MIND, EMOTION, AND THE

SCHOOL EXPERIENCE

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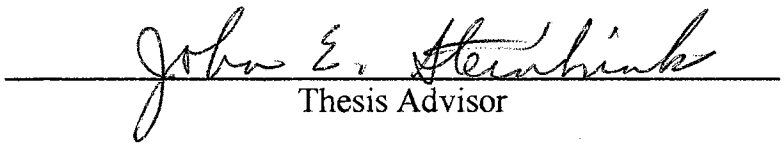

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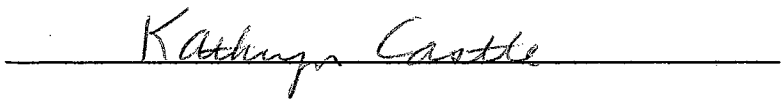

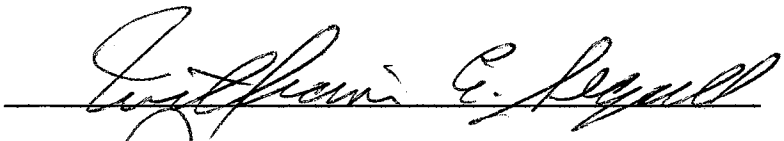

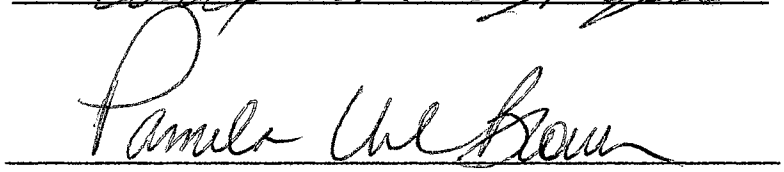

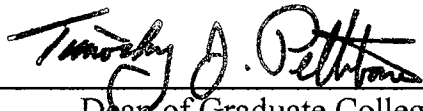

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PART 1

INTRODUCTION

The subject of human emotions has been a topic of controversy and debate for centuries. The very definition of emotion itself is illusive in terms of an established consensus. Since the study of emotion traverses several academic disciplines and "folk" domains as well, it is clear why there is disagreement concerning not only definition, but also many other aspects of emotions. Philosophers, psychologists, neuroscientists, educators, and even people involved in market research, advertising and the entertainment industry, have made prominent imprints on the study of emotions. The diverse array of emotion theorizing, meticulously crafted over centuries of diligent thought, are the very circumstances that make the essence of the subject of emotion seem nebulous and difficult to grasp.

Someone once said that---"there is nothing new under the sun." Of course one knows that this statement is not a "truth" or a "law," but it is revealing when applying it to theories of teaching, learning, and mind development in general. Many of these theories have ancestral versions that are similar to present

ones containing components that have been proposed before, in some related form.

The focus of this paper is the relationship between the concepts of mind, emotion, classroom learning and teaching, so naturally many theories on mind, emotion, and education, together and separately, have been encountered in its preparation. To be sure, many of these theories contain little that is new, but rather combine existing knowledge in a unique way that in the end forms a theory that is "new" as a whole. And so it will be with the method and conclusions of this paper, nothing really new in its components but a new and different arrangement of those components. It is plainly a re-interpretation of the works of many great scholars of the past and those of modern researchers. If this effort at reinterpretation proves worthy, and in the end advances the area of study farther, then it and its author have done so "... by standing upon the shoulders of Giants" (Sir Isaac Newton to Robert Hooke, in John Bartlett, 1968, p. 379b).[1]

CHAPTER 1

The Methodology for the "Idea"

In the strictest of terms, the word *methodology* means, "study of method," because a method is not itself a methodology (Lacey, [1976, 1986,], 1996, pp. 307-308). Indeed, to a large degree, this dissertation is a study of the methods and interpretations of those scholars, and non-scholars alike, who have lent themselves to the study of mind, emotion, and their relationships to the world.

In a sense, the study performed here is a version of the *axiomatic method.* That is, "a method for reorganizing the accepted propositions and concepts of an existent science in order to increase certainty in the propositions and clarity in the concepts" (Audi, [1995], 1999, p. 65).

But it is not only a study of past studies, or a "reorganizing" of accepted propositions. This dissertation reinterprets past studies and employs what philosophers term as "folk psychology." Folk psychology is,

> ... the unquestioned possession of every normal human who wasn't raised from birth by wolves. It is the template of our normal socialization as children; it is the primary vehicle of our social and psychological commerce as adults; and it forms the background matrix for our current moral and legal discussions.... [It is] the basic descriptive and explanatory conceptual framework with which all of us currently comprehend the behavior and mental life of our fellow humans, and of ourselves (P.M. Churchland, [1996], 1999, p. 18).

Folk psychology is the common property of folks generally. Their universality not withstanding, the overwhelming view of folk psychology among philosophers is that these bedrock common assumptions are probably mistaken (See P.M. Churchland, [1996], 1999, p. 322, and P.M. Churchland, [1984, 1988], 1999, pp. 58-59).

But in spite of this view, folk psychology is alive and used often even in academia. The scholar who uses a metaphor is employing folk psychology. After all, a metaphor is a manner of explaining the *unfamiliar* by wrapping it in a description of something that is *familiar*. The studies of emotion, and mind in general, are particularly suited for metaphorical application.

Early in life, before a scholar becomes a scholar, that particular person is a folk psychologist; in reality, each and every human that lives, and each and every human that has ever lived, is, and has been, a folk psychologist. Every research project that a scholar embarks upon once becoming a scholar has its genesis from, and is grounded in, that person's folk psychological mental foundations.

As a method, folk psychology is useful in keeping at bay the ever-present discipline specific dogma created to describe or explain an object, subject, event, or process. Regarding studies of the "mind," many disciplines have been, and are still engaged in studying it the mind, but each one constructs its own terminology in theorizing and explaining it. This is perhaps a version of what French philosopher Jean-François Lyotard called a "language game." In

general, his thesis states that the manipulation of language is a process used for the purpose of legitimizing an idea, theory, dogma, or ideology (See Lyotard, [1979, 1984], 1999). At the same time, a unique and discipline specific language insures a measure of insulation for a position or theory against disrupters or nay Sayers. In its purest forms, it is indeed *intellectual protectionism.*

A popular phrase widely used in many walks of life at the time of this paper's composition is the phrase "outside the box." It generally means that thought, or policies, or procedures are often constricted by walls of traditions or procedures the effects of which are to stifle and stagnate any type of alternative views. Paul Feyerabend devoted an entire book to the necessity of outside the box approaches in research. In his work ***Against Method,*** Feyerabend argued that intellectual progress is only attainable if the creativity and wishes of the researcher are stressed rather than those ordained by the method and authority of science (Feyerabend, [1975, 1978], 1979, p.1).

This study will employ outside the box examination and re-examination of present and past research on emotion, mind, and their relationships to education. In the process, the study will pursue "outside the box" alternatives to some aspects of education theory and educational psychology. This approach is entirely necessary given the disparate disciplines and views that have sought to address the nature of emotion throughout the centuries.

CHAPTER 2

Philosophers and Scientists: The Literature on Emotion

The dictionary tells us that the word "emotion" comes from the Latin word *emovere*, which itself means "to stir" or "upset." Greek philosopher Aristotle's definition of emotions probably pre-dates the Latin one, but also adopts the "to stir" and "upset" direction. Aristotle saw emotions as "... that which leads one's condition to become so transformed that his judgment is affected, and which is accompanied by pleasure and pain" (Aristotle paraphrased in Calhoun & Solomon, 1984, p.44).

Philosopher David Hume described emotions as "passions," and that bodily pains and pleasures are the sources for them (Hume in Calhoun & Solomon, 1984, p. 95). One contemporary of Hume, Adam Smith, the founder of the "dismal science" of economics, also lent his talents to the study of emotion or the "sentimental science" in his first book, ***The Theory of Moral Sentiments***, originally published in 1759 (Smith, 1982; also see in Evans, 2001, p. xi). Smith took a "social" perspective in describing emotions as the thread that wove together the fabric of society (Evans, 2001, p. xi). Psychoanalyst Carl Jung described emotion as "...the chief source of all becoming-conscious. There can be no transforming of darkness into light and of apathy into movement without emotion" (Jung, 1938, vol.9, p.32). Anthropologist Ashley Montagu wrote that

"... any emotion may be defined as a strong feeling or mental state that gives rise to measurable physical changes" (Montagu, 1968, p. 254).

Even non-academics throughout the years have offered their opinions on emotions. Newspaperman and satirist Ambrose Bierce wrote that emotion is "A prostrating disease caused by a determination of the heart to the head. It is sometimes accompanied by a copious discharge of hydrated chloride of sodium from the eyes" (Bierce, 1970, p.21). Novelist Jack London summed up the dilemma of emotions by describing them as "The hardest thing in the world to put... into words" (London in Brussell ed., 1988, p.199).

Just from these brief offerings, it is clear that emotions are viewed in a myriad of ways from that of being disruptive for the human organism, to that of being absolutely necessary. There is really no general agreement among psychologists as to whether the function of emotion is to either organize or disorganize behavior (Yarlott, 1972, p.21).

Some students of the mind see emotions as things to be avoided or to outgrow. R.S. Woodworth held that emotions are processes we gradually learn to live without as we develop better resources for coping with life's situations (Woodworth, 1940, 432; also in Yarlott, p. 21). Magda Arnold and R.W. Leeper reject this notion that emotion is something to outgrow and is wholly disruptive. They argue that the emotional processes organize behavior because they arouse, sustain and direct activity. (Arnold, 1970; Leeper, 1948, pp.5-21; and see Yarlott, 1972, p.21).

Daniel Goleman in his book ***Emotional Intelligence,*** begins with passages that echo how many people perceive emotions. He attaches the word emotion to four examples of violence performed by youths (Goleman, [1995]1997, p.x). Though his book is intended eventually to depict emotions in more civil light, he obviously understands that the mention of "emotion" automatically sends up "red flags" to most members of humanity, and that the word emotion itself strikes a generally negative emotional chord in human minds.

Theories of emotion are many and varied, and truly trans-disciplinary in scope. For an interested student of the "mind," wading through the withering array of emotion theories is an emotional experience in itself, if of course, we can consider confusion as an emotion.

Since antiquity, learned people have put forth opinions on emotions. Greek philosopher Aristotle saw the complete human intellect, or soul, as being comprised of rational (cognitive) and irrational (emotional) parts. Unlike his predecessor Plato, however, he did not sharply distinguish between the two parts (Calhoun & Solomon on Aristotle, 1984, pp. 42-43). He believed that there was a unity between the two, and that emotions involve a cognitive element (Calhoun & Solomon on Aristotle, 1984, p. 43).

Seventeenth century French mathematician-philosopher René Descartes offered a "dualistic" theory of emotion by making a metaphysical distinction between two kinds of substances, those being the mental and physical (Calhoun & Solomon on Descartes, 1984, pp.53-70).

Descartes suggested that the process of thinking, and the awareness of thinking, were the real substrates of being (Damasio on Descartes, 1994, p.248). Descartes imagined thinking as an activity separate from the body. His theory therefore celebrates the separation of the mind, the "thinking thing," from the non-thinking body, that which has extension and mechanical parts (Damasio on Descartes, 1994, p. 248).

German philosopher Immanuel Kant, regarded with Plato and Aristotle as one of the most important philosophers in Western culture, also held views of man and emotion. In his work ***Anthropologie***, Kant qualifies affections as diseases of the mind (Lange on Kant in Lange, 1967[1922], p. 33). He saw the human mind as normal only as long as it was under the incontrovertible and absolute control of reason, and anything that caused it to be disturbed was abnormal and harmful to the individual (Lange on Kant, 1967[1922], p. 33).

The real debate over the nature of emotions began in earnest 1884 with the publication by William James of the article "What Is An Emotion?" in the journal ***Mind*** (James, 1884, pp.188-205). James proposed a theory of emotions which claimed that human "... bodily changes follow directly the ***Perception*** of the exciting fact, and that our feeling of the same changes as they occur is the emotion" (James, pp. 188-205). He argued that "... we feel sorry because we cry, angry because we strike, afraid because we tremble, and not that we cry, strike, or tremble, because we are sorry, angry, or fearful as the case may be" (James, 1884, pp. 188-205).

James' thesis of emotion was contrary to previous thinking on the subject and it provoked serious disagreement. But coincidently, a Danish psychologist named Carl Georg Lange had been working on a theory of emotions that paralleled the one offered by James. The two men became collaborators on the study of emotions and their theory of emotions.

In 1929, Harvard professor Walter B. Cannon published the book, ***Bodily Changes in Pain, Hunger, Fear and Rage,*** in which he attacked the James-Lange theory of emotion. Cannon argued that rather than "perception" causing "motor" reaction before "emotional" reaction, what actually occurs is that "perception" engages "hypothalamic" arousal which in turn simultaneously activates emotional feeling and bodily changes (For more see, Plutchik, 1994, pp. 27-34).

Other than the "chicken or the egg" dilemma of which comes first, the emotion or the bodily reaction, emotion studies have given rise to other disputes as well. The question of whether emotions are innate or learned was, and still is, a source for debate. This nature verses nurture contention also centers around the idea of "basic" emotions and secondary emotions. That is, if there truly are basic emotions that are hard-wired within humans at birth, then how many are there, and how do secondary emotions come about?

Then there is the disagreement as to the relationship of emotions to cognition, and which one is most important, this inevitably engages the study of

human thought, memory, consciousness, and personality development as a whole.

Basic Emotions and Innateness

Most theories of emotion accept the premise of "basic emotions" and that they are innate in humans as well as lower animals. Descartes believed that there were six primary emotions, or passions as he called them (Plutchik on Descartes, in Plutchik, 1994, p. 54). Charles Darwin did not list a specific number of basic emotions, but he did offer that some emotional expressions and behaviors are innate. He wrote that "... certain actions which we recognize as expressive of certain states of the mind, are the direct result of the constitution of the nervous system, and have been from the first independent of the will, and, to large extent, of habit" (Darwin, 1955, p. 66).

British psychologist William McDougall in his textbook on social psychology published in 1921, assumed that there were seven clearly defined instincts (emotions) and five that were more obscure and less differentiated (McDougall, 1921, also see Plutchik, 1994, pp. 54-55).

William James described basic emotions as the "coarser" emotions. He listed eight of these which were: anger, fear, love, hate, joy, grief, shame, and pride (James, 1892, p.374). Behavioral psychologist J. B. Watson wrote that there are only three basic emotions. His short list included fear, rage, and love (Watson, 1919, also see Mandler, 1975, p.102).

Silvan S. Tomkins argued "... that the primary motives of man are his eight innate affects, or feeling. These are the positive affects of excitement,

enjoyment, and surprise, and the negative affects of distress, anger, fear, shame, and contempt. These are innate" (Tomkins, 1965, p.148). Richard Lazarus and Bernice Lazarus in their book ***Passion and Reason*** deal with fifteen primary emotions. Their list includes anger, anxiety, guilt, shame, envy, jealousy, relief, hope, sadness, happiness, pride, love, gratification and compassion (Lazarus & Lazarus, 1994, p.6).

Daniel Goleman lists eight emotions as primary, but he also lists other secondary emotions that are derived from those eight. For example, under the primary emotion of anger, he lists various sub-emotions, some of which are fury, outrage, resentment, wrath etc.. Under the primary emotion of "love" he includes acceptance, friendliness, trust, kindness, etc. (Goleman, [1995] 1997, p.289).

The most compelling evidence for the support of basic emotions comes from studies of facial expressions of peoples isolated from other cultures. This is called "pancultural" recognition of facial expressions of emotions. The most prominent study of universal expressions and emotions was conducted by Paul Ekman and his colleagues who traveled to New Guinea to study a group of Neolithic people called the Fore. Until 12 years previous to Ekman's study, the Fore had been isolated from all external influences, and were unlikely to have seen Western photographs, movies, or the like (Ekman, Sorenson & Friesen 1969, pp.86-88; also see Plutchik, 1994, pp.66-70). By showing pictures of facial expressions from other cultures to the primitives in New Guinea, Ekman and his

colleagues determined that certain expressions and their underlying emotions were recognizable by people isolated from other cultures.

Ekman first proposed that the facial expressions of happiness, surprise, sadness, anger, fear, and disgust are human universals, but later he added contempt to the list (Ekman & Friesen, 1986, pp.159-168). Ekman viewed these pan-cultural facial expressions as evidence that the emotions behind them were innate to the human species as a whole.

Ekman's studies have been influencial in convincing many scholars that there are indeed basic and innate emotions. Dylan Evans writes mater of factly that these basic emotions "... are not learned; they are hard-wired into the brain.... Emotional expressions are not like words, which differ from culture to culture; they are closer to breathing, which is just par of human nature" (Evans, 2001, pp.6-7).

Emotion and Cognition

The debate over whether emotions (irrationality) and cognition (rationality) are interdependent has been continuing for centuries. The Greeks viewed emotions as rude eruptions, whereas they saw reason as calm and enduring, even "eternal" (Solomon, [1976] 1977, p.124). Robert C. Solomon writes that the "... entire history of human thought (Eastern as well as Western) has tended to view the passions as forces in some sense 'outside' us, beyond our control, eruptions from an unconscious Freudian "it" or Cartesian 'animal spirits' sapping the strength of Reason" (Solomon, [1976] 1977, p. 130).

But rather than seeing emotions as saboteurs of other bodily functions some scholars see them as accompaniments to other human processes (See Hillman, [1960] 1962, pp.45-47). French/Swiss genetic epistemologist Jean Piaget saw emotion and cognition as interdependent and necessary to each other. He wrote that there "... is no such thing as a purely cognitive state.... There are no such acts of intelligence, even of practical intelligence, affective regulation during the entire course of an action, without joy at success or sorrow at failure" (Piaget, 1962, p.130).

CHAPTER 3

Education and Emotion: The Literature in Education

Educators have long recognized or at least given lip service to the importance of *emotion* in the teaching and learning process. Mostly, they acknowledge that the emotional derivative, *interest,* is fundamental in student acceptance of subject matter as a part of memory.

To be sure, there are those people in education and elsewhere that view human emotion as generally disruptive, negative, and mostly avoidable. Rather than being seen as windows through which information may pass into the human mind, emotions have been shunned as too provocative or too excitable to be used in the teaching process, especially involving young children. In this regard, the 1959 publication, ***Primary Education*** proposed that: "Teachers need to be on their guard lest they play too much on children's emotions' (***Primary Education***, 1959, p. 176; also in Yarlott, 1972, p. 9). Or, as Enlightenment philosopher Jean-Jacques Rousseau described this aspect of the teaching process: "Be clear, direct, unemotional" (Rousseau, 1762, p.74; also in Yarlott, 1972, p. 9). And perhaps another objection to emotional education "is that teachers are not qualified for it: they are not trained counselors or emotional therapists. Their efforts would be ineffective or even do harm" (Beck & Kosnik, 1995, [On-Line]).

Richard Mitchell in ***Graves of Academe*** (1987), has harsh words for the inclusion of emotions or the affective domain in education. He argues that:

> 1. It is out of resort to the affective domain that educationists can palm off as "education" everything from folk dancing to bulletin board decoration and visits to nursing homes, and, at the same time, so neglect the merely cognitive disciplines that they can spend twelve whole years in the teaching of something as simple as conventional punctuation and still Fail to teach it.
> 2. The affective domain is a logical absurdity. Feelings, sentiments, values, and responses have causes, attributes and consequences. We can know nothing of them, we can neither understand nor judge them, without the work of the intellect in the organization of minute particulars. You may call "affective" whatever you please, but you cannot deal with it unless you are cognitive.
> 3. The feeling, sentiments, values, and response of our children, or of any citizens, are none of the government's damned business.....
> 4. It is the supposed existence and paramountcy of the affective domain that have made the teacher's colleges what they are, nurseries of self-indulgence, unskilled "creativity," and half-baked psuedo-metaphysical incantation. Silly as it may seem, training in the efficient storage of chalk and erasers would actually be of more value to the incipient schoolteacher than a whole experiential continuum of intercultural awareness-enhancement, but if teacher-training were devoted only to the cognitive it could be very quickly accomplished by very few people... (Mitchell, [1981] 1987, pp. 207-208).

"Traditional education," or "back to basics" education, or as Alfie Kohn describes it, "Old School" education, has relatively little use for emotional engagement in the teaching and learning process (Kohn, 1999).

To those that endorse traditional methods in education, the subject of emotions in the classroom in whatever form, harkens back to the "child-centered" and "progressive" methods of early in the twentieth century. Traditionalists

equate present day "constructivism" with progressive and child-centered approaches. However, they view the methods that progressive/constructivists endorse as being contrary to effective learning. Traditionalists accuse modern-day constructivists of being child-centered and opposed to subject-centered as an educational process.

A prominent proponent of traditional methods, E. D. Hirsch, writes that constructivists and progressivists:

> Describe subject-centered instruction as consisting of lecture format, passive listening, mindless drill, and rote learning, and as directed to purely academic problems that have no intrinsic interest for children. The opposition between subject and child implies that focusing on subject matter is equivalent to inhumane and in effective schooling (Hirsch, [1996] 1999, p. 245).

Hirsch counters this view and declares that it is a "mere caricature" of reality He writes that:

> Observation has shown, on the contrary, that children are more interested by good subject-matter teaching than by an affectively oriented, child-centered classroom. The anti-subject-matter position is essentially anti-intellectual. The dichotomy between subject and child had too often resulted in failure to teach children the subjects and skills they need. Such failure cannot under any principled use of language be described as "child-centered" (Hirsch, [1996] 1999, p. 245).

But there is a great deal of support for emotion-enriched and child-centered teaching and learning. Greek philosopher Plato was distrustful of human nature and its accompanying instinctive emotions (cited in Hirsch, [1996], 1999, p. 72). He also insisted that reason and education must have an adequate

emotional base, and if there is none, then very little of significance can happen to a learner, except in the most negative of terms (cited in Postman & Weingartner, 1969, p. 53). John MacMurray wrote in 1935 that "reason is primarily an affair of emotion, and that the rationality of thought is the derivative and secondary one" (MacMurray, 1935, p. 26; also see Dunlop, 1984, p. 21). In 1938, Daniel A. Prescott wrote:

> Literary people always have understood the vivid emotional experiences of childhood. They have portrayed them with an accuracy and poignancy that reawakens in each of us experiences of our own. Most of us would be too shy to recount the numerous significant things that happened to us; yet we know that they were moments which counted. They were moments when concepts crystallized, concepts never to be forgotten (Prescott, [1938] 1949, p. 2).

Written for the Committee on the Relation of Emotion to the Educative Process of the American Council of Education, Prescott's study was a half-century ahead of its time. It was written in the waning years of the Progressive Era and clearly was influenced by the child-centered approaches of those years.

But progressive education only dealt with emotions in the superficial sense, that is, without the neurological approach to emotion now so prevalent at the beginning of the twenty- first century. Prescott's study addressed the subject thoroughly and as completely as possible considering the lack of scientific findings on emotion and its origins.

Regarding the relationship of education and emotions, Prescott asked:

> What can be said of the life of the child and school? Is it rich in feeling? Has it the tang of exciting discovery, the testing of the stuff that personality is made of, the thrill of feeling that here one swirls in the stream of real life? Should school life have these qualities?... Should children be trained to do without excitement? Should they be schooled to deal with reality in intellectual terms? Or is there an opportunity to enrich life from beginning to end by guiding children into and through high moments of vivid exciting experience (Prescott, [1938] 1949. p. 3)?

Prescott's questions are still being asked as the twenty-first century dawns. But the people who now pose them are "constructivist" educators, the intellectual descendents of the progressives.

To some educators, Prescott's book has become a classic. It shows that research indeed supports the idea that feelings and emotions are a crucial factor in blocking or enhancing learning, and that to a large degree, they determine what will be learned in any situation (Beatty, 1969, p. 86).

Prescott's study set forth five formal objectives in its original statement. The study was to ascertain:

> (1) whether emotion has been unduly ignored in the stress laid upon the acquisition of knowledge and the development of skill in the acquisition of knowledge;
> (2) whether education should concern itself with the strength and direction of desires developed or inhibited by the educational process;
> (3) whether the stress laid on the attitude of neutral detachment, desirable in the scientific observer, has been unduly extended into other spheres of life to the impoverishment of the life of American youth; and

> (4) in the event that it should appear desirable for education to concern itself more directly with the development and direction of emotion, to consider by what devices emotion may be more accurate described, measured, and oriented (Prescott, [1938] 1949, p. 4).

Prescott's study also addressed the aspect of emotion as a prerequisite in the selection of teachers. Prescott argued that,

> The persons in contact with children in our schools should be thought of as personnel workers rather than teachers. They should be selected for their intelligence, their sympathetic insight into children's needs and behavior, and for their skill in getting along with children. They should not be selected primarily on the basis of their erudition, "disciplinary ability," or knowledge of "teaching techniques." Their training should consist in a broad study of the realities of the world and of life, in a careful study of the growth characteristics, behavior, and needs of children and in actual experiences with children (Prescott [1938] 1949, p. 196).

Prescott cites ([1938] 1949, p. 272) a study performed by Frank W. Hart (Hart, 1934, p. 248), in which he secured replies from 10,000 high school seniors which were asked to describe both the best and least-liked teachers they ever had. Hart's results showed that teachers are liked best for their helpfulness in facilitating learning, followed immediately by teacher characteristics of cheerfulness, good nature, sense of humor, friendliness, fairness, and sympathetic understanding (Hart, 1934, p. 131).

The primary reason for the dislike of some teachers can best be described as a teacher's poor attitude or demeanor. Teachers that were cross, grouchy, sarcastic, never smiling, and who lost their tempers were disliked the

most. This was followed by reasons such as "not helpful with schoolwork, does not explain lessons and assignments, not clear, [and] work not planned" (Hart, 1934, p. 250).

Historian Jacques Barzun also recognized the importance of the teacher in understanding the abilities and moods of students. He submitted that:

> Anyone who has ever taught knows that the art of teaching depends upon the teacher's instantaneous and intuitive vision of the pupil's mind as it gropes and fumbles to grasp a new idea (Barzun, 1992, p.20).

The call for "caring" in the educational process has survived since the days of progressive education. Nel Noddings has devoted much energy and literature to that very subject. She has argued that as teacher, "... we do not tell our students to care; we show them how to care by creating caring relations with them" (Noddings, 1992, p. 22). And as Prescott argued in 1938, Noddings asserts that the cognitive aspects of education have been emphasized to an inordinate degree over the emotional aspects. She writes that: "Educational research, like behavioral science in general, has made the error of supposing that method can be substituted for individuals, and this attempt may well have increased the alienation of students" (Noddings, 1992, p. 8).

Charles E. Silberman echoes these views that subject matter dominates the classroom to the exclusion of emotion. Silberman confesses that he once held the belief that the purpose of education should be – "intellectual development"

(Silberman, [1970] 1971, p. 7). But as was writing ***Crisis in the Classroom***, he changed his mind. He came to see that "What tomorrow needs is not masses of intellectuals, but masses of educated men --- men educated to feel and to act as well as think" (Silberman, [1970] 1971, p. 7).

Silberman contends that the German University system under Hitler should provide evidence that thinking alone does not make a human being human; feeling is also needed (Silberman, [1970] 1971, p. 7). In this regard Silberman quotes these lines from W.B.Yeates:

> God guard me from those thoughts men think
> In the mind alone;
> He that sings a lasting song
> Thinks in a marrow-bone (Yeats in Silberman, [1970], 1971, p. 8).

Silberman waxes indignant at "... the narcissism of so many college professors and administrators who, at least until prodded by student rebels, refused to think about the nature and content of liberal education, particularly about the ways in which knowledge may have to be reordered to make it teachable to a new generation" (Silberman, [1970] 1971, p. 10).

Silberman also is indignant at the failures of the public schools. He cites Erik Erikson in suggesting the "The most deadly of all possible sins, is the mutilation of child's spirit" (Erikson cited in Silberman, [1970] 1971, p. 10). Silberman then proclaims that it "... is not possible to spend any prolonged period visiting public school classrooms without being appalled by the mutilation

visible everywhere---mutilation of spontaneity, of joy in learning, of pleasure in creating, of sense of self" (Silberman, [1970] 1971, p. 10).

Philosopher and researcher of the "mind" and "brain" Marilyn Ferguson addressed this extinguishing of student spirit in her book, ***The Aquarian Conspiracy*** ([1980] 1987). She wrote that:

> As the greatest single social influence during the formative years, schools have been instruments of our greatest denial, unconsciousness, conformity, and broken connections. Just as allopathic medicine treats symptoms without concern for the whole system, schools break knowledge and experience into "subjects," relentlessly turning wholes into parts, flowers into petals, history into events, without ever restoring continuity (Ferguson, [1980] 1987, p. 282).

"Worse yet," Ferguson declared,

> ... not only is the mind broken, but too often, so is the spirit. Allopathic teaching produces the equivalent of ***iatrogenic***, or "doctor-caused," illness—teacher caused learning disabilities. We might call these ***pedogenic*** illnesses. The child who may have come to school intact, with the budding courage to risk and explore, finds stress enough to permanently diminish that adventure.
>
> Even doctors, in their heyday as godlike paragons, have never wielded the authority of a single classroom teacher, who can purvey prizes, failure, love, humiliations, and information to great numbers of relatively powerless, vulnerable young people (Ferguson, [1980] 1987, p. 283).

Ferguson actually ties the repressive school environment to later-life psychological gliches. She suggests that, "Dis-ease, not feeling comfortable about ourselves, probably begins for many of us in the classroom" (Ferguson,

[1980] 1987, p. 283). She cited one biofeedback clinician who remarked that stressful memories of the classroom and the arousal of the body can be demonstrated. Ferguson summarizes that when a biofeedback subject is asked to reflect on past school days, the feedback shows immediate alarm. She related that in a PTA workshop, "every adult asked to write about a remembered school incident described a negative or traumatic event. Many adults describe nightmares of being in school again, late for class or having failed to turn in an assignment" (Ferguson, [1980] 1987, p. 283).

And finally, Ferguson suggests that "Most of us seem to have considerable unfinished business with school. This residue of anxiety may intimidate us yet on some level of consciousness; it may forever pull us back from challenges and new learning" (Ferguson, ([1980] 1987, p. 283).

But Charles Silberman argues that this whole repressive situation need not be. To him, "Public schools can be organized to facilitate joy in learning and esthetic expression and to develop character—in the rural and urban slums no less than in the prosperous suburbs" (Silberman, [1970] 1971, p. 10).

Arthur W. Combs has also written widely about affect and emotion in the classroom. He asserts that "Effective learning is also *affective*" (Combs article in Hamachek, 1990, p, 21). He argues that "We experience feelings or emotion when events are important to us.... Affect or feeling is an indicator of the degree of personal meaning. In light of that fact, if education is not affective,

it is probable that little of significance had occurred" (Combs in Hamachek, 1990, p. 21).

Combs also answers opponents of affective education such as Richard Mitchell who was quoted earlier. Combs submits that:

> [t]he hysterical opposition to affective education that has become manifest in some quarters is also downright destructive. Significant learning is always accompanied by emotion of feeling, and classrooms that rule it out simultaneously reduce their effectiveness.
>
> Learning is a deeply human, personal experience. Humanists point out that it is also profoundly influenced by student self-concepts, values, personal need, experience of challenge and threat and the learner's feeling of belonging or identification (Combs in Hamachek, (1990, p. 21).

And too, Combs asserts that "If learning is personal and affective, conditions that induce feeling of belonging should be apparent in the classroom" (Combs in Hamachek, 1990, p. 21). Combs maintains that the,

> [a]dvocates of affective education are not harebrained zealots bent on destroying the traditional bases of American educations. Neither are they well-meaning do-gooders seeking only to be nice to students. Instead, they seek to apply to the teaching process the best we know about the nature of student and the process of learning (Combs, 1982, April, p. 497).

Jane Roland Martin in ***The Schoolhome*** writes that in the educational literature of the 1980s, "One finds repeated demands for proficiency in the three Rs, for clear, logical thinking, and for higher standards of achievement in science, mathematics, history, literature, and the like. One searches in vain for

discussions of love or calls for mastery of the three Cs of care, concern, and connection (Martin, 1992, pp. 121-123).

Certainly, there is a widely held view that emotions are crucial for self-esteem, and the formation and appreciation of values. But they are also considered crucial for human well-being in general. In this regard, Clive Beck and Clare Madott Kosnik at the Ontario Institute for Studies in Education write that:

> [a]ssuming this is so, we have a basis for emphasizing emotional development in school. It might be objected that schools, with their square rooms, desks, and chalk boards, are designed for cognitive learning, not emotional learning. But in our view, the traditional school environment presents as much of an impediment to cognitive learning as to emotional learning... if emotional learning is as important as we have suggested, we must *find* ways of fostering it in schools, whatever the past practice has been (Beck and Kosnik, 1995, [On-Line]).

With regard to affect and emotion in the classroom the teacher is the pattern (DeGarmo, [1902], 1911, p. 134). Charles DeGarmo, a "progressive" educator writing at the dawn of the twentieth century, argued that the teacher is the key to "interest" in the learning process. DeGarmo wrote:

> If the teacher's mind is alert, the pupils will be also; if the teacher exhales the sunny influence of good humor the soul of the child will blossom like the rose in June; if the teacher uses correct and forceful language, the pupils will strike to do the same (DeGarmo, [1902], 1911, p. 134).

To DeGarmo, the personality of the teacher is of vital importance. "With the young," he wrote, "interest in the main follows the teacher, not the subject" (DeGarmo, [1902] 1911, p. 133). And, "It is for this reason that personality and teaching skill are so important in the awakening of the intellect, the enriching of the mind the arousing of the desires, the direction of the outgoing efforts of the soul" (DeGarmo, [1902], 1911, p. 134).

DeGarmo's arguments are profound and can be applied to education today just as they were the first decade of the twentieth century. For DeGarmo, the power or effectiveness of the teacher does not lie in the raw material of the subject, but in its use. "A good teacher can make the driest sort of material glow with life and interest" (DeGarmo, [1902], 1911, p. 130).

DeGarmo also writes as if he is speaking to the proponents of "traditional" education which wields so much sway in the first decade of the twenty-first century. Degarmo asserts that:

> One of the most serious dangers confronting the teacher, and one arising from the large number of children to be taught, is that the individual will be concealed in the mass. In such cases mechanism in memorizing, drilling, in writing, in reproducing, is likely to suppress the vital and independent; it tends to crush or leave undeveloped the spontaneity of the individual (DeGarmo,[1902]1911, p. 130).

As Silberman and Erickson would do decades later, DeGarmo complains about the "numerous class" of teachers who

> ... smother personality by technique. They put themselves and their pupils into the straight-jacket of methodological procedure. They subject everything to the routine of rule. Personality has small influence in what they do (DeGarmo, [1902], 1911, p. 132-133).

Throughout the literature of education, complaints such as DeGarmo's are common. Ben H. Weaver, in his book, ***The Student Exploiters,*** (1970), charged that the "... student is expected to be a machine who works endlessly at school work.... Feelings, emotions, values and individually are neglected. Hostility is shown toward the youth who makes a serious attempt to establish his own identity" (Weaver, 1970, p.55).

Charles DeGarmo viewed the emotional aspect of "interest" as fundamental in the learning process, so fundamental in fact, that the title of his book, ***Interest and Education*** reflected it.

German philosopher Jürgen Habermas saw interest and knowledge as irrevocably intertwined. He devoted an entire book, ***Knowledge and Human Interests***, to the importance of interest in the acquisition and construction of knowledge (Habermas, [1968] 1971). The Appendix of his book presents his thesis on the subject and also its connection to self-reflection (Habermas, [1968] 1971, pp. 301-317).

And in the present year of 2003, it is the devotees of the philosophy of constructivism who stead-fastly emphasize the emotional aspect of learning with its properties of interest and general affectivity as being prominent. In this regard, constructivists subscribe to and apply the theories and postulates of theorist Jean Piaget.

Constructivism and Emotion in Education

The genesis of modern constructivism is grounded in the theories of Jean Piaget and Len S. Vygotsky the Russian lawyer/philologist/psychologist. Vygotskian constructivism, or "social constructivism," emphasizes the process of education in terms of social transformation and reflects a theory of human development that situates the "individual" within a sociocultural context. An individual's development arises from social interactions within which cultural meanings are shared by the group and therefore internalized by the individual (Richardson,1997, and see Ismat, ERIC Digest, ED426986 98).

To some observers, Piagetian constructivism, or "psychological constructivism," views the process of education as one of educating the individual child in such a way that facilitates and supports the child's interests, needs, desires, and uniquely individual learning ability. The child is then the subject of study, and the individual child's construction of knowledge is the emphasis (Ismat, ERIC Digest, ED426986 98).

Of the two versions of constructivism, the Piagetian one seems best suited to address the affective or emotional aspects of learning. During the 1960s and 1970s however, most of the work done by the adherents to Piaget's theories focused on cognitive development, equating it with intellectual development (Wadsworth, 1996, p. x). But Piaget's theories provided for more than just cognition related intellectual development. Piaget himself maintained that in

addition to cognition, intellectual development contains an affective component, a social component, and an ethical or moral component (Wadsworth, 1996, p. x). To constructivists in recent years, constructivism is, or should be, as much about the affective development of the mind as about its cognitive development.

Although Piaget did most of his research on, and wrote primarily about the cognitive aspects of intellectual development and cognitive structures, he also recognized affectivity as important even in his earliest writings (Wadsworth, 1996, p.145). Piaget's emphasis in researching cognition related development rather than affective related development was obviously not intended to be a value statement on the difference (Wadsworth, 1996, p.145). Barry Wadsworth (1996) proposes that it is possible that cognition created the most disequalibrium for Piaget personally and thus received most of his attention (Wadsworth, 1996, p.145).

Wadsworth (1996) also offers a second likely reason why Piaget studied cognition more than affectivity, and that is he viewed the scientific analysis of affectivity as more difficult and less manageable than the study of cognition (Wadsworth, 1996, p.145). Piaget alluded to this possibility when he wrote: "It is evident that just by conversing with a child one cannot analyze feelings in the same manner one can identify the logical structures that characterize intelligent thought" (Piaget, [1965]1995, p.254). Or, Wadsworth (1996) maintains, it is possible that "... as psychologists and educators tried to understand Piaget's work, their constructions of his theory started off by assimilating what was

available, which was primarily Piaget's writing about cognitive development" (Wadsworth, 1996, p.145). Wadsworth (1996) admits that it "... has taken many of us some time to bring our constructions into line with the 'reality' of the theory" (Wadsworth, 1996, p.145).

In Piaget's most comprehensive effort on the role of affect in mind development, ***Intelligence and Affectivity: Their Relationship During Child Development*** (1981), he makes plain how vital that affect is in the process of intellectual development. He writes that it '... is impossible to find behavior arising from affectivity alone without any cognitive elements. It is equally impossible to find behavior composed only of cognitive elements" (Piaget, 1981, p. 2). Piaget also makes a profound statement regarding affect in general, he writes: "In truth, there is as much *construction* [italics mine] in the affective domain as there is in the cognitive" (Piaget, 1981, p.12).

Piaget argues that the discipline of psychoanalysis has advanced this concept further and attempted to demonstrate how feelings are constructed (Piaget, 1981, p.13). Psychoanalysis holds "... that what a person feels at any given moment is dependent on his entire history" (Piaget, 1981, p.13). Piaget offers that we should "... not be surprised if the comparison between affective states and acts of intelligence cannot be pushed too far..." (Piaget, 1981, p.15). But Piaget then makes a statement that describes the roadblock that he has perhaps placed before himself regarding affect and the rest of his theory,

he writes: "... we specifically deny that affectivity can create new structures..." (Piaget, 1981, p.15).

Constructivist educator Barry Wadsworth writes that over the 25 years that he has been a student of Piagetian theory, "... the theory has changed, as all theories do and must" (Wadsworth, 1996, p. x). He sees that even in Piaget's absence, his theories have evolved and will continue to evolve. Wadsworth confirms that to him, Piaget's theory is as exciting today as it was for him in the 1960s. And furthermore, he writes that Piaget's theory "... continues to be the most useful guide to my thinking and efforts to make sense out of issues is education. It is not my only guide, but a highly valued one" (Wadsworth, 1996, p. x). Since Wadsworth's book is devoted a great deal to the affective domain and Piaget's theories of it, then his view of Piaget's theories changing is possibly directed at the affective aspect.

Over the years in the fields of psychology and education, the emphasis has been on cognition and rationality and on ways of eliminating or diminishing the influences of subjectivity and emotion in decision making and general behavior (Cacioppo & Gardner, p. 191). Researchers in many disciplines have been encouraged to try to remove emotions from their research processes (Sarbin, 1986, pp. 83-97). But constructivists, following Piaget's lead, have generally incorporated the realities and possibilities of emotion (affect) into their research and teaching methods. In constructivist education, the concept of student

emotions is often defined by the words "caring," "feeling," and "interest," among others.

As DeGarmo ([1902] 1911) argued, the personality and mood of the teacher directly affects classroom atmosphere. In this context, emotions are seen as either an enhancer or inhibitor of learning. Attending to the emotional well-being of the student, and likewise a recognition by the teacher of their own emotional situation is a hallmark of constructivist teaching. Dealing with emotions not related to the subject matter are an important first step in ensuring student knowledge construction. Great emphasis is placed on relationships, between student and teacher, and between the students themselves.

Rachael Kessler in her book ***The Soul of Education*** (2000), addresses the subject of relationships with this question and answer:

> What is the quality of relationships that nourish the soul of students? Whether it is a relationship to one's self, to others, or to the world, the experience of deep connection arises when there is profound respect, a deep caring, and a quality of "being with" that honors the truth of each participant in the relationship. Young people are crying out to be seen and heard so that they, in turn, can take in the world through learning, loving, and serving (Kessler, 2000, p.18).

Jonathan Cohen, of Teachers College at Columbia University writes that "There is a growing body of research and practice that underscores what parents and teachers have long known: that learning how to 'read' ourselves and the reactions of others – is as important as learning how to read words and numbers"

(Cohen, 2001, p. 3). Like Rachael Kessler, he sees the emotional value of caring relationships and an understanding of one's self as important prerequisites for learning.

From some quarters in recent years, curriculums have been developed that are geared toward an emphasis on the centrality of emotions, rather than encouraging children to repress or stifle their feelings in order to focus exclusively on cognition (Kusché and Greenberg, 2001 p. 143).

Observant teachers know that each student in their class has an emotional life independent of, and not answerable to the classroom. In the complicated world outside of school, the interests of children and the interests of parents are not always synonymous (Young, 1971, p. 9). Children "... bring their own potentialities into the world with them but they live in a climate created by others" (Young, 1971, p. 9). Children sense that their opinions, and feelings, and wishes are not accorded the kind of respect to which adults are entitled (Young, 1971, p. 4).

Leontine Young's book, ***Life Among the Giants ...*** (1971) addresses the lives of children by trying to view the world from their eyes. Young does this remarkably well, and her observations strike some emotional chords in most readers. Her book gives some insight into the world of children outside of school. She refers often to the importance of mutual respect or lack of it between adults and children.

Young relates that:

> Generations of children have lived with... casual disrespect, have protected their thoughts more or less openly, have learned finally to keep their ideas, to themselves. With time they have learned in turn to despise what once seemed so important and to turn away from a past so little worthy of serious regard. They do not even notice how much enthusiasm, zest for living, spontaneity and self-honesty have vanished with the unimportant past. Childhood, that fantasy has pained as a carefree romp, has been quietly interred as the yearn of inferiority and no-power (Young, 1971, p. 4).

This subdued child that Young describes is very often treated the same way in school as outside of school. Ben H. Weaver wrote that,

> [h]ome and school should provide environments that foster mental health and produce young people who feel loved, accepted and who accept themselves. We should not seek to unduly shelter youth from the storms of life but should help them to develop qualities that enable them to face them squarely. The evidence is strong that neither agency is discharging its mental hygiene responsibilities to the extent that it could (Weaver, 1970, p.55).

Traditional education does not generally tend to the emotional needs of the child, but rather, as DeGarmo ([1902] 1911) maintained, it all too often reinforces outside of school disrespect and extinguishes the last vestiges of a child's creativity.

The "mood" of the student as he/she enters the classroom is a determinant of prospective learning. Darlene Stewart, a recognized leader in the field of neocognitive psychology, writes that due to recent breakthroughs in cognitive psychology, it is now known that human psychological functioning is

mood-related (Stewart, 1993, p. ix). Although not a constructivist, Stewart's views of feeling and moods and emotions in general parallel much of constructivist thought dealing with the importance of affect. To Stewart, positive and negative states of mind enhance or inhibit learning. Stewart believes in a concept of "teachable moments," meaning, that negative moods can be changed to positive ones, and that while all "moments" are not teachable moments, teachable moments can be created (Stewart, 1993, p. xi).

Given the mood or other emotional baggage that the student brings to the classroom, the emotional atmosphere there is important. In this regard, Renate Nummela Caine and Geoffrey Caine, in their book ***Teaching and the Human Brain*** (1991), contend:

> Because it is impossible to isolate the cognitive from the affective domain, the emotional climate in the school and classroom must be monitored on a consistent basis, using effective communication strategies and allowing for student and teacher reflection and metacognitive processes. In general, the entire environment needs to be supportive and marked by mutual respect and acceptance both within and beyond the classroom (Caine& Caine, 1991, p. 82).

Emotion Laced Memory and School Subject Matter

To be sure, student emotional disposition is important in the general receptivity of the student to learning. But even if the student has no emotional hindrances upon entering the classroom, that circumstance does not mean that human emotions are absent from the very learning process itself.

The simplest way to describe this aspect of emotion in the context of the classroom may be explained as past student emotional experiences utilized and applied to present subject matter. Piaget argued in this regard that the teacher's challenge is to identify context that intrigues children and arouses in them the need and desire to figure something out (In DeVries, 1987, p. 25).

The key words in Piaget's statement are "intrigues" and "arouses", which are key components of "interest". They are terms of human emotions; so Piaget is recommending the attachment of student emotions as a process of teaching. Rheta DeVries says that teachers of the constructivist persuasion "... ask children what they want to know and then build a curriculum on these interests" (De Vries, 1993, presented paper, p. 5-6).

Terry Lyn Anderson, in her article, "They're Trying to Tell Me Something:..." describes how an historical event and its accompanying emotional aspect can spark interest in children.

In a lesson about Charles Lindbergh's historic trans-Atlantic flight from New York to Paris in 1927, the children were astounded to find out that

Lindbergh went without sleep for over 60 hours on the journey. It was something that the children could deal with since most or all of them had tried to stay awake in a contest with sleep at sometime in their lives. They had an emotional remembrance about their struggle against sleep and they applied this feeling to Lindbergh's heroic endeavor (Anderson, 1996, p. 35).

Jacqueline Grennon Brooks and Martin G. Brooks in their book, ***In Search of Understanding: The Case For Constructivist Classrooms*** (1993), offer that:

> Learning is enhanced when the curriculum's cognitive, social, and emotional demands are sort of relationship must exist between the demands of the curriculum and the suppositions that each student bring to a curricular task. This notion leads to our fourth guiding principle of constructivist teaching: the need for teachers to adapt curriculum tasks to address student's suppositions. If suppositions are not explicitly addressed, most students will find lessons bereft of meaning, regardless of how charismatic the teacher or attractive the materials might be (Brooks & Brooks, 1993, p. 69).

Kieran Egan in his portion of the book, ***Imagination and Education*** (1988), addresses the significance of emotions in learning by offering that "The emotions are engaged by making the culturally important messages event laden, by involving characters and their emotions in conflict in developing narratives in short, by building the messages into stories" (Egan in Egan & Nadaner, 1988, p. 104). Egan contends, "... everyone, everywhere has told and enjoyed stories. They are one of the greatest cultural inventions for catching and fixing meaning" (Egan in Egan & Nadaner, 1988, p. 104). He offers that the great power of a

story "... lies in its ability to fix affective responses to the messages it contains and to tie what is to be remembered into emotional associations" (Egan in Egan & Nadaner, 1988, p. 104). "Our emotions, to put it crudely," writes Egan, "are much better things to remember with then are our intellects..." (Egan in Egan & Nadaner, 1988, p. 104).

CHAPTER 4

The World of Emotion Outside of School

Corporate America and Emotional Capital

It seems clear that throughout the twentieth-century support for the inclusion and attachment of emotion or affect in the teaching and learning process has primarily fallen to "progressives" and later "constructivists." Historically, the inclusion of emotion in the educational process has been opposed by proponents of traditional education practices. These traditionalists, usually socially, economically, and politically conservative, have viewed emotions as disruptions in what they believe should be a rigorous, rational and structured classroom environment. In the last several decades of the twentieth century, a view has remained both inside and outside of education "... equating emotions with lesser maturity and therefore with an individual's having less developed knowledge" (O'Loughlin, 1997).

Curiously, and ironically, the very people who disdain emotion in the educative process will otherwise use and profit from tapping the emotional fabric of the general public. Corporate America and its mouthpieces in advertising exploit emotions to convince and coerce the public to buy their products or use their services. But while the business of advertising is to sell something, the advertising industry, through its research, has perhaps inadvertently and

paradoxically, opened avenues for understanding the learning process in the classroom.

It has been written: "Advertising that works is advertising that makes somebody feel something.... All advertising has some emotion. Some advertising is all emotion" (Riney, 1981). A Ford Motor Company executive has been quoted as saying that "We are serious about trying to understand people and their lives and their needs in an emotional way so we can design vehicles, products, and services they opt to choose" (Quoted in Robinette, Brand, and Lenz, 2001, p.7). This Ford executive's view is one prevalent in business and advertising. It is an acknowledgement that emotion is a key aspect of understanding people and also in communication with them.

Yet corporate America is also a bastion of traditional conservative beliefs about education and its duty to produce skilled, knowledgeable, and productive citizens. The very methods that corporate executives use to attach the public demeanor, through emotions, are somehow considered to be a separate part of mentality, not to be present in the classroom. In this regard John Dewey offered that school should reflect life outside of school in both the individual and social sense (Dewey, 1897, pp. 77-80). And Dewey also included the emotional aspects of daily life as being a necessary part of the school experience.

The business community clearly knows the value of emotion in building success.

Bernd H. Schmitt in his book ***Experiential Marketing*** wrote that,

> [t]he degree to which a company is able to deliver a desirable customer experience---and to use information technology, brands, and integrated communications and entertainment to do so---will largely determine its success in the global marketplace of the new millennium
> (Schmitt, p. 199, also see Robinette, Brand, and Lenz 2001, p. 62).

B. Joseph Pine II and James H. Gilmore wrote that experiences are not exclusively about entertainment however; "... companies stage an experience whenever they engage customers in a personal, memorable way" (Pine and Gilmore, 1998, also in Robinette, Brand, and Lenz 2001, p. 68).

Research into emotion and marketing has greatly increased in both volume and scope over the last three decades of the twentieth century. Richard L. Oliver in his book, ***Satisfaction: A Behavioral Perspective on the Consumer***, endeavors to explore the mentality behind the unique and common human quest, that is, ... "the satisfaction of one's needs, wants, or desires" (Oliver, 1997, p. 1). Oliver offers examples of the increasingly sophisticated research being done in both pre-and post purchase consumer attitudes. Oliver adds that emotion as a consumer phenomenon was neglected for most of the 1950s and 1960s (p. 291). In an emotion-laden world, the logic of flowcharts and decision process models of the past did not adequately explain consumer actions and reactions. In response, researchers shifted paradigms toward more emotional themes.

Oliver writes that the,

> "... study of the role of emotion is now becoming central to understanding the consumption experience. Why would advertisers emphasize the emotional outcomes of purchasing if consumers could not relate to emotional experiences in consumption? Even the most mundane product (e. g., a safety pin), which by itself connotes no emotional response, can be sold on the basis of "Made in America," thereby inducing pride---an emotion (p. 291).

In 1976 sociologist Erving Goffman made an important statement on the relationship between advertising and real life in his book ***Gender Advertisement***. Goffman's notoriety in his field came as a result of his coining of the term "frame analysis," which in his 1974 book of the same name he offered that individuals employ a "schemata of interpretation" in order "to locate, perceive, identify, and label" events and occurrences and events in their life-space and the world at large (Goffman, 1974; also see Snow, Rochford Jr. Worden and Benford, 1997, p. 235).

Goffman's ***Gender Advertisements*** (1976) was his application of "framing" to marketing and advertising. He sought to analyze advertising for information regarding male and female gender displays. In his study he argued that advertisements do not depict life as actually experienced, but rather "illustrations of ritual-like bits of behavior" (Goffman, 1976, p. 84; also see Holman's, 1986, p. 127).

Goffman argues that advertisements contain *hyperritualizations*, in that they standardize, exaggerate, or simplify the rituals of daily life, which

themselves are actually standardizations, exaggerations, and/or simplifications---in short, advertising makes a ritual out of rituals (Holman, 1986, p. 127). To Goffman,

> [t]he magical ability of the advertiser to use a few models and props to evoke a life-like scene of his own choosing... is due primarily to those institutionalized arrangements in social life which allow strangers to glimpse the lives of persons they pass, and to the readiness of all of us to switch at any moment from dealing with the real world to participation in make believe ones (1976, p. 23; also in Holman, 1986, p. 129).

Advertising executive Rebecca H. Holman interprets Goffman's work as stating that to be successful, advertisements "have to show basic truths about human relationships, even if those truths deal more with what ought to be than with what is" (Holman, 1986, p. 129). Holman offers that:

> [I]f Goffman's premises can be accepted, then the relationship between advertising and emotionality is clear: in order to be maximally effective, advertising should portray products in the context of the rituals of life of which they are apart; if those rituals contain emotional components, they should also be part of the portrayal of the ritual; the focus of these rituals should be on life as it ought to be (or as we wish it were) with products taking their proper role in life, as perceived by consumers (Holman, 1986, p. 130).

The uses of emotion in corporate America are many and varied. As noted, examples abound dealing with the emotional aspects of consumer behavior

related to products and services. But the emotional foundation of a consumer/business relationship even reduces to a consumer/businessperson level.

Examples of this emotional relationship are found in the May 2002 issue of ***Inc*** magazine. In an article titled, "The Inner City 100: Emotional Branding: How Much of Your Life Story Should You Use to Market Your Company?" ***Inc*** magazine senior staff writer Mike Hofman examines how some successful inner city entrepreneurs are able to generate emotional interest from clients and customers.

Hofman explains that:

> [u]sing your life story to sell your company is one form of what experts call emotional marketing---getting customers to take an interest in your business not just because you offer a snazzy value proposition but because they feel something about your company. If CEOs are comfortable talking about themselves---and can connect their story to their customers' needs---emotional branding can be a freebie competitive advantage for small business (Hofman, 2002, p. 73).

Hofman writes that some entrepreneurs work at "... crafting and then selling a story around their own identity, ranging from their background to their skin color" (p. 72). One subject offered that his version of emotion marketing is telling people how he started his company from his college dorm (p. 72). Another subject expressed that when calling on potential clients for her electrical systems company, 80% of them want to hear "all the details" about what her life as a female electrician is like (p. 73). An owner of a successful printing

company in Rochester, New York, who emigrated from Nigeria in 1980, says that he details his background on almost every sales call he makes (p. 73).

Hofman then poses this question about emotion marketing: "How does a CEO infuse emotion into an initial contact without turning it into an uncomfortable 'pity me' kind of conversation?" (p. 74). Hofman answers the question by submitting that "... according to Inner City 100 CEOs, [it] seems to be that many customers will actually create the opening, particularly if a company is small or young like many on the Inner City 100" (p. 74). The Rochester printing entrepreneur adds that "[p]eople buy form who they know and like to be around (p. 74).

Whether a company is trying to sell a product or the company's image, or whether an entrepreneur is trying to sell a product by selling him/herself, emotion clearly plays an important role in the marketing success.

Emotion marketing even takes a cue from religion by employing "evangelism" to promote products. Guy Kawasaki in his book, ***Rules for Revolutionaries: The Capitalist Manifesto for Creating and Marketing New Products and Services,*** defines marketing evangelism as "... the process of getting people not just to buy but to *believe* in your product, service, or company so much that they are compelled to make converts for you" (Kawasaki, [1999] 2000, p. 84).

Kawasaki argues:

> Evangelism starts with a great product or service. The features of a product or a service that make it great are the "facts." These facts are measured in units like megahertz, horsepower, megabytes, BTUs, feet, and inches (Kawasaki, [1999] 2000, pp. 85-86).

Kawasaki offers three ways to increase Success in marketing. The first is to increase the number of "facts" about the product, and the second is to decrease the price of the product. The third way is to add emotion to the facts. Kawasaki gives the following example of adding emotions to facts by the use of a Nike ad for women's aerobic shoes.

> The facts of aerobic shoes are its design, testing, and manufacturing, but Nike has made their aerobic shoes transcend facts until they stand for power, efficacy, and independence.
>
> A (bozo) company that hasn't added emotions to facts would say to women, "We have two pieces of cotton, leather, and rubber. You have $100.00. If you give us the $100.00, we'll give you the cotton, leather, and rubber (Kawasaki, [1999] 2000, p. 86).

Kawasaki further states that marketers can only evangelize about products they themselves believe in (Kawasaki, [1999] 2000, p. 84). And he offers that there is a difference between product evangelists and salespeople. He says that evangelists have the best interests of the other person at heart, where as salespeople have their own best interests at heart (Kawasaki, [1999] 2000, p. 85).

Emotion Marketing On-Line

The proliferation of the internet as a source for the collection and dissemination of information has allowed marketing and advertising firms to develop web-sites to explain their philosophies and expertise. There are even those firms that specifically focus on developing marketing strategies that target human emotions. The firm Gang and Gang, founded in 1996, employs what is called Resonance Technology to match human emotions with some aspect of a particular product (Gang & Gang, 2001, [On-Line]). Gang & Gang describes itself as "... a consulting and solutions firm focused on understanding human emotions and motivations, and connecting them with business results. The firm's Resonance Technology is described as a

> ... self-administered on-line or paper-and-pencil survey. Resonance uses open-ended topics to elicit spontaneous emotional reactions and rational explanations. Using... proprietary algorithms,... to quantify and interpret these responses to derive reliable, useful results that have been validated using Six Sigma standards.

The result of this survey technique arrives at what is called *Motivational Intelligence*, meaning, "... the discipline that continually applies the quantification and tracking of emotional and rational motivations to marketing and organizational decisions and business practices." The quantification of emotions has been thought to be impossible, but Gang & Gang insist that

Resonance "... is the only statistically valid process for understanding human emotions and motivations."

Valentine-Radford, a marketing firm in Kansas City, MO., has developed an on-line newsletter to explain marketing strategies, much of it addressing emotion marketing (Valentine-Radford. ***I Customer Observer***, [On-Line]). In the July 2001 issue of the newsletter, V R Senior Interactive Copywriter Tonia Wright wrote an article regarding emotion in advertising titled: "Emotion Marketing... Get to the Heart of the Matter" (Wright, in Valentine Radford, July 2001). Wright wrote that "[a]dvertising and marketing are about persuading minds. The object is to leave an indelible mark on the human mind to create demand for a product of service." She argues that "[t]his is especially crucial considering that fact that everyday a multitude of messages vie for a share of each individual's mind." She explains that emotion marketing is important because consumers actually remember only one-half of one percent of advertising information that they are exposed to. So to increase this percentage, Wright and others in marketing and advertising, see appeals to emotion as imperative.

Perry S. Marshall & Associates a marketing firm based in Berwyn, Illinois, also advances the use of emotion in advertising. In an essay on the subject, company president Perry S Marshall makes several statements that while directed at marketing, could be well used in the field of education. Echoing the opinions of others in marketing Marshall asserts that "[a]ll people make buying decisions based on emotion; therefore your marketing must use emotion to sell

what people want, not what you think they 'need' or want them to have" (Marshall, 2002, p. 2,[On-Line]). Then Marshall makes an important statement about emotion and its importance in all walks of life, he offers:

> Yes this is really, true. Engineers, accountants, executives, attorney, housewives, and ministers—PhD's, delivery truck drivers and farmers—and butchers, bakers, and candlestick makers—We all fundamentally make all of our decisions based on *emotion,* not logic. Logic supports our emotions and is used to justify our decisions after we have made them. Logic plays a part, but emotion is the core ingredient (Marshall, 2002, p. 1).

Furthermore, Marshall challenges:

> Show me a product that people have little emotion for, and I'll show you a product that's hard to sell or has very thin profit margins. Show me an ad or brochure that doesn't provoke any emotion, and I can guarantee you that it doesn't work (Marshall, 2002, p. 1).

But, Marshall's most profound statement comes in regard to the emotion of interest. He declares:

> The greatest sin in marketing is being *boring*. The world is a busy, cluttered place with advertisements and messages *everywhere*. If your message is boring, you don't stand a chance. If you can't think of anything exciting about your product, then get a different product. But don't be boring (Marshall, 2002, p. 1).

Marshall's last statement probably apples to education more than the others. Although educators cringe at the idea that they are trying to "sell" something, in reality that is exactly what they are doing. The product is subject

matter, and the payment for it is attendance, attention, attitude, and competent regurgitation of that subject matter by the student. In order to accomplish this classroom version of marketing, the teacher must not be boring. The polarization of the business community and education, especially academia, keeps all sides from tapping the research and data of the others-----sadly to the detriment of the students. But even if educators cannot get past the traditional repugnance of equating teaching with selling, there still is a great deal of educationally useful and adaptable research and theory to come out of advertising and marketing, if only it is tapped.

Popular Culture and the Emotional Imperative

Anthropologist Hortense Powdermaker has written that "[a]ll entertainment is education in some way, many times more effective than schools because of the appeal to the emotions rather than to the intellect" (Powdermaker, 1950). Sam Phillips, the founder of Sun Records and the discoverer of Elvis Presley has said that music is all about "f-e-e-l-i-n-g," and he believed it so strongly that he said it was his "John 3:16" (Phillips, 2001). Although Phillips was speaking about music, the same might be said of all aspects of popular culture. Certainly popular culture is defined widely, but our focus here will be on cinema, television, and music, especially the musical aspects of film.

The emotional components of popular culture in the visual sense are plainly apparent to anyone who views movies, television etc. Early in the beginning of the "film" industry, it was recognized that emotion was a primary element in its relevance. German psychologist Hugo Münsterberg asserted that "[t]o picture emotions must be the central aim of the photoplay" (Münsterberg, [1916], 1970, p. 48). In regard to the interplay of film and emotion, Münsterberg predicted that film would eventually become the domain of the psychologist (Münsterberg, 1915, December, p. 31). But his prediction did not materialize, instead, film has become the province of the entrepreneur (Anderson, 1996, p. 10).

To be sure, popular culture is a business and has a marketing component as well. But popular culture is focused on entertaining people primarily, and also informing them at times during the process. Advertising and popular culture truly share an intertwined kinship, that is both seek to entertain, inform, and motivate in some form.

Just as emotion marketing seeks to tie past experiences of people to the product or service being advertised, so too do the varied types of popular culture. Film, television, music, art, etc., all find popularity via the emotions they stir in an audience. The focus is to revive past experience within the mind of an individual in order to make that individual become emotionally attached to the movie, or song, or both.

Emotion in Film

Regarding the essence of film, director and producer Samuel Fuller explained that the movie is "a battleground... love, hate, violence, action, death---- in a word emotion" (Fuller quoted in Brussell, 1988, p. 379). Film legend Alfred Hitchcock described movies as "life with the dull parts cut out" (Hitchcock quoted in Brussell, 1988, p. 379).

Hitchcock's films are excellent examples of the art of arousing emotion in an audience. In his 1959 film ***North by Northwest***, Hitchcock in one scene shows his main character, played by Cary Grant, frantically trying to get away from diving airplane amidst a vast sea of flat farmland in which there is no place to hide (Hitchcock, 1959). The scene revives in us those feelings that are often present in dreams where we are fleeing something faster than we with no place to hide and very little chance of escape.

Hitchcock's 1958 film ***Vertigo*** likewise plays on audience emotions of fear (Hitchcock, 1958). The film's main character, played by James Stewart, is a lawyer-policeman afflicted with acrophobia in an extreme form. This fear of high places and falling is common among the population. The film's audience therefore develops an immediate affective affinity for the unfortunate character because of shared fear.

Hitchcock's 1960 film, ***Psycho***, uncovers in us another fear. It is the fear of being in a situation and place that we previously believed to be safe, but in

reality proves not to be (Hitchcock, 1960). The film depicts a vulnerable young woman, played by Janet Leigh, taking a room at seemingly normal motel only to find out in the fatal sense that the motel manager, played by Anthony Perkins, is a psychotic killer.

Hitchcock's 1963 film, ***The Birds***, presents the unpleasant scenario of otherwise harmless and ordinary birds allying themselves with each other and preying on humans, presumably in revenge for past atrocities and misdeeds inflicted on them (Hitchcock, 1963). Fear of animals is also commonplace in people. Some people fear snakes, others fear insects, others fear sharks, etc., etc. Hitchcock manipulates and arouses these various fears within the audience and then redirects them toward an unlikely source of fear—birds. Also being overwhelmed by sheer numbers of anything is a trigger for anxiety in many people.

Hitchcock's films strike at the core of our emotional being, and by making them emotionally charged, he ensured their commercial successes. Hitchcock once said that his mission in life was "to simply scare the hell out of people" (Hitchcock Trust [On-Line]). When asked what was the deepest logic of his films, he replied, "to put the audience through them" (Hitchcock Trust [On-Line]). Hitchcock realized that human emotions can be manipulated for more than just a particular moment. His films preyed on our apprehension and anxiety for what comes next, in light of what is happening now or has just happened in the film; to be sure, this aspect is the primary reason for the success of

Hitchcock's suspense dramas. In this regard Hitchcock remarked: "There is no terror in the bang, only in the anticipation of it" (Hitchcock Trust, [On-Line]).

Hitchcock's films targeted the emotion of fear, its variants, and antecedents. Certainly this is the most prominent feature of horror and suspense films and also of similar works of literature. But films elicit emotions other than fear. In reality, over the last century of filmmaking, probably every human emotion has been a film component.

The combination of visual and audio effects in film enhances greatly emotional elicitation among an audience. The score of a film is a powerful generation of emotional reaction. Not to be confused with the film's soundtrack which are the "songs" in a film, the score is the orchestral music composed for the film often specific for certain scenes (See Oppenheim, [On-Line]).

Film scores serve several functions. Of course they provide the necessary music for the film and also "... [define] ethnicity, location and period of the film, paralleling the actions of the film, commenting on the film and adding to scenes..." and providing emotional focus (Oppenheim, [On-Line]).

The eminent jazz, film score, and television theme composer Earle Hagen echoes the importance of emotion in film scores. He argues that the sole purpose of a musical score is the heightening of the emotional stakes in the film (Hagen, 1971, p. 173). Film critic Yair Oppenheim has written that a,

> ... strong function of film score is its ability to generate an emotional response from the viewer while he/she is watching a film.

> It assists in intensifying or relaxing the pace of the film. This is such a[n] influential function, that some critics believe it to be the only one. These critics believe that the emotional response that a score generates from a viewer is also able to provide the film with other musical functions as well, since all music, whatever its other functions are, inherently presents emotion, because that is its nature.... This is most effectively done through a variety of specific orchestrations. Strings emphasize romance and tragedy, brass instruments emphasize power and sorrow (when used in solos), and percussion heightens the suspense (Oppenheim, [On-Line]).

While the prevailing views of film scores are that they provide emotional elicitation in film presentation, there are composers who seem confused as to how film scores actually accomplish this; Elmer Bernstein is one notable example. Bernstein has composed scores for more than 200 movies and is critical of the musical scores written in recent years. He argues that they lack emotion and are primarily included to create an atmosphere, rather than to impart a grand musical theme (Bernstein quoted, 2001, March 23, ***Morning Edition*** [Radio Broadcast]).

Curiously, Bernstein fails to grasp a broad concept of emotion, just as philosophers and others have failed to do for centuries in their quest for a definition of the term. An "atmosphere" in the human application, not the climatic one, is an emotional perception, and a "grand musical theme" is an entity unto itself, at times competing with rather than enhancing the emotional impact of the film. One example of this competition regards Bernstein himself and his score for the 1960 movie ***The Magnificent Seven*** (Sturges, 1960). The film has

been identified with the musical theme that became popular on its own right, and even more so after it was later used as the theme in Marlboro cigarette commercials Bernstein created a grand musical theme with that song, but ironically, the popularity of the film was due in large part to the rest of Bernstein's score, the aspect that created an "atmosphere" of emotion that surrounded each character individually, and the cast of characters as a whole. Bernstein's created "atmosphere" in ***The Magnificent Seven*** was one that allowed the audience to acquire an affinity for the characters in the film.

In this regard, Murray Smith argues that music in film "... is particularly important in conveying information about the inner states of characters, ... but this function of the film score has received little systematic attention" (Smith, 1995, p. 151). Claudia Gorbman however, has analyzed the relationship between music and character in film. She writes:

> The classical film may deploy music to create or emphasize a particular character's subjectivity. Several devices cue the spectator: the association repeated and solidified during the course of the narrative, orchestration of music that was preciously sung by or to the character, and the marked addition of reverberation for suggesting strongly subjective experiences (Gorbman, 1987, p. 83).

The emotional aspect of film also creates an interest in the subject of the film whether that subject is an event, or a character, or a combination of the two. As an illustration we might witness the 1997 film ***Titanic*** (Cameron, 1997).. It spawned a new and renewed interest in the 1912 sinking of the passenger ship

RMS Titanic after it hit an iceberg in the North Atlantic. Books, television documentaries, and other Titanic related ventures gained exposure and profited from the interest generated by the film.

Much of the success of the film is credited to its musical score, one of the most emotionally charged ever written. The score was composed by James Horner and it earned for him an Academy Award. The director and producer of the film, James Cameron, had high praise for Horner's contribution to the film. He wrote:

> James Horner's score for Titanic is all I had hoped and prayed it would be and much more. It leaps fell from intimacy to grandeur, from joy to heart-wrenching sadness and across the full emotional spectrum of the film while maintaining a stylistic and thematic unity. The music spans time, making immediate the actions and feelings of people 85 years ago with the full emotional resonance without falling into either of the two dreaded traps: the sweeping conventional period picture score, or the inappropriately modern and anachronistic "counter program" score.
> James has walked the tightrope by using a synthesizer, vocals and full orchestra to create a timeless sound which tell us that these people were not so very different from us. Their hopes, their fears, their passions are like ours. In the film I have tried to accentuate the universalities of human behavior, rather than focus on the quaint differences between this other time and our own. James has done the same thing, bridging the gap of time and making these people seem so alive, so vibrant, so real that the dreaded event, when it finally comes, is terrifying in its authenticity (Cameron, 1997, Available [On-Line]).

The historic event of the sinking of the Titanic is coupled with the fictitious love story between two of the passengers—Jack and Rose. We should

revisit Yair Oppenheim's above quote regarding the instrumental composition of film scores and his description of the emotional relevance of specific musical instruments. Julie Olson's in-depth and track by track analysis of Titanic's score illustrates Oppenheim's statement. In describing the score as it relates to the sinking of the ship and the romance between Jack and Rose that suffers as a result, Olson writes:

> ...The sudden splashes of color from the percussion add to the urgency felt by the ostinato.... The strings take off to accent the slow-moving brass into a frenzy of rhythmic complexity.... There are small pieces of the love theme quoted throughout this. The piece dies off a bit to allow you to feel the coldness of the water, but soon rushes back at you with percussion bursts. The low strings continue the development of the opening motif, while the upper strings play the love theme over grossly diminished chords. We, as an audience, hear the love theme, and feel a ray of hope descend onus, but our hopes are dismayed at the dissonant sound of the chords.... This is a great effect because it throws the audience into a panic when the chord they are expecting to hear is not played. The ostinato is repeated pattern of rising note, which is one of a composer's finest tools to create tension.... Percussion and frenzied strings lead to the panic heard in the muted trumpets and the following piano progression (Olson, [On-Line]).

Olson then completes her analysis of Titanic's last moments with these poignant lines:

> ...A lonely horn plays one final plea for peace... the synth cries for help. This is quickly replaced ("this is it") by the snare and trumpet playing a motif together. The low brass enters next, followed by the strings. The synth adds a feeling of doom with inserted winds and cries. The horns begin to play chromatic quarters, then triplets, then eighths, then triplet eighths, then sixteenths.... The trumpet is

> increased tin volume. There is a ton going on during the last minute and a half of this track. There is a suspended cymbal wash into the low bass heard as the ship is thrown into the cold, dark water of the Atlantic (Olson, [On-Line]).

After reading Olson's analysis and then viewing ***Titanic*** again, one can appreciate the true insight that film directors and film music composers have regarding emotion and its necessity in grabbing an audience.

The film ***Titanic*** is reality-based fiction, that is, a real historical event surrounded by various fictitious events and characters. Yet the sinking of the Titanic was a real event and real people were tragically overcome by circumstances beyond their control. The last two decades of the twentieth century brought renewed interest in the story of the Titanic. The 1997 film certainly added to this interest. But twelve years prior to the film's release, in September, 1985, history came to life with the discovery and photographing of the original Titanic wreck under 12,000 feet of water in the North Atlantic Ocean. Led by Dr. Robert Ballard from the Woods Hole Deep Submergence Lab in Massachusetts, a group of scientists found the wreck that had been just another historical event to most people, albeit a tragic one (See Ballard, 1987) The discovery of the wreck, the photographs, and the artifacts later retrieved, were the originators of the Titanic frenzy that James Cameron's 1997 film sent to even greater heights.

The great interest in the historical events that surrounded the Titanic's tragic story are clearly emotion-based. Capitalizing on this emotion the recovered Titanic artifacts have been displayed in "traveling" exhibits across the nation. ***Titanic: The Artifact Exhibit*** (RMS Titanic, Inc., et. al., 2000-2003), is an example of the combination alluded to earlier of marketing, popular culture and the emotional aspect of both. Of course to some people, a tour of a museum or historic exhibit can be an emotional experience in itself, even in the usually quiet and subdued atmosphere that is typical of most museums. But ***Titanic: The Artifact Exhibit,*** is a museum with an emotionally charged atmosphere. The exhibit targets the emotions of visitors who are not necessarily knowledgeable of Titanic's story.[2]

From the very beginning of the exhibit/tour, the original Titanic artifacts are displayed in recreated settings of the Titanic. Living quarters and mechanical aspects of the ship have been constructed as close to as authentic as possible. And, as in the film Titanic, music and other sounds are piped in to fit the particular setting of the recreated ship.

All of the exhibit is designed to tug at the emotions of the visitor. But there are two particular places in the exhibit where exhibit designers have appealed to sensory inputs in addition to visual and sound.

As one walks into the recreated engine boiler room, heat lamps hidden in the ceiling raise the temperature abruptly. Of course the room is loud with incessant pounding of the giant engines coming from a speaker system in a large

rather inconspicuous wooden crate in the corner of the room. It is the heat, the pounding of the engines, and the read glow of the coal fires that cause a visitor to reflect on what the engine room must have been like for the men who toiled there deep in the bowels of the ship.

While the visitor may know very little or nothing about early coal-fired boiler room and its conditions, that same visitor has, during his/her lifetime, experienced the unpleasantness of extreme heat, loud monotonous noise, and uncomfortable conditions. Even though these prior experiences had occurred in other contexts, the visitor applies and combines these emotion-laden and otherwise unrelated experiences to the unseen but imagined workers in the engine room of the Titanic. This is the process of vicarious emotion, and the exhibit designers exploit it fully.

Another emotion-laden venue in the exhibit is the one that recreated the actual atmosphere and conditions at the time the ship sank. The recreated room is dark and cooler, with one large wall covered apparently in black opaque cloth with thousands of pin holes in it and back-lit to produce the effect of the starlit night of April 14, 1912. In front of the be-speckled black cloth is a recreated iceberg produced by refrigerated coils allowed to freeze over to produce bright white ice reminiscent of an iceberg. The visitor is allowed to touch this fake iceberg, and in doing so, an immediate affinity is struck with the unfortunate Titanic victims. Like the engine room, this use of temperature starts the mental process of vicarious emotion.

To be sure, the sinking of the Titanic in 1912, then and now evokes cascades of emotions. It has been discussed at length here because it is a prime example of the many ways in which the emotion of an incident or event can transcend time and be reconstructed by various means for those generations living after the event. The emotional appeal of the Titanic tragedy spans popular culture, marketing, science, and history.

Several other films of the 1990s are also worthy of mentioning regarding emotion targeting. One such example is the 1995 film ***Braveheart*** (Gibson, 1995). The film portrayed the life of thirteenth century Scottish hero and revolutionary William Wallace, recreated by Mel Gibson. It is a biography loosely based on historic events in Scotland and the Scot's struggle to throw-off the unjust and tyrannical rule of the English king Longshanks.

As with ***Titanic***, one key factor for emotional stimulation in ***Braveheart*** is the musical score. It is powerful and reminiscent of the score for Titanic, and well it should be, the scores for both films were written by the same person----- James Horner. The score illuminates the human tragedy in the film, most notably William Wallace's loss of his father, wife, and then himself to Longshanks. It is the human tragedy and Wallace's efforts to overcome it that makes the film so emotionally stirring.

The 2000 film ***The Patriot*** is another example of cinematic emotion. It is the story of Benjamin Martin, played by Mel Gibson again, a colonial American who becomes involved reluctantly in the American

Revolution (Emmerich, 2000). He loses two young sons and his home to the "tyrannical" British and he fights to avenge his losses.

Again, the film utilizes the emotional theme of grief and revenge, just as was done in ***Braveheart.*** In retrospect, ***The Patriot*** is a remake of the storyline from the 1965 film ***Shenandoah*** (McLaglen, 1965). In that film a Virginia farmer, played by James Stewart, is reluctantly drawn into the American Civil War as a result of one of his son being captured by Union troops. In his quest to bring his son back, he loses several more members of his family to the war.

It would be hard to argue that there is a greater emotional impact for someone than that of losing a loved one. A film audience viewing such tragic event on screen has an emotional attachment due to vicarious emotions, that is an affinity for the unfortunate character on the screen.

Of a similar emotional vein is the 2000 movie ***Gladiator*** starring Russell Crowe (Scott, 2000). Crowe plays the Roman general Maximus, a fictitious character, who interacts with real historical figures in the persons of Roman emperor Marcus Aurelius, and the emperor's evil son Commodus. After Marcus Aurelius' death, Maximus' popularity leads a jealous Commodus to order the general and his family killed. Maximus loses his family but himself escapes to work his way back to Rome to avenge his family's murder in the guise of an unknown gladiator named "the Spaniard."

Like ***Brave heart*** and ***The Patriot***, ***Gladiator*** is the story of an honorable man done wrongly by evil and more powerful adversaries. The theme

is the ages old story of power and evil subjugating the less powerful with the less powerful getting their revenge in the end. While the movie viewer is not able to identify with the characters in exact emotional terms, most of the audience has had tragedy in their lives and also have been the unfortunate losers in the power plays of everyday life. The on-screen tragedy intensifies, the vaguely related emotional experiences of the viewer, add the sorrowful triumphant music to the mix, then a new emotional experience is constructed in the mind of the viewer.

Even documentary film makers, staying as close to historical fact as possible, can also ride emotional to success. Documentarians of the traditional school however, generally do not desire have their projects viewed as appealing to emotions. In the decade of the 1990s, the documentary took a cue from the Hollywood film factories and made direct appeals to the emotions of the public. One excellent example of this change in documentary style is the eleven part public television miniseries, ***The Civil War*** (Burns, 1990).

The Civil War, produced and directed by Ken Burns, and co-produced by Ric Burns, was the most successful public television series ever produced in America. As with the ways the large Hollywood theatrical productions appealed to the emotions of the audience, so did Burns' documentary about the American Civil War. Burns combined present-day reading of period correspondence with the stark and poignant photographs taken during the war, and all the while wrapping the scenes in that same type of woeful music that was so forceful in the ***Titanic***.

One such segment involves the reading of a letter written by a soldier, Sullivan Ballou, to his wife Sarah. It relays the emotions that the young soldier is experiencing as he faces the very real prospect of death at the Battle of Bull Run. The background music is ***Ashokan Farewell***, and it makes the segment even more heart rending. At the end of the segment it is revealed that Ballou did indeed die at Bull Run. Ballou's letter was a fearful, but warm prophecy and last message to his beloved wife.

Burn's documentary of the Civil War, and also others he has created, develop an atmosphere of emotion, not only for one character as with the theatrical films discussed, but also for groups and classes of people. Burns has been criticized for popularizing history through his documentaries, a strange criticism form those who also complain about the general lack of historical knowledge and interest among the public.

But Burns' Civil War documentary, as well as his others, renewed interest in the subjects they depicted. His documentary ***The Civil War*** was the most widely viewed PBS miniseries of all time. Interest among the general public about all aspects of the Civil War were also heightened due in large part to Burns' documentary.

Renewed interest in the American Revolution was brought on by the film ***The Patriot***, like wise and even more so did the films ***Braveheart*** and ***Gladiator*** rekindle public awareness of history. Of course ***Titanic*** is perhaps the best example of emotion and history combining to grasp public attention.

The Daily Immersion in Emotions

To be sure, life outside of school is one vast emotional kaleidoscope. Every news story, especially on television, strikes an emotional chord in some manner with everyone who watches it. The quest for television news ratings and advertising dollars necessarily makes every newscast an emotional contest between stations and networks. Sensationalizing events has become an art and a mandate in journalistic circles. Like the gurus in marketing and advertising, and the producers of film and television, journalists know what hooks the public---it is emotion.

The American political system could be considered a *game* of emotion. More correctly, it is perhaps not the system that is the game, but rather the process that selects the people who operate the system---that is, election campaigns.

Twenty-first century election campaigns are masterpieces of marketing, media manipulation, and popular culture all rolled into one process. Political parties and interest groups are trying to "sell" something that something being a candidate. Emotion campaigning has proved successful in this regard.

One well known example of the politicization of emotion came during the 1964 presidential race between Barry Goldwater and Lyndon Johnson. A very emotional political advertisement by the Johnson campaign depicted a child picking flower petals amidst the threat of nuclear disaster and war (Marcus,

Neuman, & MacKuen, 2000, pp. 3-4). The ad captured the public view of Goldwater as being a trigger-happy conservative war-monger. This particular campaign ad is widely recognized as the most famous campaign ad in modern American political history (Marcus, Neuman, & MacKuen, 2000, pp. 3-4).

In spite of the overwhelming observational evidence of emotional campaigning during every election, there are those who deny the impact of emotion on the elections, and otherwise claim that the role of emotion is disruptive and not compatible with the political process. As we saw with the historical efforts to define emotions, the view of emotions as disruptive is widespread.

Marcus, Neuman, and MacKuen, in their book ***Affective Intelligence and Political Judgment***, address this disdain for emotion in the political process. They offer that:

> Western tradition tends to derogate the role of affect in the public sphere. Being emotional about politics is generally associated with psychological distraction, distortion, extremity, and unreasonableness. Thus, the conventional view is that our capacity for and willingness to engage in reasoned is too often overwhelmed by emotion to the detriment of sound political judgment. As a result, theories of democratic practice proclaim the importance of protecting against the dangers of human passion and political faction by building up institutions, rules, and procedures—all intended to protect us from our emotional selves (Marcus, Neuman, & MacKeun, 2000, p. 2).

The authors then make the statement that by "[d]rawing on extensive sources in neuroscience, physiology, and experimental psychology, our research

has led us to conceptualize affect and reason not as oppositional but a complementary, as two functional mental faculties in a delicate, interactive, highly functional dynamic balance" (Marcus, Neuman, & MacKuen, 2000, p. 2).

The view that politics is an exercise in emotion over rationality, if there is such a thing as rationality, has been often expressed throughout the history of democratic governments. Frank M. Colby said that politics is a device for "[t]urning a complex problem of the head into a simple moral question of the heart" (Colby in Brussell, p. 442). In a cynical statement of politics as anything but rational, George Orwell stated that it is "[a] mass of lies, evasions, folly, hatred, and schizophrenia" (Orwell in Brussell, p. 443). And Frank Zappa called politics "[a] popularity contest... mass merchandising" (Zappa in Brussell, p. 444). It is clear that describing politics is just as emotional as the mechanics of the process itself may be.

To be sure, the emotion of politics is so ingrained in American culture that to a large degree it has become invisible in favor of a visible mythology crafted over the years to make politics appear as a rational process. The patriotic fervor that surrounds our democratic system is a product of American exceptionalist thought; therefore, the system *must* be rational in order to support this exceptionalism. Certainly we could not admit to ourselves that our political process is a competition between people and ideas driven by emotion.

Likewise, organized religion throughout the world employs emotion to its fullest potential. "Faith" is marketed and merchandised to a large degree

through many emotional means. Fear, guilt, shame, loyalty, duty ect., ect., Are all cleverly and professionally incorporated into religious messages the purpose of which is to promote or explain a particular doctrine. The use of emotion in any sphere is intended to manipulate thought or action. But the manipulation of thought is not necessarily a negative act. All thought, as we will see below, is the consequence of some type of manipulation whether overt or covert, and is a byproduct of the affective tagging of sensory data.

CHAPTER 5

Outside of School Emotional Life: Implications for Education

John Dewey's admonition that school should reflect life outside of school is far more significant than possibly even he realized. The idea that *most* children enter the classroom ready to learn and partake of education for its own sake is an idea that has been conceived in, and birthed from, the womb of naiveté.

The vast array of influences that belabor children are almost too numerous and varied to chronicle, and we have only offered a few instances. We have seen that in marketing and popular culture especially, children, and adults for that matter, have emotional bull's-eyes on their psyches. The whole world, it seems, communicates and is communicated to us through the *only* pathway into the mind, that pathway is emotion.

Intellectual historian and education philosopher Jacques Barzun has weighed-in on the dilemmas arising from the incongruities between the school environment and the out of school environment. He writes that the schools "... work with spoiled material: teachers marred by the ugly world and children already stamped with the defects that their parents condone by habit or foster on principle (Barzun, [1959, 1961] 2000, pp. 91-92).

As we discussed earlier, constructivists recognize the importance of emotion in education. But even constructivists do not seem to embrace the

research and pertinent methodology that has arisen out of marketing, and entertainment worlds especially.

We might ask this question: what is it that "Madison Avenue" and "Hollywood" do regarding the appeal to emotions that could be supremely valuable to education? The most important device that they employ is the instantaneous stimulation of autobiography through the use of biography. Ralph Waldo Emerson once wrote: "There is properly no history; only biography" (Emerson cited in Bartlett, 1968, p. 605b). By studying the ways that corporate marketing, the entertainment industry, politics, and religion, appeal to the emotions, it is easy to recognize the profoundness of Emerson's quote. For instance, in regard to the cinema, the emotional affinity by the viewer for the two young lovers in the film ***Titanic*** is autobiography vicariously applied, but stimulated by the biographical portrayal of the two characters.

Any appeal to emotion passes through the domain of biography and autobiography within each individual mind. One might argue with Emerson that "natural" history does not involve biography. By natural history we are referring primarily to the past before the evolution or creation of humanity. Against this argument we could propose that even natural history without humans is biographical. To be sure, natural history is biographical in the autobiographical sense. The benchmark against which we measure everything is "self"-----that is ourselves---- our autobiographical capital.

For example, there were no humans alive when the dinosaurs roamed the earth. So how can we remotely understand anything about them? We begin understanding the life of dinosaurs by constructing mental images based on our own past experiences. We gain understanding of a dinosaur's size by comparison to animals alive today, or buildings, or other things that we are familiar with. We understand the climate at the time of the dinosaurs by comparing it to what we have experienced. We cannot truly understand the heat and humidity of primordial earth because we have not experienced that type of climate. The closest we can come to understanding such a climate is to bring up in our minds the hottest and most humid day that we have experienced ourselves. One of our fellow humans who lives in a rainforest on the equator will no doubt have a different conception of the ancient climate than we do having lived our lives mid-way up in the northern hemisphere. Likewise will a person who has lived his/her life in Siberia have a much more accurate conception of the "ice age" than does our friend who lives on the equator.

In their article, "The Construction of Autobiographical Memories in the Self-Memory System," Conway and Pleydell-Pearce propose that:

> ...autobiographical memories are transitory dynamic mental constructions generated from an underlying knowledge base. This knowledge base, or regions of it, is minutely sensitive to clues, and patterns of activation constantly arise and dissipate over the indexes of autobiographical memory knowledge structures (Conway & Pleydell-Pearce, 2000, p.261).

And in a larger sense, the authors contend that: "Autobiographical memory is of fundamental significance for the self, for emotions, and for the experience of personhood, that is, for the experience of enduring as an individual, in a culture, over time" (Conway & Pleydell-Pearce, 2000, p. 261).

We might refer back to Terry Lyn Anderson's article: "They're Trying to Tell Me Something:..." (p. 38, this paper), and the classroom lesson about Charles Lindberg's 1927 trans-Atlantic flight, and the subsequent student interest in it. Student interest was achieved through a constructed autobiographical familiarity with the biographical story of Lindberg's flight.

It is irrelevant as to the nature of the subject matter to be taught and learned, whether it be mathematics, any of the sciences, or any of the humanities, the learning about those subjects comes about as a result of autobiographical reconstructions within each mind. At this point we must propose that autobiographical memory is the key to all learning, and furthermore that autobiographical memory is solely a creation of the emotional "tagging" process within the brain. Of course just proposing this does not make it so; we must deconstruct the emotional human mind, and with it all of the theories of mind and emotion in order to make this point hold any semblance of credibility.

PART 2

CHAPTER 6

The Subjective Impulse and the Emotional Mind

Many diverse groups view emotion as a key component in learning, behavior, and the stimulation of interest within people. Constructivist educators believe that the emotional aspect of life is indispensable in the learning process. Business and marketing executives have come to realize that "[c]onsumers, because they are human beings, have needs that go beyond the purely rational, and they purchase products in an effort to satisfy these other needs as well" (Agres, 1990, p.17). And too, popular culture in all of its genres is fundamentally emotional in its composition.

But these seem to be exercises in *superficialism* unless the true nature of emotion and its relationship to mind can be ascertained. For centuries, learned persons have waded into this very question and have failed to arrive at any comprehensive explanation of emotion and/or mind. Why is this so, and why have so many brilliant scholars been road-blocked or sidetracked in their quests for explanations?

The Subjective State of Mind

It has been said that the mind cannot know itself (For more on this see Collingwood, 1946, pp. 208-209). Perhaps the correct statement should be: *the mind does not want to know itself.* After all, the full-fledged exposure of human mentality could prove unpleasant and even distressing. It would answer finally the centuries-old Cartesian dilemma of whether the mind is *material* or *spiritual* in nature.

But standing in the way of this "knowing," is the peculiar human trait of subjectivity, or in broader terms, *human exceptionalism.* It is the reason that the mind does not want to know itself and it has hampered the march of knowledge for millennia. Its specter pervades our very being even today. The prominent neuroscientist Michael S. Gazzaniga makes a profound statement about this exceptionalism in regard to the human mind. In his book, ***The Mind's Past,*** Gazzaniga writes: "We human beings have a centric view of the world. We think our personal selves are directing the show most of the time" (Gazzaniga, 1998, p.xiii).

As an historical example of this exceptionalist mind-set, we might offer the Dark Ages with the accompanying and manifest view of the time that required an adherence to the "earth-centered universe" dogma. The prevailing unwisdom during that period not only held that the earth was the center of the Universe, but that the people that inhabited the planet must be the center of all life and were thus exceptional, and------ "chosen." This human exceptionalism

had the effect of stifling and subverting knowledge that otherwise might overturn earth-centered and human-centered theological manifestos. Nicolaus Copernicus (1473-1543), with his *heliographic planetary theory*, began to break the shackles of intellectual incarceration by proposing that the sun rather than the earth was the center of the Universe (Copernicus, [1543], 1995).

However, archaic exceptionalist thought was not unique to the Dark Ages; it exists in our time----- at the dawn of the twenty-first century. Even in academia today, subtle versions of earth-centered and human-centered thought still linger. For instance, the late astrophysicist Carl Sagan was denied tenure at Harvard and MIT due in large part to his devotion to "exobiology," the search for extraterrestrial life (Poundstone, 1999, pp. 106,107,171-173). Exobiology threatens human exceptionalism, just as Copernican theories threatened the human exceptionalism that was grounded in the old earth-centered theologic of the Dark Ages. Carl Sagan's popularization of the subject hampered his career even further, at least in the early years.

Old beliefs die hard, especially when they are constantly reinforced by the subjective mind or the collective-subjective mind. Just by browsing the Internet one can find a staggering array of types of exceptionalism. They run the gamut from national, to cultural, to ideological, and even biological exceptionalism. Just to name a few there exists: *suburban exceptionalism, technological exceptionalism, Third World exceptionalism, AIDS exceptionalism, HIV exceptionalism, scientific exceptionalism, American exceptionalism, Arab*

exceptionalism, Jewish exceptionalism, European exceptionalism, German exceptionalism, French exceptionalism, and on and on. Each type, in its own way, in some measure distorts reality in the subjective sense, and they all fall under the broad category of human exceptionalism. To be sure, the matter of human exceptionalism is indispensable to this paper, primarily because it has profoundly shaped, directed, and stagnated the study of mind and emotion as it has been handed down to us.

A Paradigm Escape

In order to understand the nature of emotions, and why they are so important in the learning process, we must jump "outside the box" of entrenched and archaic ideas that describe and define them. Rather than a Kuhnian "paradigm shift," we must execute a *paradigm escape* if we wish to make sense out of human emotionality (Regarding the term "paradigm shift" see Kuhn, 1962). We must deny the exceptionalist views that emotions are disrupters of that uniquely human and apparently desirable trait called *rationality*. We must question whether the term *emotion* itself has been afforded a connotation over the centuries that for all practical purposes makes it indefinable. And, we must question other terms related to "mind," that, like the term emotion, have by linguistic drift become almost meaningless.

There is no one paradigm from which to escape regarding emotion, mind, and even education theory. But the one paradigm that encompasses all of

these, and that is fluid enough to adapt to each and every one is human exceptionalism. It is that from which we need to escape, lest the theory in this paper will become contaminated by it, as so many have been in the past.

Certainly we all desire to see ourselves, and to have others see us as rational people. In American culture at least, emotions are still viewed as the great disrupters. In one prominent textbook on educational psychology, emotion is equated with behavior disorders and is described in interchangeable terms such as *emotional disability, emotional disturbance, and emotional handicap* (Eggen & Kauchak, [1992], 1999, p. 159). Is it any wonder that to be considered emotional, or as being an emotional person is avoided in our society? Such labels are in reality badges of denigration.

Unfortunately, the school view of emotions as disrupters is perpetuated daily with little or no challenge to it, except by the constructivists. Also perpetuated is the view that emotions are behavioral entities. In a "Parents Guide" to its "Nick Jr." book club promotion, ***Scholastic Inc.*** addresses children's emotions by relating that "[d]uring their formative years, children begin to learn how to deal with the wide range of human emotions. It is important for children to feel comfortable talking about emotions, such as jealousy, anger, sadness, fear, as well as happiness and excitement" (***Scholastic Inc.***, 2002). Certainly no one writes of "dealing" with rationality, but emotions it seems, need to be dealt with because they are oppositional in the exceptionalist view to rational thought.

There are "common sense" views of the human condition that are not mired in exceptionalist thought. Rationality in "folk psychology" is not the panacea that it is for some disciplines of mind studies. Emotionality is a component of rationality to the "folk psychologist." To their credit, constructivists in the field of education generally view the classroom in common sense terms, and view emotions as necessary components in learning not to be squashed by the quest for "uncontaminated" rationality.

It might be wise to consider the ways that humans have dealt with Nature in the physical sense over the millennia, and apply those same lines of thinking to the way we should deal with understanding the mind in the present.

For instance, in our distant past, we humans have accepted natural laws and then adapted our lives to those laws. Of course the exceptionalists have had difficulty at times in accepting this position since they have periodically been infected with the view that WE are the law, or at least the sons and daughters of it.

But generally common sense has prevailed and humanity has adapted to the natural world and prospered. When we humans saw the need for a pump, we developed one that had to conform to certain natural laws just as the human heart did in its evolution or creation. When we humans developed the lifting crane, we developed one that had to conform to the same natural laws as did the human arm and leg. When we humans developed the audio microphone, we developed one that conformed to the same laws as the human ear. When we developed the

audio speaker, we developed one that used the same principles as the human vocal chords. When we humans developed the optical lens and camera, we produced ones that employed the same natural principles as did the human eye.

Biology and physics must both conform to natural laws, but in the end they conform by using the same principles. So, can we explain the workings of the biological brain in physical or material terms? The exceptionalists say no.

This is the essence of the mind and body problem that has perplexed scholars and non-scholars alike for centuries. But this perplexion is entirely self-inflicted or self-generated because it is a problem brought on by subjectivity in exceptionalist terms.

This brings us to the sensitive question of whether the human brain is a computer or very much like one. If we follow the above argument that natural development and human inspired development will always follow and obey the same laws, then we might take the step of proposing that in our quest to develop the computer, we are also discovering how the brain creates mind.

Of course there is a great deal of resistance to the mind-is-computer metaphor. One of the most vocal antagonists of the comparison is John Searle, a professor of philosophy at the University of California---Berkeley. He has argued that "[b]rains cause minds... and the mental processes that we consider to constitute a mind are caused, entirely caused, by processes going on inside the brain" (Searle, [1984], 1997, p. 39). Furthermore, Searle submits that "[m]inds have mental contents; specifically, they have semantic contents.... No computer

program by itself is sufficient to give system a mind" (Searle, [1984], 1997, p. 39). And finally he claims that "[for] any artefact that we might build which had mental states equivalent to human mental states, the implementations of a computer program would not by itself be sufficient. Rather the artefact would have to have powers equivalent to the powers of the human brain" (Searle, [1984], 1997, p. 41).

Searle is a brilliant, accomplished, and respected scholar, but he is not immune to the exceptionalist tendencies that require the specialness of mind over matter, or mind over human invention. It seems curious that the ability to create a computer that might just help in understanding the human mind, is not viewed as exceptional in itself.

There has arisen a new school of thought that exceptionalists have developed to preserve the Cartesian mind and body dichotomy. The people within this school are called *mysterians*, and it is their belief that we will never understand the mysteries of mind and should not waste valuable intellectual capital seeking to understand it. They are the modern proponents of the "mind cannot know itself" idea.

Philosopher Colin McGinn, the founder and most ardent proponent of the mysterian position has written that:

> It is important to demarcate what we can and cannot achieve in the study of mind, so that we do not waste time in futile pursuits and do not try to extend methods that work in one area into areas in which they do not work (McGinn, 1999, p. 69).

McGinn is also adamant against the proposal that the mind may indeed be the material actions within the brain rather than some mysterious process that we cannot discover. In attacking materialism McGinn asserts that:

> Materialism says there is nothing more to the mind than the brain as currently conceived. The mind is made of meat. It *is* meat, neither more nor less. A conscious state such as seeing something red is just a bunch of neurons, brain cells, doing their physical thing. Living meat, yes, complicated meat, but meat none the less (McGinn, 1999, p. 19).

In an almost hysterical offering, McGinn then declares that "[w]e might as well call materialism 'meatism.' It is the view that consciousness is just a nice name for what you can buy in a butcher's shop: a chunk of bodily tissue" (McGinn, 1999, p. 18). In what he calls is a simple and straight forward argument against materialism McGinn writes:

> Suppose I know everything about your brain of a neural kind: I know its anatomy, its chemical ingredients, the pattern of electrical activity in its various segments. I even know the position of every atom and its subatomic structure. I know everything that the materialist says that your mind is. Do I thereby know everything about your mind? It certainly seems not. On the contrary, I know nothing about your mind. I know nothing about which conscious states you are in—whether you are morose or manic, for example—and what these states feel like to you. So knowledge of your brain does not give me knowledge of your mind. How then can the two be said to be identical (McGinn, 1999, p. 20)?

McGinn's arguments ring of blatant exceptionalism, just as the earth-centered ones did in the Dark Ages.

The mind and body dualists have become quite creative in their efforts to protect Cartesia from attack, especially from neuroscientists. Neuroscience has sought to "reduce" emotions to something explainable, and also find their elementary components. This threatens the "philosophy of mind" as it has existed for centuries. In an effort to keep mind a mystery for the long term, another school of thought that is a companion of the mysterian position has emerged. This school of thought is called *panpsychism.* This holds "... that traces of the mental are to be found in all matter" (McGinn, 1982, p. 31). Panpsychism suggests that all material things, even subatomic particles, have mental properties in addition to physical ones (McGinn, 1982, p. 31).

With this doctrine, Cartesians have extended the life of the idea that the mind is a mystery, possibly for many generations. It could take a long time for science to determine whether there is mentality in all matter.

But in all of this Cartesian protectionism regarding the prospect of mind as computer, or mind as material, one key component is missing from the debate--that component is emotion and the neurology that creates it.

Emotion:
The Missing link in the Explanation of Mind.

McGinn is correct in his description that "[m]aterialism says there is nothing more to the mind than the brain as currently conceived" (McGinn, 1999, p. 18; also see Dennett, 1991). One prominent argument against materialism states that the material mind is not compatible with the emotional mind. Paul Feyerabend in his book ***Realism, Rationalism, and Scientific Method*** gives an explanation of how materialism and emotions are incompatible. He writes that:

> ... human beings, apart from being material, have *experiences*; they *think*; they *feel* pain; etc. These processes cannot be analyzed in a materialistic fashion. Hence, a materialistic psychology is bound to fail. The most decisive part of this argument consists in the assertion that experiences, thoughts and so on, are not material processes (Feyerabend, 1981, pp. 161-162).

In essence, Feyerabend, like others before and after him, has sought to separate emotion from the physicality of mind. By doing so, emotion is presented as the "fly in the ointment" that precludes embracing a materialistic theory of mind.

But emotions, or more correctly their composing units, are what proves the theory of a material mind. We must now jump "outside the box" of the "philosophy of mind" and consider recent research done on emotions by the discipline of neuroscience.

During the last decade of the twentieth century, neuroscientists have been steadily gaining an understanding of emotions in the neurological sense. Their research has been reinforcing the "folk psychology" employed by marketers, popular culturists, politicians, and many in education to take full advantage of the human emotional component.

Joseph LeDoux in his book, ***The Emotional Brain: The Mysterious Underpinnings of Emotional Life***, addresses what emotions are, and what they are not. He also deals somewhat with the "language game" regarding descriptions of mind functions. LeDoux argues that:

> 'Emotion' is only a label, a convenient way of talking about aspects of the brain and its mind. Psychology textbooks often carve the mind up into functional pieces, such as perception, memory and emotion. These are useful for organizing information into general areas of research but do not refer to real functions (LeDoux, 1996, p. 16).

LeDoux's book chronicles his research into emotion and its relationship to particular parts of the brain. He relays the view that the *hippocampus* area of the brain is one of the primary centers for memory. He offers that the hippocampus has "... come to be thought of as a key link in one of the most important cognitive systems of the brain, the temporal lobe memory system"(LeDoux, 1996, p. 200).

LeDoux's research has also led him to the realization that the *amygdala* area of the brain is a primary area for the generation of emotion. He offers that

the interactions between the amygdala and the *basal ganglia* area of the brain may be important in instrumental emotional behavior (LeDoux, 1996, p. 177).

In terms of education, LeDoux's work may eventually prove very useful because it is beginning to show the true relationship of emotion to memory---which in reality is learning.

Another neuroscientist making inroads toward the true meaning and understanding of emotion is Antonio R. Damasio. In the Introduction to his book ***Descartes' Error: Emotion, Reason, and the Human Brain,*** Damasio gives a straight-forward purpose for writing it. He submits:

> I began writing this book to propose that reason may not be as pure as most of us think it is or wish it were, that emotions and feelings may not be intruders in the bastion of reason at all: they may be enmeshed in its networks, for worse *and* for better. The strategies of human reason probably did not develop, in either evolution or any single individual, without the guiding force of the mechanisms of biological regulation, of which emotion and feeling are notable expressions (Damasio, 1994, p. xii).

Damasio also proposes what he labels the *somatic marker hypothesis.* Somatic markers are players in an internal preference system within the brain composed mostly of innate regulatory dispositions, posed to ensure survival of the organism (Damasio, 1994, p. 179).

The somatic marker forces attention on the negative outcome to which a given action by the organism might lead, and "... functions as an automated alarm

signal which says: Beware of danger ahead if you choose the option which leads to this outcome" (Damasio 1994, p. 173).

Somatic markers are acquired by experience under the direction of the internal preference system and influenced by an external set of circumstance that include the entities and events with which the organism must interact, and also the social conventions and ethical rules (Damasio 1994, pg. 179). Damasio's somatic marker hypothesis is akin to the emotional tags we briefly mentioned earlier, and that deserves elaboration.

The works of Le Doux and Damasio carry the seeds of revolution against Cartesianism. Neuroscience is steadily and scientifically merging mind and body. It seems quite possible, and likely, that materialism will eventually be proven by the discipline of neuroscience, a discipline not yet infiltrated by human exceptionalism.

At this point we shall offer materialistic theory that is compatible with emotion. Let us suppose that all sensory data that enters the brain is marked with two types of "tags", one of *reference*, and one of *significance*. The significance tag possibly applied in the amygdala gives meaning to the tag of reference. Research by Le Doux has shown how this can be possible. He submits that:

> When a certain region of the brain is damaged, animals or humans lose the capacity to appraise the emotional significance of certain stimuli without any loss in the capacity to perceive the same stimuli as objects. The perceptual representation of an object and the evaluation of the significance of an object are separately processed by the brain (Le Doux, 1996, p. 69).

Le Doux has not taken the final step of saying that all stimuli or data receives two types of "tagging," but in our proposal here, we will say that they do. Of course this is purely theoretical, because there is no concrete data to support it as yet.

The stimuli (or data) is then stored via this double tagging system. This dual system of coding is the fundamental building block and the foundation of all mental processes.

The amount of tagged data that enters the brain is tremendous, and the older a person gets or the more varied experiences he/she has determines that specific amount. To turn this data into *thought*, and *awareness*, and in general, every conscious state, this data must be constantly appraised and rearranged by significance first, hence the reason for the significance tag.

The double tagging of data as it enters the brain is important because it makes memory storage a material (physical) process. And this implies that memory retrieval then is also a material process, which necessitates that memory organization, reorganization and reconstruction must be compatible, and thus also are material processes.

The research in neuroscience is beginning to show that the work on "affect" performed by Jean Piaget a half century ago was in general correct.

Piaget argued that affective decentration

> ... brings one's past to life again not just by connecting current situations with past ones or linking present perceptions with images from the past. It also recreates feelings and values momentarily forgotten.... Since the expression affective memory has been contested, let us say that when person recalls situations, he relives values as well as memory images... (Piaget, 1981, p. 64; also in Ross, 1991, p. 32).

In recent years, cognitive psychologists have perhaps done a disservice to those scholars who study memory and its affective component. In his book, ***Momentous Events, Vivid Memories***, David B. Pillemer addresses the lack of focus by cognitive psychologists on the specific emotion life episodes of an individual.

> Although studies of memory have long been part of cognitive psychology, specific life episodes have rarely been the focus of these efforts. Rather, the primary goal was, and for the most part still is, to discover general rules about how people learn, solve problems, and form concepts. Cognitive psychologists can certainly point to hundreds of experimental studies of episodic memory, but the to-be-remembered "episodes" in these studies typically are words, numbers, or nonsense syllables presented to undergraduate students under controlled laboratory conditions (Pillemer, 1998, p. 4).

The neglect of episodic memory is thus a neglect of autobiographical memory, which in turn is the neglect of affective memory---for they are all one in the same. It is very difficult for most scholars of mind, memory, emotion, etc., to propose the existence of a purely affective memory, meaning that all information entering the brain has an affective tag as well as a referential one. Even one of

the foremost scholars of memory research, Daniel L. Schacter, implies that there is "emotional information" as an entity, and other information that does not have an affective component (Schacter, 2001, p. 163).

Certainly it is difficult for exceptionalists and rationalists to accept the idea that affect or emotion is a component of all brain activity, whether on the input side or the output side. Even Le Doux and Damasio, both dedicated to the study of emotion and mind, will not go so far as to say that there is such a thing as pure affective memory. Daniel Goleman, in his book ***Emotional Intelligence***, still separates emotion from other brain processes. But the dual tagging thesis requires that intelligence is a product of emotion. And furthermore all experience is affect laden.

Dual tagging also has implications for AI (artificial intelligence). We have seen how humans develop technology that follows the same natural laws as the human mind and body do. But the computers that exist at the beginning of the twenty-first century are only half way to becoming truly "thinking" machines. They lack the same component that most scholars of the mind have omitted---that component is emotion.

A computer has no mechanism for tagging data with emotional significance. The computer has no sight, no hearing, no sense of taste, no touch, no smell, no way to interact in an affective way with the environment. Hitting the letter "A" on the keyboard only sends a signal of that letter to the computer. But if that "A" key had a pressure sensor that sent signals to the computer that

showed positive or negative significance related how hard the key was pushed, and if it could remember those signals along with the "A" data, then the computer has taken one very, very small step in becoming a "mind."

The dual tagging theory and its strong implication for a pure affective memory has ramifications that may overturn existing "grand" theories of mind and related matters. This includes concepts such as knowledge, intelligence, learning and perhaps even consciousness itself. But one thing seems certain, a pure affective memory in human beings is not compatible with learning in the school environment as it exists today. Learning in the traditional classroom is approached through the *referential* tag of memory, and the affective aspect of the information to be learned is neglected. Too often, there is no *significance* tag applied to subject matter, so meaningful learning does not take place. When it does take place, it is because the student developed a *significance* tag independent of the teacher or lesson plan.

CONCLUSION

The influence of emotions on memory has been a fixture in the realms of folk psychology and also scholarly endeavor for centuries. But it has been a superficial relationship. The impact of emotion on memory, and learning, has generally been studied in terms of extreme emotion such as tragedy or abundant happiness, but more often the former.

In education, a great deal of lip-service is given to the concept of "interest" as a key to the learning process. But interest is an emotional derivative, and the creation of it still hinges on emotional building blocks. The personal tragedies, triumphs, and desires in the lives of people around us, in the fictional as well as real sense, are what trigger vicarious emotions and thus an autobiographical significance within us. It is this autobiographical assessment process that creates interest and thus learning is initiated. So, the school experience must recognize this in designing curricula. Any, and every subject, should be taught through the process of biographically stimulated autobiography.

Marketing and popular culture have learned the importance of emotions in grasping human memory and attention. The use of biography to induce autobiographical memories is the key ingredient to their success. By observing the methods employed by marketing and popular culture, it could be argued that every moment of our lives is an autobiographical reconstruction vicariously applied to the present.

It is proposed here that there exists a *pure affective memory* in humans. That is, all memory contains an affective tag or code. Actually there are two tags on sensory data that becomes memory. The first tag is a *referential* tag for identification. The second one is a tag of *significance* which carries the affective value of an event. From this affective tag of *significance* are derived future emotions brought about by constructions and reconstructions of similar events. When an event necessitates a mental reconstruction of past experiences, the combination of affective tags of *significance* along with the *referential* tags creates a unique reality, albeit a subjective one. Every reconstruction is autobiographical, and the event particulars that necessitated the reconstruction then become affective and referential tags themselves.

Other researchers do not appear to advocate the existence of a *pure affective memory*, and the development of an affective logic has not yet begun (Ross, 1991, p.34). But in the folk psychological sense, it is common knowledge that emotional stimulation affects memory. Constructivists echo this, but they don't really know exactly why, or how much emotion services memory, or mind for that matter. Even constructivists do not go so far as to propose the existence of a *pure affective memory.*

It is also proposed here that the study of emotion in all its forms has been misdirected for centuries, mostly by philosophers. The tendency to reduce emotions to merely disruptive elements of the human personality have hampered the study of "affect" as a possible tag in the memory process. Due to various

cultural taboos on emotional expression, emotion studies have often dealt with the negative aspect of human emotionality.

And finally, regarding the preeminence of emotion in brain processes, this can be stated: the essence of living is emotion, the essence of mind in all its aspects is emotion, the essence of sacred rationality itself is emotion, and the essence of understanding the world around us is the product of affective "tags" and biography vicariously expressed through our autobiographical selves.

A CONFESSIONAL, AN EPILOGUE, AND SUGGESTIONS FOR FURTHER RESEARCH

When I embarked on my study of emotions and their effect on students both inside and outside of school life, I thought that the task would be relatively straightforward. I thought that I could gather together information on emotions from scientific, philosophical, and other perspectives, and then apply that information to the development of educational curriculums, educational atmospheres, and educational social environments. But, along the way, I became mired in the centuries old debate about what emotions are in the first place, and what they have to do with "mind" in the second place.

Since I already harbored a subjective view that emotions are vital to all human learning, then I was naturally troubled at the views of past and current scholars that emotions are disruptive and are generally to be avoided if possible. I found that the cult of rationality had hijacked the studies of mind, and that any importance concerning emotion had no place in its dogma. I noticed how emotions, if addressed at all, were treated superficially and relegated to bastard stepchild status in the company of rationality.

I began my study believing that I could stand on the "shoulders of giants" and perhaps see farther and gain understanding. But I was somewhat disillusioned; from the shoulders of those giants I could only see what they, and to some degree, my own subjectivity allowed me to see.

The whole-souled denial of human emotions as a valid aspect of mind has taken the form of an intellectual religion, bent on protecting itself and its sacred doctrine of rationality. This intellectual protectionism has become so entrenched, and so spread out over so many disciplines, that it may never be dislodged by any means other than abrupt and dramatic advances in neuroscience.

I came to realize that the discipline of philosophy, or more specifically, "philosophy of mind," is fast approaching obsolescence. Philosophical efforts to explain the mind produce nothing less than archaic ideas suitable only for the dustbins of exceptionalist thought. These ideas share common absurdity with the "earth-centered" religionist ones of six centuries ago.

To be sure, my research reinforced some theories that I had toyed with for years, that is, the probable existence of a *pure affective memory* and the likely existence of a dual tagging process regarding data management within the brain. But an acceptance of these premises by scholars would necessitate the dismantling of all prior theories of mind. Since these established theories are all rationality based celebrations of human exceptionalism, then a mental model predicated on the primacy of emotion would cause those theories to fall like houses of cards.

With regard to the further research of emotion and its relevance to the school experience, I suggest that the ever-increasing flow of neuroscientific

data be utilized fully and applied liberally to education. And, I suggest that the area of human emotionality be incorporated into teacher education programs in place of the stagnated curriculum of educational psychology. I also suggest that constructivist educators expand on the limited, but yet profound studies that Jean Piaget did regarding affect in humans. Had Piaget been privy to the recent advances in the neuroscience of emotion, he might have also arrived at idea of a *pure affective memory* and its significance and consequences regarding "mind."

And finally, as constructivists study the emotional aspect of learning and the whole school experience included, I suggest that they devise a method to measure the emotional capital or "interest" quotient of each student at the beginning of every school year. The assessments of knowledge that are presently enforced yearly upon every student are irrelevant and otherwise meaningless unless the emotional underpinnings of that knowledge are determined.

NOTES

[1] The exact wording of Newton's quote is: "If I have seen further (than you and Descartes) it is by standing upon the shoulders of Giants."
An interesting sidelight is that the idea behind Newton's quote is not original with him. Roman general Didacus Stella's version reads: "Pigmies placed on the shoulders of giants see more than the giants themselves (In Lucan {A.D. 39-65}, ***The Civil War,*** Vol. II, p. 10). Robert Burton (1577-1640), altered the quote somewhat when he wrote: "I say with Didacus Stella, a dwarf standing on the shoulders of a giant may see farther than a giant himself" (In ***Anatomy of Melancholy,*** 1621-1651). See all three versions in Bartlett (1968), Newton, p.379b; Lucan, p.134a; Burton, p.310a.

[2] I attended the *Titanic* artifact exhibit on February 1, 2003. During the drive to the exhibit the car radio was turned on and reports of the loss of the Space Shuttle *Columbia* began to fill the airwaves. With this emotional news heavy on my mind I entered the *Titanic* exhibit, a recreated setting from ninety-one years past. At the beginning it was a setting of man's supposed engineering triumph over Nature (the sea), but by the end it was a setting of doom, and tragedy, and death---the defeat of man by Nature. Through my own emotional experiences vicariously reconstructed, I somehow felt the pain and suffering of those long ago unfortunate souls. But my emotions were reconstructed with added significance on that day because of the loss of the *Columbia* in the intense heat of earth's upper atmosphere, a tragic and ironic companion to the emotional memories of the *Titanic*--- lost in the marrow chilling cold of the earth's ocean depths.

REFERENCES

Agres, Stuart J. in Agres, Stuart J., Edell, Julie A., & Dubitsky, Tony M. (Eds.). (1990). ***Emotion in Advertising: Theoretical and Practical Explorations.*** New York: Quorum Books.

Anderson, Joseph D. (1996). ***The Reality of Illusion: An Ecological Approach to Cognitive Film Theory.*** Carbondale, Illinois: Southern Illinois University Press.

Anderson, T. L. (1996). "'They're Trying to Tell Me Something': A Teacher's Reflection on Primary Children's Construction of Mathematical Knowledge." ***Young Children.*** Vol. 51, no. 4, 34-42.

Arnold, Magda. (Ed.). (1970). ***Feelings and Emotions: The Loyola Symposium.*** New York: The Academic Press.

Audi, Robert. (Ed.). ([1995], 1999). ***The Cambridge Dictionary of Philosophy.*** Cambridge, UK.; Cambridge University Press.

Ballard, Robert D., & Archbold, Rick. (1987). ***The Discovery of the Titanic.*** With an Introduction by Walter Lord and illustrated by Ken Marshall. New York: Warner Books.

Bartlett, John. (1968). ***Familiar Quotations***, 14th ed. Emily Morison Beck Editor. Boston: Little, Brown and Company.

Barzun, Jacques. (1992). ***Begin Here: The Forgotten Conditions of Teaching and Learning***. Chicago: The University of Chicago Press.

_____. ([1959, 1961], 2002). ***The House of Intellect.*** New York: Perennial Classics of HarperCollins Publishers.

Beaty, Walcott, H. (1969, April). "Emotions: The Missing Link in Education." ***Theory Into Practice***, VIII (*2*), 86-92.

Beck, Clive, & Kosnik, Clare Madott. (1995). "Caring for the Emotions: Toward a More Balanced Schooling." ***Philosophy of Education Yearbook.*** Available [On-Line]. Retrieved November 11, 2001, from http://w3.ed.uiuc.edu/EPS/PES-Yearbook/95docs/beck_kosnik.html

Bernstein, Elmer. (2001, March 23). Quoted on ***Morning Edition*** [Radio Broadcast]. Washington, D.C.: National Public Radio.

Bierce, Ambrose. ([1911],1970). ***Diabolical Definitions: A Selection From The Devil's Dictionary.*** Edited with an Introduction by Merton Babcock. Mount Vernon, New York: The Peter Pauper Press.

Boyd, W. (Ed.). (1956). ***Emile For Today***. London: Heinemann.

Bringuier, J. C. (1980). "Sixth Conversation: Knowledge and Affectivity." ***Conversations With Jean Piaget***. Chicago. University of Chicago Press.

Brooks, Jacqueline Grennon, & Brooks, Martin G.. (1993). ***In Search of Understanding: The Case for Constructivist Classrooms.*** With a Foreword by Barbara Talbert Jackson and a Preface by Catherine Twomey Fosnot. Alexandria, Va.: the Association for Supervision and Curriculum Development.

Brussell, Eugene E. (Ed.). (1988). ***Webster's New World Dictionary of Quotable Definitions*** (Second edition). Englewood Cliffs, New Jersey: Prentice—Hall.

Burns, Ken. (Producer & Director), & Burns, Ric. (Co-Producer). (1990). ***The Civil War*** [Documentary series]. United States: Public Broadcasting Service.

Cacioppo, J. T. & Gardner, W.L.. (1999). "Emotion," ***Annual Review of Psychology***. Available [On-Line], (no date given), at Northern Lights, www.nothernlight.com

Caine, Renate Nummela, & Caine, Geoffrey. (1991). ***Teaching and the Human Brain.*** Alexandria, Virginia: Association for Supervision and Curriculum Development.

Calhoun, Cheshire, & Solomon, Robert C. (1984). ***What Is An Emotion?*** New York: Oxford University Press.

Cameron, James. (Producer & Director). (1997). ***Titanic*** [Motion Picture]. United States: Paramount.

_____. (1997). Available [On-Line]. Retrieved January 6, 2003, from http://www.ditart.com/horner/e-tita.htm

Cannon, Walter B. (1920). ***Bodily Changes in Pain, Hunger, Fear, and Rage***. New York: D. Appleton and Co..

Churchland, Paul M. ([1996], 1999). ***The Engine of Reason, the Seat of the Soul: A Philosophical Journey into the Brain.*** Cambridge, Mass.: A Bradford Book of The MIT Press.

Cohen, David. (1983). ***Piaget: Critique and Assessment.*** New York: St.Martin's Press.

Cohen, Jonathan. (Ed.). (2001). ***Caring Classrooms/Intelligent Schools....*** With a Foreword by James Comer. New York: Teachers College Press.

Collingwood, R.G. (1946). ***The Idea of History.*** Oxford, U.K.: Clarendon Press.

Combs, Arthur, W. (1982, April). ***"Affective Education Or None at All."*** Educational Leadership, 39 (7), 495-497.

Conway, Martin A., & Pleydell-Pearce, Christopher W. (2000). "The Construction of Autobiographical Memories in the Self-Memory System." ***Psychological Review***. Vol. 107, *(2)*, pp. 261-288.

Copernicus, Nicolaus. ([1543], 1995). ***On the Revolutions of Heavenly Spheres....*** Translated by Charles G. Wallis. Amherst, N.Y.: Prometheus Books.

Damasio, Antonio R. (1994). ***Descartes' Error: Emotion, Reason, and the Human Brain.*** New York: Avon Books.

Darwin, Charles. (1955). ***The Expression of Emotions in Man and Animals.*** With a Preface by Margaret Mead. New York: The Philosophical Library.

DeGarmo, Charles. ([1902], 1911). ***Interest And Education: The Doctrine of Interest And its Concrete Application.*** New York: The Macmillan Company.

Dennett, Daniel C. (1991). ***Consciousness Explained.*** Boston: Little, Brown and Company.

DeVries, R. & Kohlberg, L. (1987). ***Programs of Early Education.*** New York: Longmans.

DeVries, R. (1993). ***Using Constructivist Theory and Research to Design a Framework For Curriculum and Assessment.*** Paper presented at AERA, April, 1993.

Dewey, John. (1897, January). "My Pedagogic Creed." ***School Journal,*** 54, pp. 77-80.

Duckworth, E. (1973). "The Having of Wonderful Ideas." In Schwbel, M. and Ralph, J. Eds. ***Piaget in the Classroom.*** New York: Basic Books. London: George Allen & Unwin.

Dunlop, Francis. (1984). ***The Education of Feeling and Emotion.***

Egan, Kieran, in Egan Kieran, & Nadaner, Dan. (Eds.). (1988). ***Imagination and Education***. New York: Teachers College Press.

Eggen, Paul, & Kauchak, Don. ([1992], 1999). ***Educational Psychology: Windows on Classrooms.*** Fourth edition. Upper Saddle River, New Jersey: Merrill, an imprint of Prentice Hall.

Ekman, P., Sorenson, E.R., & Friesen, W.V.. (1969). "Pan-cultural Elements in the Facial Displays of Emotions." ***Science*** 164.

Ekman, P., & Friesen, W.V.. "A New Pan-cultural Facial Expression Of Emotion." ***Motivation and Emotion*** 10 (*2*).

Emmerich, Roland. (Director), & Devlin, Dean. (Producer). (2000). ***The Patriot*** [Motion Picture]. United States: Columbia Pictures.

Evans, Dylan. (2001). ***Emotion: The Science of Sentiment.*** New York: Oxford University Press.

Ferguson, Marilyn. ([1980] 1987). ***The Aquarian Conspiracy.*** With a Foreword by John Naisbitt. Los Angeles: J. P. Tarcher, Inc.

Feyerabend, Paul K. ([1975, 1978], 1979). ***Against Method.*** London: Verso.

_____. (1981). ***Realism, Rationalism, and Scientific Method.*** Cambridge, U.K.: Cambridge University Press.

Gang & Gang Inc. (2001). Available [On-Line]. Retrieved December 3, 2002, from, http://www.gang.net/companyhistory.html

Gazzaniga, Michael, S. (1998). ***The Mind's Past.*** Berkeley, Calif.: University Of California Press.

Gibson, Mel. (Producer & Director). (1995). ***Braveheart*** [Motion Picture]. United States: Twentieth Century Fox.

Goffman, Erving. (1974). **Frame Analysis.** New York: Harper Colphon.

_____. (1976). ***Gender Advertisements.*** New York: Harper and Row.

Goleman, Daniel. ([1995] 1997). ***Emotional Intelligence.*** New York: Bantam Books.

Gorbman, Claudia. (1987). ***Unheard Melodies: Narrative Film Music.*** London: BFI.

Habermas, Jürgen. ([1968] 1971). ***Knowledge and Human Interests.*** Translated from German by Jeremy J. Shapiro. Boston: Beacon.

Hagen, Earle. (1971). ***Scoring for Films***. New York: Criterion Music Corp.

Hamachek, Don. (Ed.). (1990). ***Educational Psychology Reader: Toward The Improvement of Schooling.*** New York: Macmillan Pub. Co..

Harré, R. (Ed.). (1986). ***The Social Construction of Emotions.*** Oxford: Blackwell Publishers.

Hart, F. W. (1934). ***Teachers and Teaching.*** New York: Macmillan & Co..

Hillman, James. (1962). ***Emotion....*** London: Routledge and Kegan Paul.

Hirsch, E. D., Jr. ([1996] 1999). ***The Schools We Need, And Why We Don' t Have Them.*** New York: Anchor Books of Doubleday.

Hitchcock, Alfred. Quoted in, ***Alfred Hitchcock: Wit & Wisdom.*** The Alfred Hitchcock Trust. Available [On-Line]. Retrieved January 2, 2003, from http://nextdch.mty.itesm.mx/~plopezg/Kaplan/quotes/quotes.html

_____. (Producer & Director). (1963). ***The Birds*** [Motion picture]. United States: Universal.

_____. (Producer & Director). (1959). ***North by Northwest*** [Motion picture]. United Kingdom: M-G-M.

_____. (Producer & Director). (1960). ***Psycho*** [Motion picture]. United States: Paramount.

_____. (Producer & Director). (1958). ***Vertigo*** [Motion picture]. United States: Paramount.

Hofman, Mike. (2002, May). "The Inner City 100: Emotional Branding: How Much Of Your Life Story Should You Use to Market Your Company?" ***Inc,*** Vol. 24, Issue 5, 69-79.

Holman, Rebecca H. (1986). "Advertising and Emotionality." In Robert A. Peterson, Wayne D. Hoyer, & William R. Wilson (Eds.). (1986). ***The Role of Affect in Consumer Behavior.*** Lexington, Mass.: Lexington Books of D.C. Heath and Co., pp. 119-140.

Howard, Ron. (2001). (Producer & Director). ***A Beautiful Mind.*** [Motion Picture]. United States: Universal.

Ismat, Abdal—Haqq. (1998). ***Constructivism in Teacher Education: Considerations For Those Who Would Link Practice to Theory.*** (ERIC Digest No. ED 42698698). Available [On-Line], (no date given), at http://www.ed.gov/database/ERIC__Digest/ed426986.html

James, William. (1892). ***Psychology: Briefer Course.*** New York: Henry Holt.

_____. (1884). "What Is An Emotion?" ***Mind,*** IX.

Jung, Carl. (1938). ***Psychological Aspects of the Modern Archtype.*** Vol. 9.

Kamii, Constance. (1991). "Toward Autonomy: The Importance of Critical Thinking And Choice Making." ***School Psychology Review.*** Vol. 20, no. 3, 382-388.

Kanigel, Robert. (1991). ***The Man Who Knew Infinity: A Life Of The Genius Ramanujan.*** New York: Pocket Books.

Kawasaki, Guy. ([1999] 2000). ***Rules for Revolutionaries: The Capitalist Manifesto for Creating and Marketing New Products and Services.*** New York: HarperBusiness of HarperCollins.

Kessler, Rachael. (2000). ***The Soul of Education. Helping Students Find Connection, Compassion, and Character at School.*** Alexandria, Virginia: Association for Supervision and Curriculum Development.

Kohn, Alfie. (1999). ***The Schools Our Children Deserve....*** Boston: Houghton Mifflin Company.

Kuhn, Thomas. (1962). ***The Structure of Scientific Revolutions.*** In ***International Encyclopedia of Unified Science***, [Series]: Vol.2, No. 2. Chicago: University of Chicago Press.

Kusché, Carol, A., & Greenberg, Mark T.. (2001). "PATHS in your Classroom: Promoting Emotional Literacy and Alleviating Emotional Distress," in Jonathan Cohen (Ed.). (2001). ***Caring Classrooms/ Intelligent Schools....*** With a Foreword by James Comer. New York: Teachers College Press.

Lacey, A.R. ([1976, 1986], 1996). ***A Dictionary of Philosophy.*** New York: Barnes & Noble.

Lange, Carl Georg. ([1922]1967). ***The Emotions.*** New York: Hafner Publishing.

Lazaras, Richard S. & Lazaras, Bernice N.. (1994). ***Passion and Reason: Making Sense of Our Emotions.*** New York: Oxford University Press.

LeDoux, Joseph. (1996). ***The Emotional Brain....*** New York: Simon & Schuster.

Leeper, R. S. (1948). "A Motivational Theory of Emotion to Replace 'Emotion As Disorganized Response.'" ***Psychological Review,*** 55.

Lyotard, Jean-François. ([1979, 1984], 1999). ***The Postmodern Condition: A Report on Knowledge.*** Translated from the French by Geoff Bennington & Brian Massumi, with a Foreword by Fredric Jameson. Minneapolis, Minn.: University of Minnesota Press.

MacMurray, John. (1935). ***Reason and Emotion.*** London: Faber.

Mandler, George. (1975). ***Mind and Emotion.*** New York: John Wiley and Sons.

Marshall, Perry S. (2002). "Emotion vs. Logic in Sales, Marketing and Advertising." Available [On-Line]. Retrieved December 3, 2002, from http://www.perymarshall.com/marketing/11.htm

Martin, Jane Roland. (1992). ***The Schoolhome.*** Cambridge, Mass.: Harvard University Press.

McAdam, Doug, and Snow, David A. (Eds.). (1997). ***Social Movements: Readings On Their Emergence, Mobilization, and Dynamics.*** Los Angeles: Roxbury Publishing Co..

McDougall, William. (1921). ***An Introduction to Social Psychology.*** Boston: Luce.

McGinn, Colin. (1982). ***The Character of Mind.*** Oxford, U.K.: Oxford University Press.

_____. (1999). ***The Mysterious Flame.*** New York: Basic Books.

McLaglen, Andrew V. (Director). & Arthur, Robert. (Producer). (1965). ***Shenandoah*** [Motion Picture]. United States: Universal

Mitchell, Richard. ([1981] 1997). ***The Graves of Academe....*** New York: A Fireside Book of Simon & Schuster.

Montagu, Ashley. (1968). ***Man Observed.*** New York: G. P. Putnam's Sons.

Munsterberg, Hugo. (1915, December). "Why We Go to the Movies." ***Cosmopolitan***, 22-32.

_____. ([1916] 1970). ***The Film: A Psychological Study.*** New York: Dover Press.

Noddings, Nell. (1992). ***The Challenge to Caring In Schools: An Alternative Approach to Education.*** New York: Teachers College Press

Oliver, Richard L. (1997). ***Satisfaction: A Behavioral Perspective on the Consumer.*** Boston, Mass.: McGraw-Hill.

O'Loughlin, Marjorie. "Reinstating Emotion in Educational Thinking." ***Philosophy of Education 1997.*** Available [On-Line], (no date given), http://www.ed.uiuc.edu/eps/pesyearbook/97_docs/oloughlin.html

Olson, Julie. "Titanic: An In Depth Analysis." Available [On-Line]. Retrieved January 6, 2003, from http:www.hornershrine.com/scores/reviews/titanic_analysis/titanic_rl.html

Oppenheim, Yair. (1998, September). "The Functions of Film Music." ***Film Score Monthly.*** Available [On-line]. Retrieved December 18, 2002 from http://www.filmscoremonthly.com/features/functions.asp

Peterson, Robert A., Hoyer, Wayne D., & Wilson, William R. (1987). ***The Role of Affect in Consumer Behavior.*** Lexington, Mass.: Lexington Books of D.C. Heath and Co..

Phillips, Sam. (2001, November 28). Quoted in "American Masters: Good Rockin' Tonight: The Legacy of Sun Records" [Documentary episode]. Public Broadcasting Service.

Piaget, Jean. (1981). ***Intelligence and Affectivity: Their Relationship During Child Development.*** Translated and edited by T. A. Brown and C. E. Kaegi. Palo Alto, California: Annual Reviews.

_____. (1962). ***Play, Dreams and Imitation in Childhood.*** New York: Norton.

_____. (1969). ***Science of Education and the Psychology of the Child.*** New York: Orion Press.

_____. ([1965] 1995). ***Sociological Studies.*** Edited by Leslie Smith and translated by Terrance Brown et. al. London and New York: Routledge.

Pine, B. Joseph II, and Gilmore, James H. (1998, July-August). "Welcome to the Business Economy." ***Harvard Business Review.***

Pillemer, David B. (1998). ***Momentous Events, Vivid Memories.*** Cambridge, Massachusetts: Harvard University Press.

Plutchik, Robert. (1994). ***The Psychology and Biology of Emotion.*** New York: Harper Collins.

Postman, Neil, & Weingartner, Charles. (1969). ***Teaching As A Subversive Activity***. New York: A Delta Book.

Poundstone, William. (1999). ***Carl Sagan: A Life in the Cosmos.*** New York: Henry Holt & Co..

Powdermaker, Hortense. (1950). ***Hollywood, The Dream Factory: An Anthropologist Studies the Movie Makers***. Boston: Little Brown & Co.

Prescott, Daniel A. ([1938] 1949). ***Emotion and The Educative Process.*** Washington, D. C. American Council on Education.

Primary Education: Suggestions for the Consideration of Teachers and Others Concerned with the Work of Primary Schools. (1959). HMSO.

Richardson, V. (1997). "Constructivist Teaching and Teacher Education: Theory and Practice." In V. Richardson (Ed.). (1997). ***Constructivist Teacher Education: Building New Understandings.*** Washington, D. C.: Falmer Press.

Riney, H. (1981). "Emotion in Advertising." ***Viewpoint,*** 1, 2-3.

RMS Titanic, Inc., & Clear Channel Communications, Inc. (2000-2003). ***Titanic: The Artifact Exhibit.***

Robinette, Scott, Brand, Claire, & Lenz, Vickie. (2001). ***Emotion Marketing: The Hallmark Way of Winning Customers for Life.*** New York: McGraw-Hill.

Ross, Bruce M. (1991). ***Remembering the Personal Past: Descriptions of Autobiographical Memory.*** New York: Oxford University Press.

Rousseau, J. J. (1762). Emile. See W. Boyd Ed. (1956). ***Emile for Today.*** London: Heinemann.

Sarbin, T. R. (1986). "Emotion and Act: Roles and Rhetoric." In R. Harré (Ed.), (1986). ***The Social Construction of Emotions.*** Oxford: Blackwell Publishers.

Schacter, Daniel L. (2001). ***The Seven Sins of Memory: How the Mind Forgets and Remembers.*** Boston: Houghton Mifflin Company.

Schmitt, Bernd H. (1999). ***Experiential Marketing.*** New York: The Free Press.

Scholastic Inc. (2002). "Parents Guide for the Nick Jr. Book Club" [Brochure]. Viacom International Inc.: Author. ISBN 0-7172-6652-4.

Scott, Ridley. (Director). & Wick, Douglas, et. al. (Producers). (2000). ***Gladiator*** [Motion Picture]. United States: DreamWorks & Universal Pictures.

Searle, John H. ([1984], 1997). ***Minds, Brains and Science.*** Cambridge, Massachusetts: Harvard University Press.

Silberman, Charles E. ([1970] 1971). ***Crisis in the Classroom: The Remaking of American Education.*** New York: Vintage Books of Random House.

Smith, Murray. (1995). ***Engaging Characters: Fiction, Emotion, and the Cinema.*** New York: Oxford University Press.

Snow, David A., Rochford, E. Burke Jr., Worden, Steven K., & Benford, Robert D. (1997). "Frame Alignment Processes, Micromobilization, and Movement Participation." In Doug McAdam & David A. Snow (Eds.). (!997). ***Social Movements: Readings on Their Emergence, Mobilization, and Dynamics.*** Los Angeles: Roxbury Publishing Co., pp. 235-251.

Solomon, Robert C.. ([1976] 1977). ***The Passions: The Myth and Nature of Human Emotions.*** New York: Anchor Books.

Stewart, Darlene L. (1993). ***Creating the Teachable Moment; An Innovative Approach To Teaching and Learning.*** Blue Ridge Summit, Pa.: TAB Books.

Sturges, John. (Producer & Director). (1960). ***The Magnificent Seven*** [Motion Picture]. United States: United Artists.

Tomkins, Silvan S., & Izzard, Carroll E. (Eds.). (1965). ***Affect, Cognition and Personality.*** New York: Springer Publishing Company.

Valentine-Radford. ***iCustomer Observer.*** Available [On-Line] at http://www.valrad.com/icustomer.asp

Wadsworth, Barry, J. ([1971] 1996). ***Piaget's Theory of Cognitive and Affective Development.*** White Plains, New York: Longman Publishers.

Watson, J.B.. (1919). ***Psychology From the Stand-point of a Behaviorist.*** Philadelphia: Lippincott.

Weaver, Ben H. (1970). ***The Student Exploiters.*** With an Introduction by Kenneth Sorey. Enid, Oklahoma: Phillips University Press.

Woodworth, R. S. (1940). ***Psychology.*** New York: Henry Holt.

Yarlott, Geoffrey. (1972). ***Education and Children's Emotions: An Introduction.*** London: Weindenfeld & Nicolson.

Young, Leontine. ([1965] 1971). ***Life Among the Giants: A Child's-Eye View of the Grown-up World.*** New York: McGraw-Hill.

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