part one

The Foundation

1 Why Build Art into Literacy Learning?

Writing used to be hard for me, but now it is easy. All I have to do is look at each picture [I made] and describe some things I see. I listen to my words to see if they match with my story and they always do.

—David, Grade 2

f you are a teacher, I have no doubt you have met a student like David.

David usually spent most of the school day looking for reasons to get out of his seat. The pencil sharpener, the wastebasket, the water fountain, and the bathroom all provided predictable pathways through David's second-grade classroom and welcome excuses to roam. Writing time was the worst part of the day for David because it demanded he stay in his seat and focus his attention. He spent much of writing time each day fiddling with little pieces of folded paper inside his desk and glancing up at the clock. If he could only wait long enough, it would be time for recess.

"I hate to write," David once confided to his teacher. "The words fly out of my head before I can get them down on paper." Perceptive as this insight was, verbalizing it did not help David cope with the many challenges he faced each day. Sadly, at eight years old, David had already learned that teachers did not take kindly to him and that he was falling behind in school.

But this book is not another treatise bemoaning the fate of students who don't fit the mold required for success in school. David's story took an unexpected turn:

When David's teacher invited him to create his own portfolio of hand-painted textured papers, David became actively engaged. Later, when his teacher invited the class to "become detectives" and search for the story hidden within their portfolios of hand-painted papers, David stood apart from his peers—not for disruptive behavior but for his keen ability to discover images within his brightly colored, hand-painted papers.

David was the first to discover his story. A geometric design in a Plexiglas print reminded him of a window. He quickly cut it out and peered through it to search for the rest of his story. He spotted a swirling tornado in his blue marbleized paper. As soon as he cut out the tornado, freeing it from the page, the tornado took on a life of its own. Propelled by David's active body, the tornado spun around the classroom accompanied by great whooshing sounds.

David embodied his story-making process. As a visual, tactual, and kinesthetic learner, he constructed collage image after collage image, eagerly securing each animated shape to his sequence of pictures once he had "practiced each page," complete with movement and a wide range of sound effects. While David did not choose to write during his collage-making process, he enthusiastically rehearsed his story over and over again, collage image by collage image. With each retelling, his story grew in detail and description.

As his active fingers traced the edges of his collage shapes, descriptive language was literally at his fingertips. Holding a magenta and purple marbleized paper in his hand, he announced, "It seems like we're caught in a meteor shower. Huge rocks like pumpkins hit me from all sides. It's raining rocks." (See Color Plate A.) David ducked, his hands flying over his head to protect himself from the "dusty storm."

Through his repeated retellings, David was able to memorize his story so that the words no longer flew out of his head before he could get them down on paper. And should he forget, David had a concrete visual record of his thoughts glued down right in front of him in the brightly colored images he had fashioned.

Using these dynamic, concrete tools, David created a coherent and engaging story replete with vivid picture and word images. As he thumbed through the pages of his published book for the first time, he glanced up with tears in his eyes and said, "I didn't know I could do that good . . ."

For David, this experience of success was life-altering. Not only did he gain new respect from his teacher and his peers, he also discovered his own talents as a gifted crafter of story. From that point on, he developed a passion for creating stories driven by his important realization: "Writing used to be hard for me, but now it is easy. All I have to do is look at each picture and describe some things I see." Smiling, David added, "Now writing is my favorite part of school." David was one of the first students who, years ago, opened my eyes to the power of pictures to enhance literacy learning. The transformation that took place in David as a powerful writer, as an engaged learner, and as a self-respecting and respected human being stayed with me and fueled the deepening of my inquiry into the dynamic relationship between pictures and words. Since then, I have witnessed hundreds of students of all ages who, like David, were not well suited to our verbally oriented educational system, but who thrived when allowed to construct meaning and express themselves using the language of pictures.

Their experiences have resonated with me. As a visual and kinesthetic learner myself, I recognize the challenges these diverse learners face as they struggle to make their way through a system poorly designed to meet their learning needs. For nearly two decades, the faces, the personal challenges, and the successes of these students have stayed with me and spurred me on to continue to grow and refine my art-based approach to literacy learning.

Along the way, I began to notice something curious: it was not just the struggling readers and reluctant writers who benefited from participating in this alternative pathway to literacy learning. Instead, virtually all students found new and stronger voices as they learned to use visual tools to deepen their thinking and more fully express their ideas.

The Hidden Verbal Bias

In my early years of elementary school in the mid-1950s, I remember my father, an intellectual and avid reader, asking me who the "smart kids" were in school. I knew exactly what he meant: those kids who were good at the 3 R's: reading, writing, and 'rithmetic. But what about my other classmates, the ones who got D's and F's on their report cards but were amazing artists or skillful athletes? Even as a six- and seven-year-old I understood that many of these kids were in trouble.

And indeed, their frequent trips to the principal's office in elementary school often turned into detentions and suspensions in junior high, and to truancy and even more reckless behaviors in high school. Some of my elementary school classmates who struggled with reading and writing stopped coming to class altogether in high school. Those who did stay barely graduated. While my honors English and math classes did not include these students, I knew most of them well because they were in my art classes. It was the one time of day when their talent were recognized. I often wondered if the rest of their teachers knew about their extraordinary gifts.

While I too struggled with reading and writing early in my school career, I was fortunate. My parents had faith in my ability to learn. They treated me like the intelligent human being they knew I was, which allowed me to maintain my dignity and self-respect despite the daily

challenges I faced. As a visual and kinesthetic learner, however, I lived every day with the deep disconnect between my inner world and the word-centered world of school. At times, I became very self-conscious about my failed attempts to learn how to read.

By the time I was in second grade, I was well aware that I was still not reading and most of my classmates were. Week after week, my parents would patiently walk with me down to our local bookmobile so I could pick out the most visually appealing picture books from along the bottom shelf of its musty book-lined walls.

My parents would read these books to me over and over again during the week. Then sometimes, if the book didn't have too many words, they would tell me it was my turn to read a page. Inevitably, I would stumble through the short text, my body tensing with every unfamiliar word, my stomach tied in knots.

Finally, deciding I'd had enough, I announced to my parents that they didn't have to read to me anymore; I had learned to read. In fact, I told them, I could read an entire book.

I sat down with them to prove it. Then, page by page, I proceeded to read the pictures, delivering a well-rehearsed rendition of the story. As a visual learner, I was quite good at picture reading. Somehow I thought I could fool my parents—after all, my words *sounded* like a real story. Apparently, it never occurred to me that because my parents knew how to read and I didn't, I would be found out. Such is the logic of an eight-year-old. Fortunately, my parents were kind enough to play along and chose not to embarass me.

This relatively inconsequential anecdote in the life and times of a struggling reader illustrates an important point: for young children, reading pictures comes as naturally as speaking. This ability to read pictures, to make meaning, seems to be programmed into our brains. Even young children can decode the meaning of pictures and encode meaning into pictures with ease, without ever being taught to do so. This is something most educators rarely consider.

My personal experience growing up as someone who learned differently (than the way things were taught), and the experience of watching my own three children (with their diverse learning strengths) go through our educational system, helped me years ago to recognize the intelligence of those who learn differently. Of course, I am not the only one who has arrived at this understanding. In *Envisioning Writing*, Janet

Olson (1992) shares her observations and poses critical questions: "Many children have problems with language. Is it because they are "learning disabled" or "reluctant writers"? Or is it because they aren't being taught the way they need to be taught? Children who think and learn visually process information through images instead of through words, and these children often have great difficulties succeeding in school" (p. 1). She reminds readers, "Nothing is wrong with children who are visual learners. They are simply different from verbal learners. Teachers need to understand and incorporate visual thinking and visual learning strategies into conventional teaching methods in order to make it possible for both types of learners to reach their full language potential" (p. 6).

While Howard Gardner's theory of multiple intelligences (1983) has served to broaden our understanding of human ability and to accept, at least in theory, the intelligence of those who "learn differently," we still struggle within our educational system to live this truth. In spite of the evidence linking visual learning styles to creativity, ingenuity, and even genius (West, 1991), our educational system continues to disregard the intelligence of those who learn best through nonverbal means.

What History Tells Us

In his book, *In the Mind's Eye*, Thomas West (1991) forces us to confront some disturbing truths about our educational system through his extensive research into the learning idiosyncrasies and educational experiences of many of the world's most creative and original thinkers. West presents a significant body of evidence that documents how, throughout history, many of the world's most original thinkers and greatest innovators experienced tremendous learning difficulties in school in areas such as reading, writing, spelling, speaking, calculating, and memorizing. West discovered that a vast number of these great thinkers displayed what he refers to as "some form of dyslexia" in the broadest sense of the term (*dys* meaning difficulty and *lexia* meaning words). Albert Einstein, Thomas Edison, Winston Churchill, and William Butler Yeats, for example, all exhibited tremendous difficulties learning how to read or write and suffered tremendous humiliation during their schooling. Albert Einstein had a terrible memory for words, which made the standard

rote learning methods of his day intolerable. As difficult as it may be to imagine, one of Albert Einstein's teachers told his parents that he would never amount to anything.

Thomas Edison was also the victim of an educational system that collided directly with his learning needs. Tedious lectures and rote memorization drove Edison to develop his own set of unusual compensatory behaviors including "putting his body in perpetual motion in his seat." One of Edison's teachers told his parents that they should not bother sending him to school as he had no capacity to learn.

These stories are not anomalies. West cites dozens of cases in which students who struggled pitifully in school and were made to feel like hopeless outcasts ended up in their later lives being recognized for their genius and unequaled contributions to society.

What is even more interesting (and not surprising) is that investigation into the notebooks of these original thinkers reveals that their innovative ideas, whether new theories or great inventions, were developed in pictures first, not in words. Upon closer analysis, there is a significant body of evidence that documents that these individuals who suffered with dyslexia exhibited strengths as visual learners and that their strong visual abilities actually paved the way for the creative thinking that ultimately led to the development of the innovative body of work they each produced. West concludes that there is a vital link between visual thinking, creativity, and the ability to solve problems creatively. Sadly, our schools rarely recognize the keen intelligence of visual learners.

Today's Schools

If you happen to have been born a verbal learner, meaning that words are a natural and comfortable medium for you, you have been cut from the cloth that our educational system is designed to teach. That is, the way you think is aligned with the way instruction is delivered. This is particularly true regarding instruction in verbal skills such as reading and writing.

However, if you happen to have been born a visual, tactual, or kinesthetic learner, our educational system is not designed to support your learning needs. Reading and writing (typically delivered through straight verbal forms of instruction) may not come easily to you, and that puts you at risk for a number of related social, emotional, and academic challenges. Again, Olson (1992) warns "... such children are in danger—they don't progress well academically, they perform poorly on tests, and they often suffer from poor self-esteem" (p. 1). Often, diverse learners, are made to feel intellectually inferior in school—an unfortunate though common fate.

As long ago as the 1960s and 1970s, research documented that third-grade reading level can be used as a strong predictor for high school graduation (Kelly, Veldman, & McGuire, 1964; Howard & Anderson, 1978; Lloyd, 1978). Students who have not mastered basic reading skills by third grade are far more likely to become high school drop-outs than are those who successfully acquire basic reading skills. Thus acquiring essential literacy skills early in one's school career is particularly critical to success not only in school but also in later life as well.

Yet traditionally those students who learn differently (from the way we teach) are subjected to tedious drills and tested to death using the very language that has already proven, time and again, to be ineffective for their learning style. Our low-performing students have shown repeatedly that they do not learn effectively through traditional auditory and verbal means. The mandates of No Child Left Behind—and the threat of punitive measures for schools that do not make "Adequate Yearly Progress"—only make matters worse for the very students they are designed to help.

Often administrators' typical reaction to the legislation is to insist that teachers apply more so-called rigor to their teaching by using the very same straight verbal methods that have so clearly failed to reach those being targeted. Yet low-performing students are likely not performing to the best of their ability because we are not teaching them in the way they best learn. Furthermore, while every student has areas of relative strength and weakness, by focusing on the weaknesses of our low-performing students and ignoring their strengths, we do little to help them learn. Without intending to do so, we often end up aggravating their problems and further programming them for failure. We strip them of their self-confidence, their dignity, and their will to learn while ignoring their many gifts and talents.

Framing the Challenge

With the recognition of multiple intelligences, diverse learning styles, and multiple ways of knowing, educational theory has made important advances in the last quarter of a century. At least in theory, we now accept that students do not all learn the same way and that predominantly verbal methods are not the only valid approach to teaching and learning. We now recognize that there exists more than one way to develop and express ideas, or to construct meaning. With this recognition, the stage has been set for us to acknowledge that our schools have traditionally discriminated against nonverbal learners.

Hand in hand with this recognition of multiple intelligences and diverse learning styles comes the responsibility to consider how we can successfully reach *all our students*. All too often, classroom teachers remain uncertain as to how to put this sound theory into practice. This is especially true when it comes to teaching verbal skills such as reading and writing.

Even educators who clearly grasp the theory and have the best intentions are easily derailed by the tremendous pressures they face—pressures to meet state standards, to teach district-mandated curriculum, and to prepare students for standardized tests in order to meet the federal mandates established by No Child Left Behind. These pressures weigh heavily on educators, making it difficult to embed sound theory into daily teaching practices. With mounting pressure to teach to the test, it is extremely difficult to move beyond traditional straight verbal methods for teaching essential literacy skills. And yet the stakes have become even higher for those who learn differently, for their teachers, and for their school districts.

How Students Learn

In 1995, *Learning Magazine* published the research findings of Dr. Sue Teele, who conducted an inventory of where students' strengths lie, based on Howard Gardner's initial seven multiple intelligences (Brudnak, 1995). In a typical primary classroom of twenty-six students, Teele documented

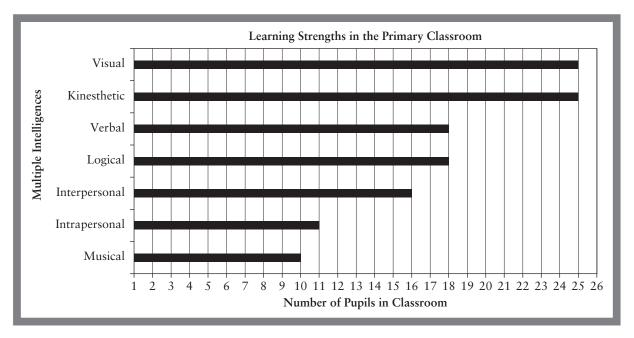


Figure 1.1. Learning strengths in the primary classroom. *Source:* Research by Dr. Sue Teele, 1995.

that twenty-five displayed strengths as visual and kinesthetic learners¹ (Figure 1.1). Only eighteen demonstrated strengths as verbal learners. That means that if you are a first-grade teacher teaching reading and writing the way you have been taught to teach reading and writing (through practice in reading and writing), approximately one-third of your students will be at a clear disadvantage (see Figure 1.1).

Teele's research revealed that students retain their visual and kinesthetic strengths all through elementary and middle school. Her study documented that after third grade, students' strengths as verbal learners actually diminish. Today, this phenomenon, is often referred to as "fourth-grade slump" (see Table 1.1).

These findings also correlate with research mentioned earlier, which documented that students who would later drop out of high school could be identified based on their third-grade reading levels. There is ample evidence that students must be given the opportunity to succeed early in their school career (Anderson, Hiebert, Scott, &

^{1.} It can be assumed that tactual learners were grouped with the kinesthetic learners—those who learn best through hands-on experiences.

 Dominant Strengths
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 First
 Second
 Third
 Fourth
 Fifth
 Middle School

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 Verbal
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 Kinesthetic
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Table 1.1. How students learn through the grades

Source: Research findings by Dr. Sue Teele, 1995.

Musical

Mathematical

Wilkinson, 1985; McPartland & Slavin, 1990). While this has been known for some time, and even though Howard Gardner's theory of multiple intelligences provides a framework for broadening the discussion about intelligence, many school systems remain locked into the traditional verbocentric notion of learning—particularly when it comes to teaching reading and writing. And yet we press on, driven by test preparation and assessment after assessment while ignoring this critical question: How does a classroom teacher teach verbal skills such as reading and writing to those who are not verbal learners? As educators, we continue to struggle to find our way.

Another Perspective on Visual Learners

In *Right-Brained Children in a Left-Brained World*, Jeffery Freed (a former teacher, now an educational therapist and consultant) contends that without exception, every student he has ever worked with who has been labeled as having Attention Deficit Disorder (ADD) or Attention Deficit/Hyperactivity Disorder (ADHD) is a visual and kinesthetic learner and right-brained thinker (Freed & Parsons, 1997).

Because these students don't function well within our very leftbrained, verbally based educational system, they are labeled as deficient and made to feel inadequate as learners. They, like other visual, tactual, or kinesthetic learners, become victims of the hidden verbal bias within our educational system. Of course, the more we pressure diverse learners to "do it right" (that is, our way), the more resistant they grow to learning (our way), and the more they lose faith in their own abilities. Without intending to, we have created an educational system that tests students for a limited kind of intelligence (predominantly verbal-logical), identifies many of them as deficient (across the board and not just in this limited realm), and then dwells on the weaknesses thus revealed. This only compounds the challenges faced by those who do not fit into our verbocentric box.

Net of Exclusion

Freed is not alone in suggesting that most school administrators (those in the position of determining policy), and many classroom teachers (especially those who end up specializing in teaching reading and writing) are likely to be verbal learners. (This assumption is based on the fact that they have successfully risen up through the ranks of our verbally based educational system, and in the case of literacy experts, are often drawn to specialize in those areas where they themselves feel most accomplished.) Because these educators and administrators themselves are not visual learners, they find it difficult to understand or imagine what it is like to be a visual learner. Test developers, of course, are also most likely to be verbal learners.

West maintains that our educational system creates an unrecognized "net of exclusion" that serves to prevent diverse thinkers from successfully moving through the system and therefore prevents them from being placed in positions of authority or policymaking in their adult lives. He maintains that it is indeed rare, and often only the result of some chance event, for a visual or kinesthetic learner to reach a position of influence or authority—particularly one that dictates educational policy. Such learners are even less likely to wind up in a position that determines educational policy in the field of literacy learning. Given this, it is easy to understand how our schools have become designed to neglect our diverse learners.

The Visual Avenue to Verbal Learning

Counterintuitive as it may seem to teach verbal skills such as reading and writing through art, this approach makes sense when considered more closely. Pictures do not serve a merely decorative function; they are our first written language, both in the history of human culture and within the lifetime of each human being. The connection between art and writing, between the language of pictures and the language of words, is an ancient and natural one.

Embedded somewhere in our DNA, no matter what our race or culture may be, we are programmed to progress through the evolutionary stages of development of humankind beginning at conception and proceeding well beyond birth. This recapitulation includes retracing the evolutionary stages of written language. Beginning with making marks—in the mud, in the sand, on bedroom walls—as soon as children are old enough to hold a stick or a crayon, they discover their own power to alter a surface, to create. It becomes and remains a source of fascination and delight.

Young children intuitively understand the meaning of pictures long before they are taught how to read words on paper. Whether or not a well-meaning adult can "read" the pictures a child creates, the young artist can explain with confidence exactly what a particular drawing means. Children can also look at pictures created by others and read those pictures for meaning. Pictures are indeed a child's first written language, and one that children generally acquire on their own. Unlike writing (letters, words, and sentences), pictures are a language that does not have to be taught.

But what happens to this innate language of pictures once children enter elementary school? While teachers of very young children (kindergarten and first grade) encourage their emergent writers to draw to help them put their ideas down on paper (Routman, 1994), this practice is often discouraged as soon as students acquire the ability to write. In the name of not frittering away precious writing time, many elementary school teachers urge students to distance themselves from their natural language of pictures early in their school career. Given the diverse learning strengths students are now known to have, I believe this

deliberate distancing from their first written language is shortsighted and ill-conceived. As educators, we are often in such a hurry to get to the "real work" of writing and reading (those skills that are tested) that we unknowingly sever an important lifeline to literacy learning. This is especially true for those students who are not naturally strong verbal learners.

Once we recognize that pictures are our first written language (both as a species and as individuals), we may begin to understand that taking away students' first language of pictures is akin to setting them adrift in a foreign sea. Pictures provide a natural language for all children, particularly for those who are visual or experiential learners, emergent writers, or struggling to learn a second language. Pictures provide a vital life raft for second-language learners, one that can make the difference between sinking or staying afloat. When we insist that emergent readers and writers—of any language—distance themselves from their natural language of pictures, we are not only taking away their life raft but also asking them to swim against the current. And we wonder why we are losing so many of our students along the way.

What are the implications of acknowledging these realities? Should educators just ignore students' learning difficulties? Or stop trying to teach students how to read and write at the first sign of difficulty? Absolutely not. However, it is essential that we break out of the verbocentric box imposed by our educational system and find ways to serve *all* learners, not just those fortunate enough to fit the system. I have witnessed time and again that struggling readers and reluctant writers rise to the occasion and produce quality work when they are given the tools they need to succeed. Showing students what they are capable of achieving when they apply the strengths they do possess, can in itself be a powerful life lesson.

A More Democratic Way

Most teachers can recall a student (past or present) who could spend hours creating extremely detailed and precise line drawings, yet struggle with basic reading and writing skills. These students are common in our classrooms. If we care to pay attention, these students are telling us (showing us) *how* they learn, yet we often do not listen. We need to ask ourselves what we are doing to our children by ignoring these important clues to unlocking literacy learning.

Our educational system continues to identify and label these students as deficient when in truth it is the system that is deficient. Thomas West (1991) believes, as I do, that our system is failing great numbers of students who become convinced of their inability to learn simply because our teaching methods are not aligned with the way they learn. He maintains that these very students "who think differently" may well hold the inner capacity to discover innovative solutions to today's problems, if only their teachers were able to recognize and respect their intelligence and support their unique learning strength.

When I think about all the human gifts that go unrecognized, when I think about all the students I have known who have become discouraged learners, because our educational system is unable to serve their needs or recognize their talents, I am deeply troubled. We should and can do better. We can begin by recognizing the invisible form of discrimination that exists within our schools; only then can we begin to build a truly democratic educational system, one that serves to honor *all students*, not just the verbal learners.

We need to look to our students' strengths to show us the way.