed a checklist assessment for tracking children's literacy growth through stories. This assessment has five scores, "never, rarely, occasionally, frequently and always," with a grid for recording a score and the observation date. Thus, the teacher can track vocabulary and oral language development, sense of narrative, listening skills, reading ability and other substantive aspects of literacy development. Checklists allow teachers of young children to monitor and document student progress over time on classroom behaviors and skills that potentially impact student learning.

Portfolios of children's work also document their learning growth. Long a part of early childhood practice, portfolios are gaining acceptance as an important assessment tool for older students, as well. Portfolios allow teachers, parents and the students themselves to see their progress. For example, Storytelling Project teachers are encouraged to use sign-in sheets to help young children master writing their own name. Including monthly samples of the sign-in sheet in each child's portfolio provides clear evidence of the child's growth. When Lilly, age three, began signing in, she made many tentative vertical lines under her name. A month later, Lilly wrote her name so others could read it. The teacher commented that she thought Lilly's first attempt had seemed to be random lines, but on closer examination of the two samples, she realized that the word "Lilly" is in fact mostly vertical lines. Lilly's first attempt perhaps was closer to the adult model than the teacher had perceived originally (Figure 1).

Once children begin reading, another effective assessment strategy is the **use of running records**, developed by Marie Clay (1993). Teachers learn a system of recording a child's reading errors to indicate a substitution, a repetition or mispronunciation. Analyzing this information, the teacher can classify the child's errors, allowing her to examine the word identification strategies being used and then to design further instruction. Additionally, **reading inventories**, either teacher-designed or commercially-produced such as the Texas Primary Reading Inventory, are individual diagnostic assessments designed to identify children's instructional reading and listening levels. Ideally, such assessments guide instruction rather than determine student placement, for any one-time assessment is only a snapshot, a moment in a child's learning life, and may not accurately reflect a child's full abilities.

Ongoing, structured assessment should inform instruction. This happens only when teachers are deeply familiar with assessment methods and understand how to interpret the assessment data. Instruction without assessment is inefficient and often ineffectual. Assessment without instruction, however, is even worse. More and more teachers of young children report they are so busy administering multiple standardized assessments multiple times that much of their instructional time is lost.

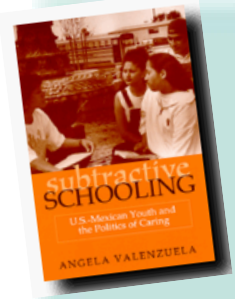
Teachers like Victor's, in contrast, are learning within the Classroom Storytelling Project to weave assessment into their instruction, observing and monitoring each child's progress and supporting children's development and literacy learning.

References

Clay, Marie. 1993. An Observation Survey of Early Literacy Achievement. Portsmouth, NH: Heinemann

International Reading Association and National Association for the Education of Young Children. 1998. "Learning to read and write: Developmentally appropriate practices for young children." Young Children. 53: 30 - 46.

National Association for the Education of Young Children and National Association of Early Childhood Specialists in State Departments of Education (NAESC/SDE). 1992. "Position statement on guidelines for appropriate curriculum content and assessment in programs serving children ages 3 through 8." In Reaching Potentials: Appropriate curriculum and assessment for young children, Volume 1, eds. S. Bredekamp and T. Rosegrant. Washington, DC: NAEYC.



Subtractive Schooling Receives 2001 Critics' Choice Award

Angela Valenzuela has been awarded the 2001 Critics' Choice Award by the American Educational Studies Association (AESA) for her book *Subtractive Schooling: US-Mexican Youth and the Politics of Caring* (SUNY Press, 1999). *Subtractive Schooling* also received the Outstanding Book of Year Award for 2000 from the American Educational Research Association, and Honorable Mention from the Gustavus Myers Outstanding Book Awards for 2000. Please contact SUNY Press (http://www.sunypress.edu/backads/c43213.html) to purchase a copy of *Subtractive Schooling*.

continued from page seven, Assessing Pre-Service Teachers

become more established, ExCET test preparation programs have proliferated and teacher preparation programs have begun changing curriculum to include more test preparation course work. Teacher preparation institutions rated "Acceptable" are certified as doing their jobs well.

Texas has established a bottom line for proving that pre-service teachers are competent to teach, based on test scores, and a bottom line for determining if teacher preparation institutions are doing their jobs, based on their students' test scores. But that is not all there is to it.

Teachers, even beginning teachers, need to know their content well and need to have thought through the process of education and their role(s) in it. They need to be practitioners of their subject and they need to interact well with people. They need to be learners, researchers, organizers, role models, politicians, and all the other roles that come into play in a school. A multiple choice test cannot measure all that teachers need to be before they are given the responsibility for their own classrooms. Teacher preparation institutions are responsible for assuring a smooth transition into the classroom.

At Rice University, we ask each teacher preparation candidate to apply to the program. Each application is reviewed by at least three members of the faculty. We look for beginning expertise in the subject area, an interest in the development of children, ability to work with wide ranges of individuals, and especially a commitment to education. Once students have been admitted to the program we evaluate them on their course work, on classroom performance, and with a portfolio. Probably the most important component is classroom performance. We have a summer school on campus which constitutes about half of a student teacher's practical experience. Students use their philosophy of education, theory of learning, knowledge of the content, and the numerous professional resources available to them to create the courses they teach. Under the supervision of master teachers from the local schools and department faculty, they teach the courses to secondary students who come to campus for summer enrichment courses. Academic course work can be a predictor of teaching success, but we find that the experience itself is a much more valid indicator. Students who have prepared meticulously can at first find themselves lost in a class of adolescents, and some who have been less diligent in their preparation can find that they understand exactly what they need to do to arrange an environment in which children can learn. Because student teachers, master teachers, and faculty are all on campus at the same time we find we can provide immediate, theoretically cohesive, and individual support to every student preparing to teach. Our students prove that they are ready to begin in their own classrooms long before they take their multiple-choice tests for the state.

"How do you know your teaching is good?" I asked a group of student teachers toward the end of a summer school session.
"Every student in my speech class has stood up and has become more confident."
"They ask a million questions and then someone says, 'Oh, I get it!' They are keeping me on my toes!"
"The students have become more and more open. We had a good discussion today."
"My quiet class has come out of its shell big time. I feel connected, even with the quietest ones."
"There is energy in the room. The light is on in [students'] eyes and they're asking questions. I'm having fun."

And so on. Not one person mentioned standardized test scores, not theirs and not their students'. Teaching is an active, interactive, giving, receiving, academic and people -oriented profession. No one can be fully prepared for everything that happens in classrooms; that is one of the attractions of the profession. Preparation to teach must be evaluated as the multi-faceted, challenging, even intuitive process that is involved in human interaction.

Standardized test scores are not all there is to it.

continued from page twelve, The Trouble With Testing

U.S. Secretary of Education Rod Paige has labeled those of us who argue against yearly testing as defenders of "a broken system of education that dismisses certain children and classes of children as unteachable." Nothing could be further from the truth. If I believed that my students were unteachable, I would have left the field long ago. It is precisely because I believe they are every bit as intelligent as the children of Andover and Exeter that I oppose yearly testing. As the recent testing boycott in Scarsdale, N.Y., showed, the best teaching happens when teachers have the freedom to implement innovative and creative curricula, not when they are prepping kids to answer multiple-choice questions. The children of Scarsdale are lucky; they can boycott their posh schools that are well-supplemented by local tax money without fear of punishment from the school system. My students are not so lucky; under the president's plan, such a boycott would only result in having precious federal dollars stripped from their already underfunded school.

But teachers and parents in both systems want the same things for their children: a school that has the ability to attract excellent teachers with the promise that they will have the freedom to be excellent teachers. A system flooded with tests can do no such thing.

So we are forcing the best teachers and administrators out of the schools that need them the most, as they rebel against a testing system that ties their hands and threatens their jobs and their budgets. And as they leave, we doom our poorest students to the worst education, driving home even more forcefully the twin points that as a nation we are content to neglect them, and this is somehow their fault.

Jane Ehrenfeld now teaches 1st grade in the Roxbury section of Boston.

continued from page six, School Writing Project

in his interpretation and writing. So instead, I ask him to underline the key text lines that emphasis his point. His marks are few, so we talk about the importance and value of evidence to support the highly original argument that he has developed and hidden in his paper

Of course, after a decade of work and study within the School Writing Project, collaboration, peer feedback, and reflection are central steps in writing, particularly in my portfolio-based class. It is part of the hard work of the fall semester to train students to develop conversations around the practice of reading, response journaling, and writing so that by December, in lieu of a multiple-choice scantron final exam, they will assemble a multi-page writing portfolio. They will be asked to examine, discuss, and revise specific pieces of writing submitted from over the semester. With this authentic assessment, the voice that I want to hear resonate, about what quality writing should contain, the relationship between reading and writing, and how to go about writing in different genres, should be my students' voices, not mine. It should be honest about the complexities, successes, and occasionally the frustrations of writing one paper that flows only to hit a wall sometimes with a second piece of writing

They (students) will be asked to examine, discuss, and revise specific pieces of writing submitted from over the semester. With this authentic assessment, the voice that I want to hear resonate, about what quality writing should contain, the relationship between reading and writing, and how to go about writing in different genres should be my students' voices, not mine.

The voice might sound like Analee Bivins who wrote about the "fear she experienced in timed-writings" and the success she found in rediscovering a line that fit in her essay: "I searched through *Beowulf* to find something that would fit my thesis. I was so surprised when I found the line because I had not noticed the importance of that line when I read it the first time." The voice might be that of Julian Villagomez, who for the first time discovered the pleasure of maintaining a writer's journal. "I never took my school journal seriously because it related to school and school is bad. A school journal is a journal everyone had, and that's not what I wanted. I wanted a forbidden journal. A journal that I would have to hide inside my eco binder, a journal that doesn't threaten to open its pages to anyone else. I've filled three journals this year and my journals are full of conversations. That's what I love, conversation." In fact, the voice I listen for might not even come to me in prose, but in poetry like Kelli deRegnier's ",. . . to touch someone/but not with your hand/to move the soul/with colors and images from a far-off land. I want to drink in the fountains of beautiful words/to climb the staircases with a storybook/So how could someone be passionate about such a language . . . English/ask me, take my hand/and I'll not just tell you/I'll show you the fantasia of the written world."

english..
who could be passionate
about such a language
it's not romantic like french
or rhythmic like the italians

many assume
you can't work it hungrily
like a math problem
dissect it with tweezers
like a helpless frog
or slap colors on a canvas

but i can
i like to play with words
to roll them on the end
of my tongue until
they just don't make sense
anymore

a young girl
can surprise those around her
with an immense vocabulary
command respect from elders
exchange ideas with the wise

got it from my father
i suppose
he spoke with a lawyers tongue
could make himself sound right
even when he wasn't

to touch someone
but not with your hand
to move the soul
with colors and images
from a far-off land

Kelli deRegnier
student, Bellaire High School

It is that conversation between the writer and audience (teacher, peers) that I believe defines real learning in the classroom. It is not the one-dimensional instruction contained in somany state-adopted writing manuals that seem to dictate so much of what happens today between teacher and student. The process I engage in with my students is messy, inexact, frustrating, and real. To engage in real writing with students takes time, practice, patience, and conferences. Although I realize that many of my campus colleagues outside of the School Writing Project are excited about a new computer program that promises to "grade" student papers in a matter of minutes, I am convinced that it will not search for the meaning embedded deep in an essay like David's. It will probably check for correctness, spelling, and sentence length, and then assign a grade based on a numbered criteria. If it does, I wonder, "Whose voice will we hear? Who voice will we silence?"

I think about all of this as David E writes down his final revision notes at the conclusion of our conference. I know that the changes David intends to make will be his, based on what he needs to do to reach an audience with his writing, not on my red-ink corrections. And I know that the voice that I will listen for when his paper reaches my desk will be his own, quirky, imaginative, and clear.

continued from page eight, Authentic Assessment in Action: Studies of Schools and Students at Work

Even in the early grades, teachers can assess their students' work by evaluating oral reading, writing samples, and conversations. The Bronx New School's students keep portfolios in grades K-6 in addition to teacher observations and reading logs. These approaches are more like those that are used in most other countries around the world, and they encourage the development of performance skills and thinking ability that is needed increasingly in college and most workplaces.

Authentic assessments have four common characteristics.

They are representative of performance in the field. For example, students write instead of taking spelling tests or answering questions about writing. They conduct science experiments rather than memorize isolated facts about science.

The criteria for the assessment use explicit performance standards. Learning is supported when teachers and students know ahead of time what the tasks and standards will be.

Students develop the capacity to evaluate their own work against public standards, revising their own progress much like the self-reflection required in real-world situations; students receive credit for individual growth regardless of their level of skill.

Students are expected to present their work publicly and orally. This deepens the student's understanding and ensures that the apparent mastery is genuine.

What effect do these new methods have on students?

The story of a student, Akeem, at the Bronx New School demonstrates how the careful documentation of student learning helped a teacher reach a difficult student. Third grader Akeem came to this school after three years in a troubled, overcrowded school, with scores in the lowest percentiles on standardized tests. He was hard to reach, fidgeting and talking, or quiet and withdrawn, often a disruptive presence in the class. From the teacher's notes, and in consultation with other faculty members, his teacher, Susan, noticed that the disruptions came when the class was working on lessons he could not do. She tried an alternative: to discover and encourage what he actually could do.

From the very rich resources in the workshop-style classroom, Akeem spent two long work periods each day on activities of his choosing: legos, building blocks, drawing, and junk sculpture. He was allowed to work rather than attend the group meetings that he had disrupted. Susan encouraged his interest by providing materials, resources, conversation, and related experiences. Connecting to what he already knew, she helped uncover his curiosity and supported him in its pursuit, thus expanding his skills and knowledge.

"Over the course of several months, Akeem built a set of aviation vehicles accompanied by a book illustrating the history of flight; a series of Lego buildings and drawings reproducing important architecture in New York City, and a set of action figures with a companion descriptive catalogue" illustrating "not only his sophisticated artistic ability, but also his ability to plan and sustain an extended, tightly organized piece of work." From Susan's journal:

> *During a unit on space he constructed a space shuttle out of a seltzer bottle, cardboard pieces, and other items. He referred to books for help with his work. He even sat through a meeting without disrupting the rest of the class. Others now seek him out for advice on building. It appears that he is valued for his talents.*

From her careful observations, Susan not only helped Akeem to change, but changed her thinking and teaching as well. "She became poignantly aware that children who have diverse strengths and interests often feel that because there is no room in school for the kinds of activities they value, there is literally no room for them either." By extending the range of what was valued, "Akeem and the other children began to understand the inclusive message. They began to feel that there was a place for them in the classroom and the school." Each child felt valued for his or her skills, not excluded for their inabilities.

The validation Akeem received transferred to his more vulnerable areas; he began to choose to stay with the group at meeting times, participated in quiet reading time, and worked with the reading specialist. Susan's view of Akeem changed from thinking of him as a troublemaker to thinking of him as an artistic builder, adept at mechanical skills, and she had insights into his learning styles. She supported him in the areas that he found most difficult. Five years later, academics are still not easy for him, but he makes A's and B's. He looks forward to high school and hopes to become an architect or engineer. A different school would have excluded Akeem; Susan's ability to help him find himself made an important difference in his success.

How does authentic assessment work in the schools?

Authentic assessment in many ways changes the nature of the process of schooling. No longer is the classroom centered on the teacher-as-lecturer, with the goal being to pass along/obtain enough facts to pass a test. This new focus provides the stimulus and the energy to bring about new approaches to learning. Commonly, schools have restructured roles, relationships, time, and courses to provide the necessary conditions to do the serious collective work that is the hallmark of this learning framework. Teachers develop standards of practice that encourage them to examine their teaching strategies, the curriculum they use, and the students they teach. As they develop ways of assessing student learning, teachers move from being passive recipients of others' decisions to working with their colleagues on decisions which will affect their work and their students' futures, thus creating a professional culture.

The focus of the student changes as well. "By working toward challenging standards on authentic tasks, students are engaged in constant learning about the nature of high quality work,

continued on next page

continued from page nine, Standardized Minds: The High Price of America's Testing Culture and What We Can Do to Change It

A class of at-risk students took on the challenge of creating an environmentally friendly soft-drink container. Their lessons in geometry, algebra, writing, and other subjects took on new meaning since these were the necessary tools to complete the project. Students' logical reasoning skills improved as they started with the big picture and broke it down into smaller tasks, opposite the way skills are usually taught. "The less heed she [the teacher] paid to test scores, the more attention she paid to the process of learning, the more her students understood." They not only learning to apply their writing and math skills, but they also demonstrated remarkable progress on their standardized test scores.

This alternative approach also works on the elementary school level. In a K-3 classroom in a struggling Kentucky mining town, Karen Adkins demonstrated that paying attention to genuine achievement rather than test scores produced good test scores, too. Their performance assessment projects cover such topics as "autumn" or "the five classes of animals" with activities relating to the topics geared to the age of the child. When asked what appealed to her about performance assessments, Adkins replied,

> *It's real. Paper-and-pencil tests don't show you very much….They promote a type of learning that's just factual with lots of regurgitation. I knew from my own schooling that that's not what learning is….The goal of school should be to create lifetime learners. That's the way we believe. By the success of our children, they're telling us, 'If you just let me do it, just show me how, let me be involved in the process.' When you do that, they can become lifelong learners.*

But other teachers resist this type of learning due to opposing philosophies about children's learning. Adkins states, "Most teachers…do not believe in authentic assessment. Not because it doesn't work. It's a lack of want to. We have good teachers, some really good teachers, but I'm afraid most do not believe – at least have not been taught to believe – that all children can learn. I was convinced from the beginning that all children can learn."

Additionally, performance assessments address something that traditional tests don't – motivation. This is one of the greatest problems seen by educators and parents. They see kids who have the ability but choose not to participate. Even the brightest kids are often alienated; they get through with minimal effort. A North Carolina educator states, "We're hearing a giant message from kids: They don't think most schoolwork is worth doing. That's where I see hope in performance assessment."

continued from previous page, Authentic Assessment in Action: Studies of Schools and Students at Work

about themselves as learners and workers, and about the phenomena they are studying." Schools, likewise, are engaged in constant organizational learning as they work collectively to incorporate new assessment models, to rethink school-wide practices to enhance student learning, and to communicate in new ways about students' work.

In these case study schools, common norms undergird new structures that enhance: **personalization** – opportunities for teachers to know students well and to communicate regularly with colleagues to reflect critically, share and problem-solve; **ownership** – allowing students and teachers to have a stake in their learning; **contextual authenticity** – embedding learning in authentic tasks that link to students' experiences; and **recognition of diversity** – resulting in a high degree of teacher-student interaction around individualized work and personal and social development. All of these increase opportunities for deep engagement in school and school work.

Cross-Over Study: Teachers in Desegregation

We are looking for cross-over teachers to participate in a study at the Center for Education at Rice University.

Cross-over teachers were teachers, Black and White, who moved or were hired to work in schools where they would be in the minority for the purpose of school desegregation beginning around 1970. The stories of these courageous and intelligent teachers make up a vital chapter of our educational and social history. Hearing the voices of these teachers will enhance our capacity to understand the experiences of the teachers, students, families and schools during this period of change. There are lessons to be learned about what happens in a school when a neighborhood changes. There are lessons to be learned about teaching in the face of professional scrutiny.

Cross-over teachers are heroes, going into neighborhoods and schools where they were not always wanted, to do a job that was not often appreciated. Their stories need to be heard and these teachers deserve to be honored.

If you were a cross-over teacher or know cross-over teachers, please contact Mary (Connie) Floyd, Director of Cultural Conversations, at (713) 348-5332 or by email at conflo@rice.edu `

•Upcoming Events•

February 2, 2002 – School Literacy & Culture Project Miniconference on Early Literacy, Rice University

February 3, 2002 – Thirtheenth Annual African American Read-In, sponsored by School Literacy and Culture Project, Project Row Houses, and the National Council of Teachers of English (location to be announced)

March 21, 2002 – Hazel Creekmore Collection Memorial Symposium– Research at the Center: Rethinking Learning, Culture and Standardized Testing with Elnora Harcombe, Linda McNeil and Angela Valenzuela, Grand Hall, Rice University

To learn more about the Center's teacher development programs, its publications and its research activities, see our website at http://www.rice.edu/education

To learn how to participate in one of the Center's teacher development programs, contact the project director or Center staff at (713) 348-5145.

CENTER *for* EDUCATION
RICE UNIVERSITY
P.O. Box 1892
Houston, TX 77251-1892

NON-PROFIT ORG
U.S. Postage
PAID
HOUSTON, TEXAS
PERMIT NO. 7549