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(Author)
Abstract

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Abstract

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The Three Little Pigs in a Postmodern World

Postmodernism is a concept that is still emerging into the cultural dialogue. Many (though not all varieties of) postmodernists tend to be constructivists—even the deconstructionists. They also tend to focus on the interactiveness of ecological relationships. Postmodernists want us to pay more attention to the implications and contingencies of our knowing. They want us to recognize and escape the constraints of the reductionist perspective—to realize that the world and our tasks are too dynamically interactive for simplistic and formulaic approaches. Postmodern is an ambiguous term, yet it is important enough to the actualization of our potential for us to work through its inchoate fogginess.

In his book, The Postmodern Reader, Charles Jencks (1992) discusses the use of this much abused, confusing concept:
In the last ten years postmodernism has become more than a social condition and cultural movement, it has become a world view. But its exact nature is strongly contested and this has helped widen the debate to a world audience. The argument has crystallized into two philosophies—what I and many others call Neo- and Postmodernism—both of which share the notion that the modern is coming to an end, and that something new must replace it. They differ over whether the previous world view should be taken to an extreme and made radical, or synthesized with other approaches at a higher level . . . Not a few people are now suspicious of this attendant confusion, or bored with the fashion of the term. Yet I cannot think of an adequate substitute for summarizing the possibilities of our condition. (p. 10)

The Changing Notions of the Educational Process

Within the emerging paradigm of postmodern education, much is fuzzy, but some things are becoming increasingly clear. In this paper we wish to discuss three developing notions and how they relate to our changing perceptions of teaching and learning and the place of instructional technology in the changing context.

As we study how the brain learns, we increasingly recognize the interactive—as opposed to the transmissive—nature of the educational process. Notions about the best conditions for effective teaching and worthwhile learning are changing. First, we will briefly investigate three of those notions—learner-initiated learning, the construction of narrative beds, and the power of metaphors. Then, we will illustrate them with an original interpretation of an old story, The Three Little Pigs (Revisited). Finally, we will pose some considerations regarding how computer-assisted education can contribute to the emergence of postmodern curriculum.

Learner-initiated Learning

The best learning—learning that has the most nourishment, lasting value, and greatest contribution to developing intellects—is action that takes places within learners. Learning that is the passive reception of transmitted material is systemically crippling and antithetical to the ideal of self-formation, which is fundamental to democratic education. Louise Cowan (1993), in her article, "The Literary Mode of Knowing," writes:

... Learning is a genuine making, an act of gathering and forming, by persistence and struggle. Each act of learning reorganizes reality, each is an authentic creation. And, as Dorothy L. Sayer's translation of the Divine Comedy has it, "the eye by seeing learns to see." ... And by our efforts to bring together and to understand the conflicts from within that are engendered by images of conflicts from without, somehow, miraculously, we learn. (p. 22)

Perhaps we are what we see, while we can only see what we are. But there are always anomalies aborning, which we either nurture or neglect. Even when life is not slapping us around, there is something within us which compels us to invite perceptual variations into our identities. We then fuse those variations into the fabric of ourselves. We resonate with them. Gradually, but often dramatically, we change ourselves by changing our view of the world and ourselves in it.

Cowan (1993) informs us that learning is not "a mere linear movement forward, collecting an aggregate of information and skills" (p. 22). As she understands learning, it is an interior and individual occurrence. Learning is not a passive reception of information. Rather it is taking input and transforming it to fit and nourish individual intellects. As knowledge is introduced, or born, into the developing intellect, it is fused into the evolving identity, which is then capable of seeing and incorporating new knowledges.

Our present educational approach merely throws a steady stream of frozen snowballs of knowledge at our students, where the benefits, if any, are momentary. More than one teacher has made the comment, "It's like water off of a duck's back." Getting students to think about what they know and what they need to know is a prerequisite to educating for growth of the intellect. Excessive focus on either attribute of learning, knowing, or thinking, cripples the process.

When we use the phrase "life of the mind" we are referring to the organic and symphogenetic nature of the individual actively comprehending and interpreting information. Every brain produces cognition, but it is the life of the mind that produces intellect. The mind that is "alive" is one increasingly able to derive nourishment from more varied and more complicated information.
The stagnating mind, on the other hand, finds less and less information worth thinking about. It finds less relevance. With little in the way of a web, few threads can excite its constructive juices.

Information not thought about and, therefore, not digested is not fused into the developing intellect. The individual with a "life of the mind" is increasingly likely to search for and find nourishing information. Such an individual goes beyond mere acquisition of knowledge and adds the digestive juice of thought to turn data into information, therefore contributing to his or her developing intellect.

The alive mind contributes to the evolution of its self. It acts upon knowledges and circumstances, weaving them into an ever-developing self-organizing tapestry. The fully alive, mature mind can connect every thread to the web of itself.

Sadly, we seem to desire minds full of measurable material more than alive with self-inspiring and self-directed learning. One of our most serious problems is that students are understandably not interested in thinking about the knowledge particles with which they are bombarded. The very disconnectedness of knowledge discourages search for relevance. Frequently, the schooling environment stagnates their minds.

Evidence is mounting that learning requires active participation. Knowledge can be acquired passively, but then it is knowledge that will not thrive; it will be weak and anemic knowledge, and the mind will be quick to discard it as irrelevant. It does not take on the "aliveness" of knowledge that the learner mulls over and ponders, seeking to fit it into his or her developing intellect.

A hopeful indicator of the emerging shift in our cultural perceptions regarding the educational endeavor is the growing recognition of brain-based education. Our pedagogical practices don't mesh with the brain's biology. Psychologists and brain biologists essentially agree that the human brain learns actively, and in context. The passive reception of congealed knowledges does not make biological sense.

Renate and Geoffrey Caine (1994), in their book, Making Connections: Teaching and the Human Brain, comment:

The brain processes information all the time. It digests experience to some extent in the same way that we digest food. It is always responding to the complex global context in which it is immersed. Educators must come to grips with that fact. Brain-based education, therefore, involves

1. Designing and orchestrating lifelike, enriching, and appropriate experiences for learners

2. Ensuring that students process experience in such a way as to increase the extraction of meaning

Among the features of brain-based learning are active uncertainty or the tolerance for ambiguity; problem solving; questioning; and patterning by drawing relationships through the use of metaphor, similes, and demonstrations. . . . It is not necessarily brain based [learning] if parameters are strictly controlled, and students engage in specified activities for the purpose of identifying pre-determined outcomes. Obviously, the brain is also involved in such learning, but it may not engage in enough "mapping" processes to create the type of connections we seek. (pp. 8-9)

The mapping processes referred to by the Caines are where the mind actively searches for meaning in its natural, ever-evolving context. It is the intellect in development. This process is symphogenetic, for the threads (of knowledge) change the web (of understanding) and then the changed web alters the kind of threads it searches for and incorporates. Passive learning, however, impedes this kind of mental development.

Passively acquired—or injected—knowledge is either stillborn or soon withers and dies; it does not become fused into the life of the mind. Thinking and knowing are an interdependent dynamic. The health of either is dependent upon the growth of the other. Without coevolutionary development of thinking and knowing, the necessary balance between tension and resolution—the rhythm between confusion (the new, disorder) and comprehension (the old, order)—is disrupted.

It is thinking that breathes life into knowing, while the gaining of knowledge keeps thinking from stewing within
The Three Little Pigs in a Postmodern World

Acquired knowledge provides thought with new foundations from which to expand. But it is thinking that gives learning its aliveness with the energy of initiative. Thinking constructs new understandings from the acquisition of new knowledges, for as knowledge is born it must be fused into the developing intellect.

The Construction of Narrative Beds

Learning that sticks—that has a place to reside within memory, reflection, and imagination—must fit into a context, a developed understanding that gives the acquired data its meaning. Narrative is the larger relational whole within which facts reside. It is the ongoing story of a person, a community, a culture, an idea, or a study. It is the evolving context within which intellect and judgment determines the meaning of particular events or realities. Narrative is static in that it includes history (though the interpretation of that history may not be), and it is fluid, for it also includes the actualizing of potential, the evolution of both intention and capacity. It is the ever-restless bed within which stories flow and change direction.

This is why so many of our students perceive, with justification, the entire process of schooling as meaningless aggravation. The curriculum has neglected to provide them with the necessary narrative beds, within which they can place, and therefore make meaningful, the knowledges they acquire. As one teacher complained, "I find myself compelled to teach inflectional endings to kids who don't know the words."

There is a systemic docility in an educational milieu that begins and ends at knowledge acquisition. "No assembly necessary. "No construction required." "Clunky and complicated intellectual tools, such as interpretation, judgment, or perspective are dispensable—everything is prepackaged for your convenience." No personal responsibility for making meaning of any knowledges acquired is necessary. Students are systematically told to simply pick up the knowledge bricks as they are purveyed to them. Someone will come along later and show them what to do with the data.

Theodore R. Size (1985), in his book, Horace's Compromise: The Dilemma of the American High School, is concerned with the lack of reasoning skills in our students. They have little ability for either analysis or synthesis—to make narrative beds and fit new information into them. "Students seem," Sizer says, "to be improving in rote-level, concrete learnings—vocabulary recognition and, in mathematics, simple addition, for example—their ability to think critically and resourcefully is lamentably weak and is continuing to weaken" (p. 58).

Sizer quotes a 1981 National Assessment of Educational Progress report on Reading, Thinking, and Writing:

> Between 1970 and 1980, both thirteen- and seventeen-year-olds became less likely to try to interpret what they read and more likely to simply make unexplained value judgments about it. One way of characterizing the change during the seventies is to say that seventeen-year-olds' papers became somewhat more like thirteen-year-olds' papers.

[The NAEP researchers sum up as follows.] Quality of life is directly tied to our ability to think clearly amid the noise of modern life, to sift through all that competes for our attention until we find what we value, what will make our lives worth living. What we value is seldom on the surface and, when it is found, can seldom be defended from the incursions of the trivial without sustained efforts to understand it more deeply . . . A society in which the habits of disciplined reading, analysis, interpretation and discourse are not sufficiently cultivated has much to fear. (p. 58)

Education within a postmodern curriculum will (hopefully) be a process with increased focus on meaning-making. The imbalance between knowledge acquisition and knowledge understanding will be addressed and alleviated. Knowledges will be presented within the framework of their stories. We will culturally perceive stories as integral to the learning process; the stories of disciplines, and the stories of individual learners.

William E. Doll (1993), in his book, A Post-modern Perspective on Curriculum, talks about the work of Jerome Bruner in this regard:

> In his Acts of Meaning, Bruner starts us toward the development of such a postmodern pedagogical frame. He takes cognition and its revolution out of the scientific, behaviorist, and computer-oriented mode into which it slipped in the 1960s, back to its original beginnings of human meaning-making
through acts laden with and embedded in culture, language, intentionality, and subjectivity. This act of meaning-making Bruner believes is innate but not restricted to humans, although the development of language and self-conscious reflection gives humans a qualitative ability other animals do not possess. He puts forth the **radical thesis** that there is in all humans a "push to organize experience." The radicalness of this thesis, though, is that we do this "narratively" not logically. The logical, in the mode of Piaget and the positivists, he sees as coming after the narrative... he writes that "logical propositions are most easily comprehended by the child when they are embedded in an ongoing story" (p. 128).

By culturally ignoring the "ongoing stories" and excessively focusing on logical propositions, we impede the making of meaning and the developing of intellects. The systemic costs of congealing knowledge are tremendous, for we turn a frightening number of students off from the energy and power of learning. Many others we turn into passive learners. Neither result is conducive to our social health or the success of our students. The instructional habit of shoving logical propositions into minds unprepared for them with narrative beds is wasteful and harmful.

**The Power of Metaphors**

We tend to forget that we are specialists in visual, not auditory stimuli. Evolution has designed us to comprehend our realities with our eyes. We have added language to our perceptual repertoire, which gives us pictures of realities through the power of words.

But language, as many theorists are beginning to understand, is a collection of dead and alive metaphors. When we lecture, regardless of whether students have word pictures to house the spew of syllables, we are only making noise and aggravating students with what can only be nonsense to them.

The life of languagewhich words live and which words diedetermines our pasts, possibilities, and potentials. Hence the importance of language to the educational endeavor—for we feed the nourishment of ideas to the young. We nurture the development of new concepts, and we frequently determine the archaic.

It is important that languages be vigorous yet coherent—to evolve with kinetic stability. Otherwise, we freeze into foreclosed potential or collapse into meaningless babble. Language is the foundation of not only our present but our future situations. It transmits the notions which define and guide us. Words are—to use a linear metaphor—the bricks with which our metaphors and paradigms are constructed.

Language, which not only houses our thoughts but also the potential of our thoughts, is essentially composed of dead and living metaphors. It is metaphorical perception that allows us to understand the nature of one reality by using the perception of a dissimilar reality to provide the necessary light. For example, a condition for Freud's theory of the subconscious was the personally and culturally held realization that ninety percent of an iceberg was submerged.

George Lakoff and Mark Johnson (1980) in their book, *Metaphors We Live By*, comment:

> The concepts that govern our thought are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities.

> But our conceptual system is not something we are normally aware of. In most of the little things we do every day, we simply think and act more or less automatically along certain lines. Just what these lines are is by no means obvious. (p. 3)

The metaphors that we harbor within our minds govern the construction of context. Without them, we lack the narrative understanding necessary for comprehending the meaning of what we are learning. With the wrong metaphors, we learn the wrong messages. Passivity is itself a picture, that of the empty vessel being filled by curriculum. This is a particularly pernicious message, for it neglects the responsibility we have for the construction of our own literacies.
When context is denied us or provided by outside forces, individuals find their potential governed by other than the power of self-formation. In such a case, they become illiterate, or—perhaps this is even worse—alliterate.

Context is the engine of literacy. Without contextual awareness, knowing every word in the English language does not amount to literacy. Knowing the denotations of words is inadequate, for understanding their often fluid connotations and implications is also necessary. Literacy means understanding the interweaving of words, how they interact within the ever-changing fabric of a living language. Literacy has more to do with understanding meanings and their interactions than it does with the acquisition of transmitted data.

**How We Use The Three Little Pigs (Revisited)**

In teaching we use this revised story of *The Three Little Pigs* in the following ways:

1. as a narrative bed for an ongoing discussion of the role of leaders and teachers in the development and maintenance of social mental health within communities
2. to help us investigate the development or diminishment of personal integrity, and the relationship between social and personal evolution, as well as the process of victimization
3. as metaphoric illustration of what it means to gain experience. The images of integrity, identity, and circumstances serve as a touchstones throughout the course.
4. to help students envision their personal responsibility for building their own houses. This ties in with the ideal of self-formation within democratic education, which encourages learner-initiated learning.

**And Now ... The Three Little Pigs (Revisited)—A Multimedia Presentation**

Once upon a time, there were three little pigs. The first little pig chose to build his house of straw. After all, straw was cheap and easy to clump into desired shapes.

But the first little pig did not understand that *house* was a metaphor for *identity*. So, when the wolf came along looking for dinner, the first little pig was in serious trouble!

The little pig also did not understand that *wolf* was a metaphor for *bad circumstances*. (Hence the expression, "the wolf at the door.") So, when the wolf huffed and puffed at the little pig’s fragile house, it quickly disintegrated into a cloud of debris. The first little pig ran for his life, chased by the circumstances—the big, bad wolf. He found refuge in the house of the second little pig.

Now, the second little pig built his house with a little more integrity—out of sticks. When the wolf arrived and huffed and puffed, the house shivered and shook. It soon disintegrated into a shower of broken sticks. In a panic, both little pigs ran to the house of the third little pig.

Now, the third little pig chose to build her house of bricks, even though bricks were harder to acquire and integrate into a completed whole. She wanted her house to be substantial and strong because she knew about wolves.

When the wolf huffed and puffed at the house made of bricks, instead of disintegrating, the house settled more firmly upon its foundation. This frustrated the wolf. He became angry! He climbed onto the roof and crawled down the chimney. However, the third little pig did not panic in the face of bad circumstances. As the wolf came down the chimney, she had a cauldron of boiling water waiting in the fireplace. The wolf became a tasty soup for dinner that very evening!

**Moral**

If you build your house of bricks, you can make nourishment of whatever circumstances confront you.

**Postscript**

But, wait!!! While eating dinner, the third little pig heard a knock at the door. She opened the door and peered outside. She saw thousands of foolish little pigs who had built their houses out of straw and sticks, being chased by hundreds of wolves.
Question

At what point does society disintegrate due to too many citizens building their identities of straw and sticks?

Seeking Closure

We have come full circle. The interaction of learner-initiated learning, narrative comprehension, and metaphoric perception, is what constitutes the best education. Learning that is passive, that is without meaningful context, that is fragmented and disconnected, is, in many ways, not only wasted but harmful effort.

Where does computer-assisted learning fit into the emerging postmodern theory of curriculum? Philosophically, and practically, it could fuel the notions of learner-initiated learning, narrative and contextual comprehension, and metaphoric perception. Unfortunately, it could also be used to simply reinforce the traditional habits of teaching as baby-sitting and data transmission and learning as passive acceptance of acquired information.

We like the way Jencks phrased the situation, "the possibilities of our condition." Fear and confusion often indicate the presence of opportunity. The vitality and hopefulness of the emerging postmodern perspective gives promise that we will find ways of dealing with our predicaments. How will computer education fit into the context of that new emerging world?

References


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