

# **Students in Search of Meaning; or Why Literacy Alone Is Not Enough**

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## ***The New Austerity***

Beginning in many kindergartens these days, school is almost exclusively about reading and writing. It is about learning how to decode symbols and manipulate them so that you can digest other peoples' writing and express your thoughts. In the new Elementary Literacy Block introduced in the fall of 2002 at Denver Public Schools, half-day kindergarten students spend three and a half hours in school, three hours of which is devoted to literacy. Children trace and play with letters or numbers, look at big books, listen to stories on tape, do alphabet or number puzzles, write letters or words (author's personal observation). Students in subsequent grades face a similar routine designed to have them reading one million words a year. Classroom teachers work on "expectations" for annual assessments mandated by the Colorado Basic Literacy Act (CBLA) and the district's Literacy Program, devoting three hours a day (almost four for Spanish-speaking students) to reading and writing workshops, skills, and other literacy development activities. Teachers of other subjects like music, art, or P.E. are required to have a strong literacy component in their lessons so that students lose no opportunity to pick up content vocabulary or to perceive the symbolic connections between "specials" and reading and writing. Other than lunch and one recess, there is no part of the day that is free from a subtle, well-meant pressure to shift children into print.

It takes several years before children are completely under the alphabet's spell, and primary teachers must provide a variety of materials to hold the interest of the younger ones. However, by about grade three or four all the hands-on activities usually stop because it is assumed the children are hooked. They have learned enough about the alphabet, decoding and grammar to enter the "House of Print" and can now be subjected fully to the linguistic way of understanding the world. Though they may forget about the code after three-thirty, play soccer, and not touch another book for the rest of the day, when they open those pages again at nine o'clock the next morning their brains know exactly what to do be-

cause they have been trained. They have been trained to decipher printed linguistic representations. This training, no matter how devoutly it is to be wished and no matter how many doors it opens, is also the closing, or at least the remodeling of some other doors, the doors of perception. I wonder if teachers realize how significant this is.

The purpose of this article is to raise questions about the current almost exclusive emphasis on literacy and math in many of our public schools and to restart a discussion about the relation between language and perception in learning. Dewey wrote about this relationship in *How We Think* (first published in 1910) when he observed that Pestalozzi's "object teaching" (a pedagogy that tried to substitute sense perception of things for the manipulation of symbols, introduced by way of England at the beginning of the nineteenth century but not popular in American schools until the 1850s) was a necessary corrective to "the abuse of linguistic methods in education," and "the preeminence assigned to language in schools" (1933, 236–37). Education reformers were right, he thought, to attack teacher verbalism—the premium put on technical facility and skill in producing external results—because words separated from things lacked "intelligible signification" (236). If the job of educators was to transform language into a "conscious tool for conveying knowledge and assisting thought" (239), they could not do this if they talked all the time, if lessons were too short and "so minutely subdivided as to break up the unity of the meaning," and focused on avoiding error not attaining power. This failure happened, he argued, because the educational value of "observation" was not appreciated. An emphasis "upon the linguistic factor eliminated all opportunities for first-hand acquaintance with real things" (248), which was necessary to enlarge children's vocabulary, to render their use of words more precise, and to form habits of consecutive discourse (240–46).

For Dewey, the exclusively linguistic method reduced individuals to "parasites" living on "the secondhand experience of others" (237). My concern is similar but slightly different. Since the beginning of the last century, our lives have become much more mediated and commercialized, and it is difficult to find an area that has not been touched by images, slogans, journalism, movies, and books. Children are assaulted by ads as soon as they can sit up, and everywhere they go in a crowded world, the voices of strangers are urging them to see this, buy that, and get on track and attain a college education so that they earn enough money to shop. Free exploration of the planet they will one day inherit and idle curiosity to investigate the many things they will have to know how to use are luxuries of the past when from day one they are pushed onto a conveyor belt whose end is future production and income.

How, then, are they supposed to make sense of their lives? Unless they are given help early on in learning how to distinguish the real from the unreal, the truth from propaganda, fact from opinion, they will be pawns for whatever brand name is fashionable, whatever trend is "cool," whatever slogan is repeated

often enough, and the actual circumstances or power brokering behind the flashy products they are enjoined to purchase will escape them. We live in a much more artificial world than Dewey did, and it requires considerable sophistication to deduce the implications of the various campaigns that vie for our attention. In addition to learning how to write “power paragraphs,” children need to become savvy about the structure of the reality they are moving into so that they learn ways to survive the onslaught they will experience and to confront its basic assumptions.

This “structure” is based on symbolic thought, whose abstracting process helps us organize the details of reality so that they better suit our species, and language is the symbolic system we use for thinking and communicating. It shows us how to get the most out of what exists by dividing entities from their behavior and designing itineraries through the world. How language creates worldviews for us that then influence and determine how we perceive other people, places, problems, and things is one of the most important realizations a thinking person can make. It is the discovery that humans live, in fact, in two worlds—the world of events and things, and the world of *words* about events and things; and the sooner we become conscious of the abstracting process at the heart of language, the sooner we realize that this process distorts reality by simplifying it. In addition, it takes place at a considerable remove from the reality of the world itself and it is very human-centered (Postman, 1996, 181).

My first objective, therefore, is to make mainstream teachers more aware of the system of thought they are imposing on children when they teach them how to read and use written materials, and a brief review of recent research on language is in order. I would also like to alert teachers to what they are ignoring or leaving out by not including experiential activities in their lesson plans. Language hooks onto reality through perception and gets its meaning by referring to experiences that have happened or are happening to people, and to things that are “out there” (Putnam, 1994a, 456). “Words can detach and preserve a meaning only when the meaning has been first involved in our own direct intercourse with things” (Dewey, 1933, 176). “Understanding cannot exist without contact,” wrote Paul Feyerabend in *The Conquest of Abundance*. “Contact changes the parties concerned” (Feyerabend, 1999, 268). If sensory connection with a wide range of phenomena is essential for creating meaning and developing understanding, should not at least a part of the school curriculum be devoted to giving students experiences out of which they learn important facts about themselves and the world? Why, then, are we shunting children into classrooms all day long and confining their attention to books?

An exclusive focus on print could be construed as a form of sensory deprivation. It could also be charged with responsibility for subjecting students to propaganda. How so? When educators are obliged to behave as if reading is enough, when they are not encouraged to take students out of the classroom or bring things into it that can be seen, smelled, touched, or heard, they unhinge

language from its already tenuous relationship with reality and make the world irrelevant to its working. This cuts students off from the physical reality they need to be able to refer to in order to check the truth of statements. It also risks not valuing the contact with things through their senses children need to develop common sense about the world. Language is an extremely powerful representational system that is capable of controlling our whole consciousness if we are not careful. Given the extent to which we are now dependent on it, is it not essential that we not let it obscure our connection with the world?

### ***Language as a Conspiracy against Experience***

If teachers are not yet conscious of what they do to children's perception when they teach reading and writing exclusively, it may be that the current concern with raising test scores does not allow them the time or opportunity to investigate the subtler effects of an exclusive focus on print. Few classroom teachers engage in research, and in the climate created by President Bush's No Child Left Behind legislation, it is unlikely that anyone could justify spending time or money investigating the negative consequences of teaching people to read. Besides, what children perceive is determined by many factors other than school; it has been realized for a long time that educators struggle to achieve their goals against the overwhelming influence of socioeconomic factors, home life, television, popular music, films, which can all be much more powerful forces in a child's life than the classroom. In the context of influences on what a child perceives, does it even make sense to try to isolate reading and writing from all the other forces that impact a child's apprehension?

Cultural influences, however, are not the same as mental shifts, and the linkage between seeing and hearing that occurs when children learn to use the phonetic alphabet is different in kind from the changes that occur when someone embraces a new way of talking or dressing or experiences a change in economic circumstances. In learning to read we shift our attention from the beautiful world that surrounds us to row after row of black abstract ciphers. We break "the spontaneous participation of our eyes and ears in the surrounding terrain (where they had ceaselessly converged in the synaesthetic encounter with animals, plants and streams) in order to recouple those senses upon the flat surface of the page" (Abram, 1996, 131). This displacement is not just a different version of a familiar theme. It opens the door to another reality, a mental reality as opposed to the sensory reality in which everyone lives, and once children have been taught to find it, for the rest of their lives they will jostle back and forth schizophrenically between one or the other, letting the two mix together and blend until they are difficult to separate.

It would be hard to exaggerate what a difference this makes in a person's consciousness. Suddenly, a huge chunk of human history, imagination, and thought is available to be absorbed, reflected upon, and continued. While teach-

ers can only introduce it to students gradually (and some only stay long enough to feel a small fraction of its power), they are nevertheless putting a spell on them, a spell from which most of them will probably never awaken. Hidden within a magical code, it is the key to human culture, but it is also a conspiracy against immediate experience whose negative effects have still not been fully investigated.

Nor is it as well known as it ought to be that sense perception is a form of knowledge in its own right and that by using it we learn many things that cannot be processed linguistically (Code, 1993, 32). Perception is our bodily encounter with the world around us, and if we value that world, should we not also value the equipment that allows us to apprehend it?

Easier said than done, you may say. When standards and high-stakes tests are the key determinants on a school curriculum and pedagogy, the only kinds of teaching allowed are those that permit numerical assessment, e.g., test scores, essay grades, etc. Since perception is subjective, there is no way to objectively measure progress in achieving greater complexity, subtlety, or depth. To make expanding students' consciousness part of the school day, educators would either have to relax accountability standards or else adopt new rubrics that value emotional and moral development, the ability to sense more about objects, people, and places, the capacity to represent ideas artistically and practically. Most impoverished schools cannot do this because it flies in the face of all the literacy training their faculty have received over the past few years. When governments are starved for funding, schools under fire have limited room in which to maneuver. The prospects for a less skill-oriented, more humanistic curriculum are not encouraging.

These are the practical arguments against making school a more perceptual experience for students, but there is another reason why schools under fire may be hesitant to criticize literacy and embrace more experiential learning. Long before de Saussure surveyed the path of modern linguistics, William James knew that language is a representational system that presupposes perception. "To know what the concept 'color' means you must have seen red or blue, or green" (James, 1977b, 245). He also knew that to function well, language requires the analysis and fixing of concepts upon a relational scheme with respect to other concepts and that this exercise takes you further and further away from "concrete bits of sensible experience" (James, 1977a, 243). It takes you back into language, to teasing out the differences between words and finding better ways to *express* what you want to say. There is a hidden reason why most school reformers are not insisting that children have experiential activities to build up their background knowledge and help them grasp the concepts we want them to learn. It is that the work of using language is so absorbing it takes over the whole of consciousness and makes us forget about what is in front of us. "Whenever we conceive a thing we define it; and if we still don't understand, we define our definition. This habit of defining is inveterate. The farther we push it, the more we

learn about our subject of discourse, and the less we remember the actual experience until we end by thinking that knowing the latter consists of getting farther and farther away from the perceptual type of experience” (James, 1977b, 247).

This abstracting tendency is the curse of using symbols and is not peculiar to spoken or written languages. “Any language,” writes Michael Baxandall, “is a conspiracy against experience in the sense of a collective attempt to simplify and arrange experience into manageable parcels” (Baxandall, as quoted by Feyerabend, 1999, 27–28). We use symbols to structure our lives, shape them to our needs, and get control over them, and all forms of symbolic activity—maps, music, painting, dance, mathematics—press us to ignore life and conform to their patterns and institutions (Feyerabend, 1999, 29).

However, language’s grip on human consciousness is particularly tight and deep, and as David Abram has shown, print is actually bewitching. A strong visual bias runs through Western thought that has its origins in language’s capacity to generate schema or linguistic representations that supposedly “mirror” reality. Until fairly recently, the chief task of Western philosophy was the search for objective knowledge, by which I mean truth that is independent of bias and which can be verified. How do you verify propositions? You *look* to see if what they maintain is corroborated by the facts. If they do not hold up under close *inspection*, then you throw the propositions out. However, if they do hold up, then you have uncovered something that can be considered “true.”

This method of verifying propositions by checking to see whether they “mirror” reality goes back through Kant and Descartes to the Greeks but has recently been subjected to criticism. Something is “true” if it corresponds to reality, but since “reality” is filtered through whatever conceptual system you are using to uncover the truth, something is true if it corresponds to your conceptual schema. Can you not pry open your categories to admit comparison with the things they are supposed to be representing, the situation they are supposed to be changing, the problems they are supposed to be addressing? No. Once you have employed concepts to organize your experience (which is to say, once you have started to think), there is no going back to seeing the world without them because that would be like returning to a prereflective, infantile stage where your observations would *mean* nothing. Only if there were some way to exit language altogether could you perceive the world without the categories that have been established to understand and control its contents, and so far no one has figured out how to do this. Given the conviction, in any case, that adult human perception is heavily concept-laden, such a technique would likely be met with great skepticism. Language’s control over human thought is so thorough we cannot even taste the tart purity of wild blueberries without engendering ideas about “wildness,” “fruit,” “survival,” or “scarcity.”

A faster, more efficient eradicator of raw experience would be hard to conceive. Language consumes life as if it were a cloth wiping a table clean. Where does the raw experience go? It becomes material for reflection, plans, projects,

products, itineraries. Since language helps us *do* the things we want to do, we have a tendency to focus on that—what we want to do—not the tool we are using to help us do it or what we are doing things to. The grammar of everyday language is shaped by pragmatic concerns: how to pay your bills, where to buy organic food, which candidate to vote for, and neither consciousness of how language works nor “faithfulness to the full multiplicity of experiential phenomena” is economically valuable enough to figure much in our concerns (Stern, 1995, 12).

What about poetry? Nature writing? Phenomenology? Are these not attempts to use words carefully and directly present the contents of immediate experience? Yes, they are, but as Wittgenstein realized to his dismay, even these more phenomenological uses of language are subject to the same limits that prevent everyday language from representing what we perceive—they are representations—and therefore contain a hypothetical element (the world as idea) that directly contradicts the physical nature of immediate reality (ibid., 144). Language and perception belong to two self-contained worlds, the mental and the physical, and the two only connect when what we say is made true by what we see—verified by observation. For obvious reasons, connection is desirable, but it is rarer than one might think. This is because there is something in language itself that pushes users to sever their ties with biological reality so that they can move freely in a separate, totally intellectual world.

### ***Review of Research on Language and Perception***

During the past thirty years, a new way of understanding intelligence has developed that uses the computer as a model of the human mind. Known as the computational theory of mind, it claims that intelligence comes from information; that is, it is the correlation of two things produced by a lawful process (as opposed to coming about by sheer chance)—and is found wherever causes have effects. What makes information special is that it can be processed; it can be symbolized and made to do things. This dexterity forms the basis of thinking machines. “To the extent that thought consists of applying any set of well-specified rules, a machine can be built that, in some sense, thinks. To the extent that the world obeys mathematical equations that can be solved step by step, a machine can be built that simulates the world and makes predictions about it. To the extent that rational thought corresponds to the rules of logic, a machine can be built that carries out rational thought. To the extent that a language can be captured by a set of grammatical rules, a machine can be built that produces grammatical sentences” (Pinker, 1997, 67–68).

This machine-oriented theory has been strikingly helpful for understanding how language works. Just like a machine, our brains construct a model of the world and crank out formal syntactic patterns day in and day out without our ever giving it a thought (Bickerton, 1995, 39). “Each person’s brain contains a lexicon of words and the concepts they stand for (a mental dictionary) and a set

of rules that combine the words to convey relationships among concepts (a mental grammar) (Pinker, 2000, 76). Indeed, a few elements and a few rules can produce so many combinations that the computer is capable of generating only a fraction of their range. The process of computation also explains how many previously inscrutable mental phenomena developed, such as beliefs (beliefs are inscriptions in memory) desires (desires are goal inscriptions), thinking (thinking is computation), perception (perceptions are inscriptions triggered by sensors), and trying (trying is executing operations triggered by a goal) (Pinker, 1997, 78). In fact, the whole mystery of thinking and talking has been reconstituted in the light of the computer as the distillation of syntactic patterns under the direction of a Universal Grammar.

If language is easier to understand because of the computer, it also becomes easier to see that just like a computer, language has a program, a series of coded instructions for thinking. The program is designed for our survival as a species. By separating entities from their behavior, it focuses on how things function—how animals behave and phenomena occur. By providing only a certain number of grammatical units, it limits what we say about the world to those aspects which are useful or practical. The program supports representation at any cost. We have just to perceive something to form an idea about it, which is then connected to other ideas or concepts on the huge map of reality we carry around in our heads. Finally, syntax helps us form sentences automatically, and these sentences are basically itineraries into and through the world. Our actions are effective to the extent that we plan what to do by first rehearsing it in our minds.

It is a little like driving a car. We negotiate reality with language, whose program guides us through the world and shows us how things work. From the moment we become aware that there is a reality outside ourselves, we start building a model of the way things are. First it is purely perceptual—our mother's face, her hands, her voice. Then, as we learn the names for things, people, and places, it becomes linguistic. Depending on what our genes give us, we have our own needs and wants and look for ways to satisfy them in the reality we have been dealt; however, we always have to settle for what there is. This is why it is a negotiation. We try to negotiate the best reality we can from the circumstances into which we were born and the categories language gives us (Bickerton, 1991, 248–49).

Where do the categories come from? We do not know. They seem to be innate. Chomsky thinks we have a language faculty: “There is, it seems rather clear, a rich conceptual structure determined by the initial state of the language faculty (perhaps drawing from the resources of other genetically determined faculties of mind), waiting to be awakened by experience” (Chomsky, 2000, 64). While we may not be as aware as other species are of those aspects of the world our type of consciousness does not pick up on, linguistic consciousness has granted us the ability to conceive practically anything. We have just to perceive something to form an idea about it. Long before we could actually perceive dis-

tant planets, we conceived the idea of the universe. Language is an innate mechanism to learn with whose chief features—concepts and syntax—have allowed us to create models of whatever we pay attention to and do.

What about perception? Perception is our other form of knowledge. Its field is the amazing world that surrounds us, into which we venture every day that we are alive. However, the explanation for how something crosses over from being outside us to inside our consciousness is not nearly as convincing as the one that explains how language works. This is partly because perception really is mysterious. We still do not understand how we sense things and know their meaning and value. Nor is it clear why perceptions vary from culture to culture. What we see seems to depend on an interior construction of our own (Zajonc, 1993, 5). Nor does our perception concur with what the world is like according to scientists. The world that physicists describe as being full of energy and motion is quite unlike the steady one that we perceive (Bolles, 1991, x–xxiii).

We are also befuddled because Descartes saddled us with a totally unnecessary “interface” conception that internalizes perception—i.e., the immediate objects of perception are mental not physical—and leaves their objective reference almost wholly undetermined (Putnam, 1994a, 452). In order to explain how he knew that his stove was hot, Descartes invented the notion of “sense data” to account for the transfer of heat from the stove to his skin to his brain. He refused to believe that his senses were capable of picking up this sensation on their own but rather needed a sort of intermediary to convey the “information.” This idea evolved over the centuries to include numerous refinements until now there is a whole school of cognitivists, or brain-based researchers, who study perception as a form of information processing (Fodor and Pylyshyn, 1981). They argue that if language processes experience so that it can be represented conceptually, perception processes neural responses so that they can be turned into experience.

Not everyone thinks that we need “sense data” to account for what happens when we look at a pear or the back of a truck or a mountain in the Himalayas. William P. Alston thinks that “there is a cognitive element, aspect, or component of perception that is nonconceptual” (Alston, 1998, 2). Merleau-Ponty argued that perception is embodied (Merleau-Ponty, 1964). James J. Gibson developed a fascinating vocabulary to describe the environment that all animals perceive (Gibson, 1986, 8–9). His student Edward S. Reed has written a powerful defense of sense perception, *The Necessity of Experience*, that says that not only is it primary, but also that our lives are now so mediated by culture that some of us do not get enough physical experience to think clearly (Reed, 1997). Consciousness for these thinkers is not just something that goes on in our heads but is experienced in and through our bodies in an environment whose features constantly influence how we achieve homeostasis. “No animal could exist without an environment surrounding it” (Gibson, 1986, 8). Whatever else may be happening simultaneously in our brains, animals are perceivers because survival depends upon picking up information about temperature, food, water, hazards,

and predators. Cognition is not just a brain mechanism; it is a life process. Knowing cannot be separated from living, some of which is solitary but most of which is collective (Reed, 1996, 168).

By holding on to perception as a primary, bodily encounter with a multifaceted world, these thinkers challenge the notion that it is just the internal information-processing behavior of single individuals. They are open to ambiguity because they redefine consciousness as the awareness of imminent possibilities as well as existing things and they allow for more continuity between us and other species than has ever before been admitted. Their vision of human awareness puts us into a relationship with other animals, landscapes, things, the past and the future—the universe.

Despite its obvious inferiority, Descartes's narrower definition of human consciousness still holds sway in many places. A. J. Ayer argued that what one perceives when one perceives an object is a sensory experience which represents the object, not the object itself (Ayer, 1973). Distrust of the senses is rampant among cognitivists. The belief that we can perceive things directly without taking sense data into account is condescendingly known as “naive realism,” and Gibson's “ecological approach” has been dismissed for failing to identify which organs are part of a perceptual “system” (Fodor and Pylyshyn, 1981, 152). Post-modernist Richard Rorty does not even consider perception worth talking about because for him the mental and physical worlds are incommensurable, so the idea of being able to produce accurate propositions about reality must be replaced by a relativist tolerance for a variety of different interpretations (Rorty, 1979, 378).

As a rule, philosophers do not talk about direct perception of the external world. Perhaps knowledge through the senses is problematical for them because they have not yet relinquished the notion that perception is having your subjectivity affected by things through an interface. How can they even talk about “the external world” if they do not believe it is possible to be in genuine cognitive contact with it (Putnam, 1994a, 456)? If all languages are a conspiracy against experience, then no matter how careful you are, your perception will always be laced with cognition; therefore, you will never know whether what you pick up is something new or something you *already* knew. Does this mean that philosophers are forever hindered from writing propositions about the whatness of the world around us? It would seem so. How can you write a proposition about something you are not entirely sure is there? Even if you are sure that something is there, if perception cannot be distinguished from conception, how do you write propositions about it that are true? This is the dilemma Samuel Johnson resolved by kicking a stone with his foot.

Alston offers a practical solution when he argues that we should not limit knowledge or justified belief to what is supported by propositional reasons, because, though vulnerable to influence, “how things appear is a reasonably reliable though not infallible guide to how they are” (Alston, 1998, 4). His “theory

of appearing” may solve the immediate problem of finding a way to restore perception to human consciousness, and David Abram’s “depth ecology” tries to rescue our animal bodies from the detachment enforced upon us by using print (Abram, 2002). However, unless someone makes a new revelation about our cognitive situation that shakes us out of the spell that language puts over us, it will be some time before their efforts affect the wider culture—because the real problem is that language’s stranglehold over our brains forces us to ignore large areas of life that cannot be represented linguistically. As I said earlier, only a few investigators have been brave enough to challenge the consensus that what we perceive every day when we open our eyes, ears, and noses is off-limits.

### ***The Consequences of Neglecting Perception***

It would be difficult to overestimate how great a loss this neglect has been. Though there is no reason to think that educators are more concerned about the loss of perception as a field of academic study than other professionals, silence about the faculty that puts us in touch with the external world has affected education, too. D. W. Jardine finds “Descartes’ nightmare” in the “attempt to reproduce the lives of children, the life of the classroom, the curriculum vitae, into clear and presentable objects borne out of a severance from life as it is actually lived” (Jardine, 1998). Even though research shows that children deprived of sensory engagement with the world have undeveloped abilities to note relationships, to predict, to act, and even to conceive abstract notions, many “back to basics” schools still offer science and mathematics from a textbook with little opportunity for hands-on learning (Davis et al., 2000, 3–26; Arnheim, 1993). When life is divided into subjects, it becomes easier to see that some areas get more attention than others. An emphasis on formal concepts and symbol use usually follows when standardized tests are the basis for the curriculum, and as I said earlier, in many schools a “new austerity” has replaced the curriculum richness that only a few years ago struggled to be born. By limiting attention to texts, teachers can control unhappy students’ behavior better than they ever could before, because the latter are not responding to things that might invite them to act “out of line.” If children must internalize an array of external, ostensibly objective knowledge—something on the outside must get on the inside—what better way to ensure that their concepts match the prescribed understanding of external reality than to freeze those concepts in texts and insist that children study them? The use of literacy for the social control of poor minorities bears serious investigation.

Holistic educators blame advocates of high-stakes testing for the failure to design schools that nurture “whole human beings who can think and act and feel” (Miller and Nakagawa, 2002, v). However, it may be that it is the *literary* nature of the mainstream curriculum that prevents teachers from teaching as if learning is a “vital, bodily form of participation oriented toward the world”

(B. Hocking, 2001, 302). The emphasis on representational systems blinds and deafens teachers (and their students) to the rich sensations and emotions that come from encountering actual things and places. It takes the smell out of fried onions, the rasp out of sawing wood, the pleasure out of observing the life beneath a log. It disembodies students because it teaches them to avert their attention from the gorgeous things all around them and focuses it on rows and rows of black, abstract ciphers. Their sensory awareness moves into a mode of semi-consciousness or even unconsciousness as they lose sight of, or touch with, the actual things around them, “the dimension of the sensuous” (H. Bai, 2001, 88–91). This is not a new development, but it is new, perhaps, to become more aware of it. As Abram writes in *The Spell of the Sensuous*, with the advent of the phonetic alphabet, “a new distance” opened between human culture and the rest of nature. “The written character no longer refers to any sensible phenomenon out in the world, or even to the name of such a phenomenon (as with the rebus), but solely to a gesture made by the human mouth” (Abram, 1996, 100).

The elevation of printed language to the position of being the only form of knowledge educators honor and trust has put severe limits on what we think is educational. There is no reason why everything in school has to be written down or read. Teachers at Rocky Mountain Expeditionary Learning School in Denver use a writing-intensive curriculum but they also *do* things with their students, such as study trees for six weeks or make daily visits to a house under construction or help homeless people connect with resources. These activities involve all the features that Dewey thought gave observation its central position in mental training. They are open-ended. They incorporate active exploration, and they can be approached scientifically (Dewey, 1933, 252–55).

First-hand experience is also valuable and not unmanageable, even in a confined space. Object lessons can be easily handled in a classroom (Eder, 1998; Hennigar-Shuh, 1982). Keeping animals in the room has been shown to be remarkably beneficial for children’s social and emotional development (Rud and Beck, 2000). Admittedly, there are reasons why frequent field trips might not be integral parts of a school’s curriculum, for example, cost, transportation, and fear of misbehavior (Nespor, 2000, 30). However, these problems can be overcome under supportive circumstances. What about the standards for education developed by the National Science Foundation, the National Council on Social Studies, and the National Association for the Education of Young Children? Are they not evidence that the goal of mainstream education is not just to teach reading and mathematics skills? Yes, and if the teachers actually get to use them, and do hands-on activities, not written problems, they give their students a more balanced outlook. Most teachers in low-income schools are under pressure to pare the curriculum down to test preparation skills and thus do not get the chance to imagine, let alone implement, active learning experiences for their students. In the current politics of schooling, low-income children lose out twice: once when they attend schools that are inadequately funded; and second when

they have to learn from a curriculum that has been deliberately narrowed to address their test-taking needs.

We do not yet seem to understand the importance of insisting that children use their senses: “Our educational tradition separates perceiving and thinking as though they were two entirely different activities” (Arnheim, 1993, 95). This is dangerous on several grounds. First, when we do not ask children to keep track of their perceptions, we deny them the opportunity to ask questions based on what they perceive, and this stifles curiosity. Maxine Greene’s “individual in quest of his own future” is relevant here (Greene, 1998, 299). Knowing math and science “deeply,” she believed, is not as important as knowing who we are as individuals and as members of a culture. To create meaning, students need to stay in contact with their own observations about the world so that they can rework the curriculum they have been taught in terms of their own consciousness. Teachers need to bring themselves to school, too, and use their own lives, knowledge, and explorations as part of the curriculum.

Secondly, to go back to our original analysis of language, if in the classroom children have to be able to write down or say something to convince us that they are learning, we restrict their attention to the map of their concepts of the world and exclude the world itself. Insisting that children learn their way around the map is not a mistaken goal in itself. We all have to learn what to call things, how to describe events so that others understand us, and how to analyze situations so that we see how they developed. No one would want to deprive children of the chance to learn how to express themselves in words. However, what about how the map hooks on to the world? Children also need to spend time learning how to observe carefully so that they do not allow their feelings to interfere with what they see. They need to learn how to distinguish between what is actually happening and what they think is happening or what someone else tells them is happening. They need to see the difference between what things look like when they are thinking about one thing rather than another. Most importantly, they need to appreciate that there is something amazing “out there” that they can investigate if they want to know more of the truth.

Language without perception is like a plant shorn of its roots, its lifeline to the soil. “To know what the concept ‘color’ means you must have seen red or blue, or green.” Words need a reference to be meaningful, and by ignoring the world as a phenomenon and concentrating only on the linguistic representation of it, teachers withdraw the very things children need to make sense not just of what they read but of life itself.

### ***Literacy as a Bully***

Thus, while primary teachers teach children their letters, elementary teachers introduce them to chapter books, and middle school teachers try to get students to read more on their own, it may be that the current huge emphasis on literacy,

especially in low-achieving schools, is not as enlightened as we thought it was. Despite its necessity and the many avenues it opens up for children, when taught without corresponding perceptual opportunities, an exclusive focus on literacy robs children of the basis they need to create meaning. An exclusive emphasis on literacy hides the concrete stuff they need to make “connections” (Stanton, 2001). If children are not led to honor perception as a form of knowledge as well as language, they will not value the world as a field of inquiry and experience and beauty. Nor will they develop the basis for making their own words an accurate portrayal of what is because they will be out of sync with reality. It is obvious why this is an undesirable end.

Literacy is not usually seen this way as a bully. Literacy is usually seen as the answer to our problems, the key to future success in the job market, the doorway to a life of rational thought based on the acquisition of knowledge. However, blanket endorsement of the literacy caravan is not to see how language works, how it analyzes reality in a particular way and functions by taking awareness further and further away from the sun and the grass and the things at hand into the work of creating or adopting a linguistic model of the world. This would be harmless if people kept on returning their gaze to the things and people and animals around them to see whether or not their models were appropriate or helpful. It would not matter that people sometimes get carried away when they speak or write if every time you heard a new word or invented a new scheme you checked with the situation or people on the ground to find out if it fits. However, language does not require us to do that. Language carries us away into the huge simulacrum of the world we construct ourselves or borrow from others to help us navigate. This is why it is so easy for many of us to live in a totally intellectual world—because language does not force us to stay in touch with “things” or how we feel. It substitutes itself for what we can see and smell and hear and makes it possible for us to “forget” who we are and the place where we live.

Perhaps more than anything else, it is the domination of school curricula by literacy that is responsible for the difficulties experiential and environmental educators have encountered getting their ideas accepted by the mainstream. When individual perception is undervalued, the “world” is a construct written by the teacher, documented in textbooks and tested for on exams. It is not the “big blooming buzzing confusion” unfolding inside and outside of schoolroom walls, or at least the connection is only tangential. We are interested in whether to call something a theatre or a playhouse, a dragonfly or a wasp, but the things themselves might as well disappear from the universe as far as we are concerned, because we are not looking at them or smelling them or touching them with our hands. We are only writing about them. Or reading.

## Conclusion

There are a few examples of public school teachers incorporating perceptual activities into their lesson plans and watching test scores rise (Johnson and Rucks, 2001; Rud and Beck, 2000; Byerly, 2001; [www.microsociety.org](http://www.microsociety.org)). Despite evidence of their value, however, most mainstream teachers are obliged to focus strictly on reading and writing. Even Expeditionary Learning schools whose “Criteria of Quality for Learning Expedition Projects” contain a welcome dose of character-building attributes, such as “strong work habits” “perseverance,” and “craftsmanship,” test their more robust curriculum against the standard of improving academic achievement. In the present climate in the United States, it is difficult if not impossible to find a state-financed school that adheres to anything else. When governments measure schools by how well their students do on standardized tests, activities which do not support linguistic measurement are not likely to be used by educators whose own salaries are sometimes tied to test results (Nelson, 2001; McClay, 2002). Any attempts to focus on the individual perception of real things or the having of physically challenging experiences are supplemental to the main agenda, which is getting children literate; they could even be seen as interfering with the acquisition of critical skills.

Outdoor educators seem to be adapting themselves to the new regime. Fearful that their body of knowledge and procedures will be used without reference to the process and foundations of experiential education, they no longer try to offer their programs within mainstream settings and see themselves as providing an effective, alternative structure outside regular schools, that is, charter schools. Since mainstream schools now focus mostly on reading skills, not individual growth and development, it has been more useful to reconceive the goal of experiential education as the socialization of young people (Lindsay and Ewert, 1999, 18). The retrenchment may be wise under the circumstances. However, by abandoning the struggle to make mainstream education more “progressive,” are they not capitulating to the further separation of our two forms of knowledge?

My analysis of the power of language offers another way to conceive the problem. If the reason why mainstream education is still closed to experiential approaches to learning is because it is under the spell of the linguistic form of knowledge and we want to make mainstream learning more experiential, maybe we need to disenchant it from language. Maybe we need to expose the ways that language has got its teeth into our thinking and behavior such that we no longer try to help children *see* where they are and what they are doing. This effort may seem an unnecessary detour from the hard work of persuading schools to allow teachers to teach cooking for its own sake, not just for the sake of state standards, or to let students out of the classroom to visit a river. However, I would maintain that because of the grip language has over our consciousness, if we do not do it, the effects of our work are not going to be long-term. They are going to peter out

once children hit the big tests. It is not that I wish to replace the teaching of literacy with experiential or environmental learning. Rather, the teaching of literacy needs to be more honest about what *it* is replacing and start helping children make the “connections” they need to understand what we want them to learn.

William James said it long ago. We have two forms of knowledge, language and perception, and both are necessary to live and understand life. Perception puts us in touch with what is, the huge gorgeous show that all of us are part of and wash our hands in every day, while language inspires our wills with its ideal constructs and provides the map which shows us where to go to get what we want. By acknowledging only literacy in our schools we are giving children only half of the equation. We are giving them the map but we are not showing them how the map hooks onto the world—through perception. It should not surprise us that some students leave school feeling deprived and angry. Not only have they spent thirteen years listening to and reading someone else’s words, they have forgotten what things feel like, smell like, and taste like, because all they know are words, symbols, maps, charts. They have had the world stolen from them.

The situation is baffling, to say the least. We must teach children how to read so that they can survive in our language-drenched civilization. On the other hand, we must also show them how not to read so that they can use their senses to see and experience where they are. Perhaps a self-aware literacy program would pick up on the precedent set by Denver’s Rocky Mountain School of Expeditionary Learning, and supplement work teaching children how to read and write well with plenty of attention to concrete things and experiences so that they become familiar with the difference between representation and reality. As students become accustomed to spending equal amounts of time observing where they are and writing or reading about it, teachers could talk to them about the differences between the two and how important it is to check back with their observations to make certain they do not forget what they perceive. They could compare their perceptions and try to figure out why people see things differently. They could examine how what we perceive is affected by ideas, slogans, and images and what steps we could take to reduce their influence. They might even try to observe things for their own sake. Something like this is needed to counteract the pervasive influence of literacy’s children—journalism, advertising, TV, images—in students’ lives. We need to show them how to get some control over what language makes them do, because left unchecked, they are at risk of being hoodwinked by forces that do not have their best interests in mind.

Though clearly an amazing tool, not all of language’s features are functional, as it is now widely agreed that we are in the process of destroying the planet. Derek Bickerton’s call for a serious discussion about language and how it took our species out of unity with the rest of nature is long overdue (Bickerton, 1991, 256–257). How to uncover what those dysfunctional features are and try to correct them is one of the motives behind the present essay. Such an uncovering

is particularly critical for teachers, because they enforce society's values, and if they understood better why language is a problem, they might significantly influence the way that the next generation thinks (Thompson, 2004).

Certainly, there will be insufficient impetus for change until more teachers realize that literacy cannot be the only thing we teach. If we are interested in helping students make sense of the world, at the very least we owe them the opportunity to study the world as an observable phenomenon. Chomsky says that nature provides us with an innate stock of concepts and the child's task is to discover their labels (Chomsky, 2000, 65–66). However, nature also gives us the world and a physical body with which to explore it. The child's task is to find out what's "out there" and study its features. This is how humans have always learned, and it is the only way to reach deep understanding. "Percepts and concepts interpenetrate and melt together, impregnate and fertilize each other. Neither, taken alone, knows reality in its completeness. We need them both, as we need both our legs to walk with" (James, 1977a, 235).

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