Introduction to the Problem: Visual or Verbal Learner?

Many students have problems with language. Is it because they are "learning disabled" or "reluctant writers"? Or is it because our teaching methods aren't reaching them? Students who think and learn visually process information through images instead of through words, and these students often have great difficulties succeeding in school. Our combined classroom observations, made over a 40-year period, suggest that these students are in danger—they don't progress well academically, they perform poorly on tests, and they often suffer from low self-esteem.

Students who think and learn verbally, on the other hand, are best served by the present teaching methods in the public schools. Teachers, especially in the language arts, are verbal in their behavior and training, are expected to be so, and expect their students to be or become so in turn. Whether the language arts are taught by conventional or innovative methods of instruction, words are used to elicit more words. An examination of any language arts curriculum and/or text such as James Moffet (1968), John B. Carroll and Jeanne S. Chall (1975), or Lucy M. Calkins (1986, 1994), will reinforce that this is the case. In such a setting, the visual learner is left out.

Yet the drawings of these students indicate that they see the world in great detail. They do not think that it is necessary or even desirable to say in words what is clearly seen and known in images. This book shows that through a process of "envisioning" writing, visual learners do, in fact, improve their writing skills. To describe how visual and verbal students process information, John P. Dixon refers to a study by Clementina Kuhlman and states:

> *Verbal children tend to do well on tasks that require a sensitivity to the conventional, culturally understood, functional qualities of things. For example a ball, a balloon, and a hula hoop would be linked together on the basis that they are toys. Visual-spatial children, on the other hand, tend to associate things on the basis of recognizing patterns in their physical qualities. The ball, balloon, and hula hoop would be associated on the basis of*

> *being round. One could say that verbal children are culturally sensitive, while spatial children are physically sensitive. Verbal children do well when conventional understanding is important, while spatial children do well when being aware of physical properties and patterns in things is important. (Dixon 1983, 57–58)*

Why haven't art educators previously brought this problem to light? Quite simply, art educators have been much more concerned with the "student artist" than with the "student learner." In other words, if language arts educators have been blind to visual learners, art educators have been deaf to their language difficulties. Indeed, art teachers should understand visual learners best of all (even though, this is unfortunately not always true); they need to realize that students with highly visual aptitudes are capable of complex processes for problem-solving and thinking. Unless these students learn to communicate their thinking with words, the school community will not fully understand or appreciate them and they will never achieve their full educational potential. It is the art teacher's responsibility to educate the school community to recognize the strengths and weaknesses of the visual learner. Only when art educators systematically assume this comprehensive responsibility for educating the community and its students, will the visual arts be viewed as offering a necessary and essential part of every student's education. In other words, when the relationship between visual literacy and verbal literacy is understood and the results of a visual-narrative program are clearly established, we will finally view the visual arts as having equal status with the language arts and no longer consider it a "frill" that is continually victimized by budget considerations. Art educators, in short, have perceived their instructional roles much too narrowly, as Rudolf Arnheim has argued:

> *The discipline of intelligent vision cannot be confined to the art studio; it can succeed only if the visual sense is not blunted and confused in other areas of the curriculum. To try to establish an island of visual literacy in an ocean of blindness is ultimately self-defeating. Visual thinking is indivisible. (Arnheim 1969, 307)*

Art educators need to broaden their perspective to include a genuine concern for the total education of the visual learner. If the language arts have been guilty of overemphasizing words as a method of instruction, the visual arts have been equally guilty of not emphasizing words enough. Edmund Feldman seems to have understood this:

> *In order to cope with the world, you have to be able to translate from one language to another—from or to a visual language, a kinetic language, an aural language, an oral language. You have to be able to translate what you see into what you say and do .*
> *(Feldman 1971, 118).*

Many visual people think that everyone sees the way they see and are surprised to find out that this is not the case. And many highly verbal, nonvisual people think that visual people are deficient when they can't immediately understand the meaning of others' words or express themselves accordingly. While visual learners are quite aware of the high priority placed on verbal skills, they are rarely rewarded because their efforts fall short of what is expected. It is not surprising, then, that they frequently become "ever-more-reluctant" writers, readers, and speakers. The artist Ben Shahn described this difficulty in the following way:

> *It is sometimes very difficult for me who most often thinks in images rather than in ideas. I have occasionally done magazine illustrations, and I bring them in to the editor, who is essentially a word man. And until I have surrounded the image that I have brought in with certain words, he does not get it. Then suddenly some word helps him to get it. He needs that bridge apparently. But my own habit is naturally to think in images.*
> *(Morse 1972, 44)*

We might assume from this explanation that most visual people in our society are artists. But Vera John-Steiner reports that physicists, biologists, mathematicians, and engineers are also very likely to be visual learners. She suggests that the artist and the scientist go about their work in a similar way:

> *Of greatest importance in the thought activity of artists and scientists is their pulling together of ideas, images, disarrayed facts and fragments of experience, which have previously been apprehended by them as separated in time and space, into an integrated work.*
> *(John-Steiner 1985, 77)*

Indeed, J. C. Gowan reports that "in the case of every historic scientific discovery which was researched carefully enough, we find it was imagery, either in dreams or in a waking state, which produced the breakthrough" (John-Steiner 1985, 87). John-Steiner concludes that process is the essence of creative thought.

The critical question, then, is to what extent is general educational practice adequately serving visual learners? How can we identify visual learners and the problems they face in schools today? Why are so many of these students labeled as learning disabled? What are the biases and misunderstandings held by specialists in language arts, art education, and special education, and how can we change this educational problem into an instructional opportunity?

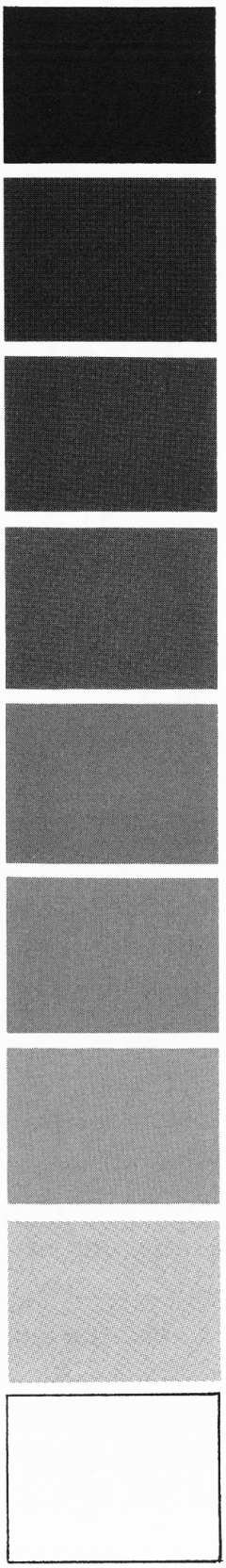
We must begin by confronting the almost universal belief held by teachers that visual expression is separate from verbal expression. While many of us recognize and support the values that make up art education curricula, we fail to understand what is actually involved with visual thinking. Arnheim explains this type of thinking as follows:

> *My contention is that the cognitive operations called thinking are not the privilege of mental processes above and beyond perception but the essential ingredients of perception itself. I am referring to such operations as active exploration, selection, grasping of essentials, simplification, abstraction, analysis and synthesis, completion, correction, comparison, problem solving, as well as combining, separating, putting in context. These operations are not the prerogative of any one mental function; they are the manner in which the minds of both man and animal treat cognitive material at any level. There is no basic difference in this respect between what happens when a person looks at the world directly and when he sits with his eyes closed and "thinks." (Arnheim 1969, 13)*

The visual expressions of students are rarely, if ever, acknowledged as a form of language that others can question, explore, interpret, and translate into different modes of expression. Visual learners are not provided with any means to improve their verbal language skills. Albert Einstein explains this process very well:

> *The words or the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The physical entities which seem to serve as elements in thought are certain signs and more or less clear images which can be "voluntarily" reproduced and combined.*

Figure I.1
Visual and verbal value chart



> *The above-mentioned elements are, in my case, of visual and some muscular type. Conventional words or other signs have to be sought for laboriously only in a secondary stage, when the mentioned associative play is sufficiently established and can be reproduced at will. (Einstein 1976, 142)*

Einstein's understanding of himself as a visual thinker is further explained by Susanne Langer (1942, 265): "The limits of language are not the last limits of experience, and things inaccessible to language may have their own forms of conception, that is to say, their own symbolic devices. John Updike describes this same process through one of his characters:

> *He saw art—between drawing and writing he ignorantly made no distinction—as a method of riding a thin pencil line out of Shillington, out of time altogether, into an infinity of unseen and even unborn hearts. He pictured this infinity as radiant. How innocent!*
> *(Updike 1963, 185)*

Teachers, while they might appreciate this nondistinction coming from Updike, must also come to see this kind of thinking and learning among their students. It is a well-documented fact that 15 percent or more of all children do not respond well to verbal instruction (Taylor 1979, 214), and many more children have varying degrees of difficulty with it. We can use a value chart to visualize these many variations, as shown in **Figure I.1.** If white represents visual learners and black represents verbal learners, it's easy to see how many variations of gray are possible within the two extremes. The students who respond poorly to verbal instruction may very well be the students who simply cannot or will not pay attention, who will not lead or participate in class discussions, who seem unable or unwilling to follow directions, and who are very likely to be classified as being daydreamers, discipline problems, learning disabled, or all of the above.

These students do indeed have a very real learning disability in the public school context. They may be handicapped by finding themselves in a disabling environment, one that is too narrow to serve and enhance their visual aptitudes. As Jerome M. Sattler (1982, 398) puts it in a cartoon depicting a psychiatrist's analysis of a teacher lying on a couch: "Your feelings of insecurity seem to have started when Mary Lou Gurnblatt said, 'Maybe I don't have a learning disability—maybe you have a teaching disability.'"

Nothing is wrong with students 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. Obviously, this should be the common goal for art, language-arts, and special-education teachers, but it is a realizable goal only if we begin to recognize that it is the instructional process that needs correction—not the learner.

Drawing and writing should be integrated in our schools and this book shows how this can be done. In the classroom, teachers can weave together visual and verbal modes of learning. Language need not and should not be separated from its initial visual component—in this manner, all types of learners can benefit.

The book is divided into two parts. Part I, "Toward a New Methodology: Envisioning Writing and Educational Practice," shows a variety of specific teaching strategies and activities appropriate to visual arts, language arts, and special education classrooms. The need for new strategies becomes blatantly clear after viewing the students' art and reading their narratives. They speak strongly and convincingly for themselves.

Part Two, "Theoretical Implications for Visual and Verbal Learners," presents two sources for understanding why the visual learner is not well served in educational practice today. We consider history first. Important and relevant clues are found in the development of language and in previous educational theories and practices related to the teaching of writing. Then, we consider current educational goals, beliefs, and practices employed in the fields of art education, language arts education, and special education. By closely comparing them, we can gain a fuller understanding of both their similarities and their differences.

If we understand their common goals, we can emphasize their similarities rather than their differences for the sake of the learner. With this theoretical framework, educators interested in deepening their understanding of the methods suggested here will be able to continue developing more of their own teaching strategies.