

The Case for an Arts Inclusive Curriculum

Timothy D. McKennie

Concordia University Portland



A Thesis Presented to
The Graduate Program in Partial Fulfillment of the Requirements
For the Degree of Masters in Education Foundation

Concordia University Portland
2010

Abstract

The purpose of this study was to research the history and modern applications of progressive arts based learning techniques. The author traces the implementation of “child centered” education from its modern origins in Rousseau and Pestalozzi, to current advocates of these practices as exemplified in the works of Gardner and Eisner. The researcher suggests that these best practices should be more utilized in the modern secondary school in order to support and enhance learning and that this can be most effectively accomplished by combining these engaging and involving methods with structured lessons that have specific learning goals and are based in established standards and benchmarks.



Chapter One

Introduction

The Question: “Why should, and how could, the arts be integrated into the core secondary curriculum to enhance learning?”

The great American philosopher and progressive education proponent, John Dewey, defined the purpose of education as follows: “The Purpose of education has always been...to give the young, the things they need in order to develop in an orderly, sequential way into members of society.” If this definition of education is accepted, the obvious follow-up question is, what are the most effective means for obtaining this end?

In the traditional schools of Dewey’s time, this goal was usually attempted through a method of direct instruction or rote learning. That is, the teacher presents facts for students to memorize and later regurgitates them at the instructor’s demand. This approach, although still present in the modern classroom, has been somewhat replaced, due to the theories of Dewey and others, by a more child centered, or as Dewey proposed, experienced-based education.

Dewey’s progressive ideas on appealing to the child as an individual and developing the “whole child” was a precursor to Howard Gardner’s Multiple Intelligences theory, as the following passage from Dewey’s pedagogic creed illustrates,

Education, therefore, must begin with a psychological insight into the child’s capacities, interests and habits. It must be controlled at every point by reference to these

considerations. These powers, interests, and habits must be continually interpreted—we must know what they mean. (Dewey 1897, p.78)

Gardner's Multiple Intelligence (MI) theories refute the widely accepted notion that human intelligence is manifested (and measured) primarily through verbal-linguistic and logical-mathematical means. Gardner asserts that there are at least six other autonomous "intelligences," Bodily-kinesthetic, musical, visual-spatial, interpersonal, intrapersonal and naturalistic, and it is suggested that by engaging and appealing to these intelligences profound learning occurs. These theories are one of the primary basis for the best practice of differentiated instruction, a teaching technique that attempts to appeal to individual students intelligences, or "learning styles." Again, if these more contemporary modes of teaching are accepted as more effective at producing meaningful learning, what then can educators do to best utilize these practices, and most effectively engage these intelligences? The answer may lie in introducing and utilizing the arts in the classroom, an arts curriculum can effectively engage all of these intelligences, as well as stimulating the much sought after higher level creative thinking skills found in Bloom's Taxonomy.

As Dewey states in his essay *Individual Psychology and Education* (1934), not only should education be for developing children into functioning and contributing members of society, "(a) worthwhile education is a direct enrichment of the life of the young and not merely a more or less repellent preparation for the duties of adult life." (p. 6) It is this life enrichment and engagement in learning that an arts curriculum fosters that seems to be often lacking in many of the so-called "core" courses. In the advent of accountability in education, most evident in the federal reauthorization of the Elementary and Secondary Education Act, No Child Left Behind (NCLB) and standardized testing, arts courses such as music and drama are being marginalized,

often due to the fact that these subjects are not part of these mandated tests, or considered extra-curricular at best, and in some extreme cases of financial limitations, eliminated in favor of a more “rigorous” and “important” curriculum.

Unfortunately it appears this change is most prevalent at lower income and higher minority populated schools where the educational and psychological benefits of such programs are most needed. Sabrina Holcomb quotes from a 2004 study commissioned by the Council for Basic education in her January 2007 article in NEA Today, *State of the Arts*,

(Research) lends support to the overall thrust of anecdotal accounts that poor and minority students are bearing the brunt of a waning commitment to the arts. The greatest erosion of the curriculum is occurring in schools with high minority populations, the very populations whose access to such curriculum has been historically limited. (Holcomb 2007, p.35)

Funds, or the lack thereof, is one of the more obvious causes for this reduction and or loss of arts programs, and although no one would likely suggest that these programs offer no educational benefit, few would argue for the elimination or reduction of more traditionally “core” courses such as language arts or mathematics in order to obtain more resources for the arts. Therefore, one question might be, how can the arts be effectively integrated into these mandatory courses in order to exploit their learning potential and reach diverse students, while also maintaining the arts integrity and unique contributions to the education and edification of the whole child?

Elliot Eisner, an emeritus professor of Art and Education at Stanford University and author of *The Arts and the Creation of Mind*, states his opinion on the current status and need for the arts in education,

Indeed, I would say that the current context in American education, a context focused on the measurement of achievement with respect to discrete standards, provides the most compelling reason for the arts in our schools. When education policy emphasizes the display and achievement of uniformity, when it diminishes the opportunities for imagination to flourish, when it considers metaphor and ambiguity to be problematic, both the argument and the need for the arts become even stronger. (Eisner 2005, p. 8)

This quotation clearly articulates a concern that the modern trend of focus on “core” subjects, or as Eisner terms “getting back to basics” primarily due to standardized testing and its necessary focus on accountability, is unfortunately quite possibly a movement backward to pre-Dewey traditional education, rather than forward to the theoretically more enlightened approach of differentiated instruction that an arts curriculum supports and encourages. Eisner in the same introduction further makes the case for the need of the inclusion of the arts in the curriculum. “We wish to say that the arts are deeply engaged in the development of mind. The curriculum that we design is basically a mind altering device that makes certain forms of experience possible.” Eisner echoes his mentor Dewey in the next part of this passage, “A life without the arts is an impoverished life.” He continues with the arts’ ability to promote higher level thinking skills, “The ability to shape form so that it imaginatively shapes feeling is a profoundly intellectual task.” (p. 9) Eisner concludes this introduction with what he considers three unique contributions the arts offer to the learner,

First, they develop the mind by giving it opportunities to learn to think in special ways. Second, they make communication possible on matters that will not take the impress of logically constructed language. Poetry, after all was invented to say what prose can never say. Third, the arts are places and spaces where one can enrich one's life. Such outcomes are not educationally trivial. When taken seriously, the arts have much to teach educators; they could provide the models needed to create schools that genuinely educate. (Eisner 2005, p. 9)

Author Daniel Pink in his bestselling book, *A Whole New Mind* also recognizes this value of creative thinking, and proposes that the world is moving from the "Information Age" into what he terms the "Conceptual Age" an age where the most valued workers will possess a mastery of developed creative thinking skills, therefore, according to Pink, the development of these types of skills not only has the indisputable potential to enrich the individuals life experience, but also has the potential to train them better for the modern workplace.

It is hoped that the traditional tendency for the arts not to be taken seriously or considered extra-curricular in this era of standardization will no longer mitigate its potential to genuinely educate. And that by further investigating this problem and making a case for the arts, and its unique abilities to teach across the curriculum while contributing its own particular benefits to the education and enrichment of the child, that an arts centered curriculum will be more respected and, therefore, more utilized in the modern classroom. As John Dewey states in his pedagogic creed,

I believe that there is, therefore, no succession of studies in the ideal school curriculum.

If education is life, all life has, from the outset, a scientific aspect and an aspect of art and

culture...I believe when science and art thus join hands the most commanding motive for human action will be reached the most genuine springs of human conduct aroused and the best service that human nature is capable of guaranteed. (Dewey 1897, p.80)



Chapter Two

History

It is difficult to pinpoint the beginnings of more progressive and creative “child-centered” educational philosophies, or practices, but it appears the works of Jean-Jacques Rousseau are a good start. Certainly the French romanticist’s major work, *Emile, or On Education* published in 1762, and one of the great works of the Romantic age, is considered by most historians and scholars to be the introduction of this radical philosophy of the inherent goodness of the child, and that their natural curiosities and aptitudes should be encouraged and nurtured.

God makes all things good; man meddles with them and they become evil. He forces one soil to yield the products of another, one tree to bear another’s fruit. He confuses and confounds time, place, and natural conditions...he will have nothing as nature made it, not even man himself, who must learn his paces like a saddlehorse, and be shaped to his master’s taste. (Rousseau 1762, p.6)

Emile and its romantic philosophies on education, would be a profound influence some decades later on Swiss educator Johann Heinrich Pestalozzi and his own work, and it’s similar child centered philosophy, *How Gertrude teaches Her Children* (1801). This influence is further made evident in the following quote attributed to Pestalozzi,

I wish to wrest education from the outworn order of doddering old teaching hacks as well as from the new-fangled order of cheap, artificial teaching tricks, and entrust it to the eternal powers of nature herself, to the light which God has kindled and kept alive in the

hearts of fathers and mothers, to the interests of parents who desire their children grow up in favour with God and with men. (Pestalozzi in Silber 1965, p. 134)

This romantic ideal would further influence Pestalozzi's famous German pupil Friedrich Froebel, the developer of Kindergarten, and its methodology of experience based learning, a precursor to many of John Dewey's tenets. The first United States Kindergarten would then be introduced by one of Froebel's students, Margarthe Schurz, in Wisconsin in 1856, thus helping to introduce these more creative and engaging child centered learning techniques to the New World. Stages of development in child-centered thought and practice and their introduction to the States seem evident from Rousseau to Pestalozzi to Froebel to Schurz, and later we will see through Horace Mann.

A contemporary of Pestalozzi and Froebel and later an adherent to their basic techniques, was another German, Johann Friedrich Herbart. Herbart was philosophically concerned with the development of the individual and how individuals could best serve society through education. He, like Pestalozzi, Froebel, and later Dewey, believed that experience was the best teacher.

Herbart made an important distinction between what he called "education" and "teaching." The former was concerned with the intellectual and moral development of the student, that is, educating the whole child, whereas, the latter was concerned with imparting basic knowledge, facts and techniques, that is, training. Herbart's life work was an effort to combine the two "educational teaching" into an effective process, in order to create the most desirable citizens for modern society. Herbart believed that the key to truly educate relied on the teacher appealing to students' interests. "Herbart believed interest enables the first links to be created between the subject and the object and so determines the 'viewpoint' of the individual about all the aspects of the world that he either grasps or fails to grasp." Or as Norbert

Hilgenhegar paraphrases in his article on Herbart in volume XXIII of *Prospects: the quarterly review of comparative education*, “Only a continuous interest can constantly and effortlessly expand the circle of thought, give access to the world and encourage individuals to participate sincerely in the destiny of their fellow men. Therefore, the ‘worst sin of teaching’ is boredom.” (p. 6)

It is this emphasis on the importance of student interest, or if the researcher may use the more popular modern term “engagement” as a synonym, and its concurrent benefits that is one of the many educational advantages of an arts inclusive curriculum that this paper proposes.

In 1837, a few decades after the majority of Herbart’s most important work, a major figure in American educational history, Horace Mann would become Secretary of the newly formed Massachusetts State Board of Education, one of the first and certainly most influential bodies of its kind. It was in this position of influence and through his twelve famous annual reports that Mann would spread the idea of the “common” or public school. This was a major departure from the private and parochial schools that made up the majority of American educational institutions at the time.

Mann believed that it was imperative that the citizens of a democracy be educated in a non-secular matter, that is, the separation of church and state, and was one of the most influential pioneers of what would become the modern public school system. His fervor for the improvement that a more democratic school system, that is, a free system for rich and poor, could effect on society was ironically almost religious in its intensity. His ardent belief in the necessity of a wide spread free education in order to have a healthy and functioning democracy would be echoed by Dewey almost a century later in such works as *Democracy and Education*

(1918). The following is from Mann's 12th and final annual report for the Massachusetts State Board of Education,

Hence it is, that the establishment of a republican government, without well-appointed and efficient means for the universal education of the people, is the most rash and fool-hardy experiment ever tried by man, such a Republic may grow in numbers and in wealth. As an avaricious man adds acres to his lands, so its rapacious government may increase its own darkness by annexing provinces and states to its ignorant domain. Its armies may be invincible, and its fleets may strike terror into nations on the opposite sides of the globe, at the same hour. Vast in its extent, and enriched with all the prodigality of nature, it may possess every capacity and opportunity of being great, and of doing good. But if such a Republic be devoid of intelligence Such a Republic, with all its noble capacities for beneficence, will rush with the speed of a whirlwind to an ignominious end; and all good men of after-times would be fain to weep over its downfall, did not their scorn and contempt at its folly and its wickedness, repress all sorrow for its fate. (Mann 1848, p. 1)

It was rhetoric such as this, along with the strengthening of compulsory attendance laws and the creation of child labor laws that contributed to the development of the public school system in general, and the modern high school specifically.

Mann like Herbart, was also significantly influenced by his European counterparts, and it was the Prussian system, which is often referred to as the Pestalozzi-Prussian system, because of the direct influence of Pestalozzi and his followers (Froebel, Herbart), that Mann studied on his trip to Germany, that would serve as the basis for the American common school system. This system would be set up in the state of Massachusetts and would later spread to other major

metropolitan areas of the east coast, and eventually be the inspiration for the origin, structure and administration of the American common, or public school. Therefore, it is important to note that the origins of the American school system, owes much of its pedagogical and administrative heritage to these European “child centered” approaches.

The following from *A History of Western Education* by Harry Good and James D. Teller summarizes some of the important contributions Mann made to the American public school,

He was a man of action, a propagandist, and a publicist; but in judging his achievement one must consider not only his own gifts and defects but also the difficulties of his office. For years he was hardly ever free from attack and had to fight to maintain his position. A more sensitive and less devoted man would have retired from the storm. Mann fought on for twelve years and by that time the amount of money appropriated for schools by the state was double that of 1837, the average school term was longer by a month, teachers' salaries had risen fifty percent, four normal schools and fifty high schools had been opened. . . . Pestalozzian ideas and a growing faith in American institutions and in our national destiny had begun to build schools for democracy. (Good & Teller 1947, p.461)

Concurrent with the development of the modern public school system, and indeed part of that development, was the growth of secondary education, or the modern high school. The growth of this now familiar institution had much to do with some of the main tenets of democracy and the support of an educated electorate. Simply put, if a government “by the people and for the people” was to function, “the people” needed to be educated in order to choose their leaders and law makers wisely. [See Thomas Jefferson] This philosophy, along with major socio-economic changes, stronger compulsory education laws and their

accompanying child labor laws, combined with the influx of immigrants in the later part of the 19th century, led to an exponential growth of these free public “higher” education facilities. Along with this phenomenal expansion came the inevitable debate on the function of the high school, who should it serve, and what should be the focus of its curriculum. Should it be primarily a college preparatory institution as secondary education had been traditionally? Or should it attempt to prepare the majority of the students that would not attend college for more “practical” skills such as vocational training and home economics.

It was these questions of secondary school curriculum that the president of Harvard, Charles W. Eliot and his Committee of Ten wrote a now famous, some would say infamous, report. It is in this 1892 report that Eliot and his colleagues sought to set the first standardizations for secondary education. Included with such specifics as subjects to teach, time devoted to each subject, teacher training and improvement, they also gave their recommendations on what the purpose of the curriculum of the secondary school should be. In his book *America's Public Schools (From The Common School to "No Child Left Behind")*, William J. Reese generalizes their recommendations,

What the Committee of Ten basically argued was that the high school, which was likely to continue to enroll relatively few students, should not differentiate between pupils preparing for college and the majority preparing for life. Since few secondary students would attend college, college preparation was incidental to the high school's main purpose, intellectual and cultural training. (Reese 2005, p.185)

This report is considered by many the impetus of the debate between more conservative academic-centered curriculum and more liberal or progressive “practical” approaches. In order

to achieve the major purpose of this paper, that is, that an arts-based curriculum is viable and reasonable, it is important to try to establish that these approaches are not mutually exclusive. The author posits, for example, that the best way to learn a traditionally academic subject such as Shakespeare is to “experience” his work through dramatic performances, either through direct involvement or as an active observer rather than a solely academic approach. Or as Pestalozzi suggests, appeal to the head, the hands, and the heart.

It was during this time of radical growth in the late 19th and early 20th century that the existence of extra-curricular activities became a large part of the high school experience. Some of the most popular of these “clubs” centered around sports and the arts. It can be assumed that the introduction of these types of peripheral activities were at least an attempt at engaging the more diverse student body, giving many of the students a well needed respite from the mostly academic nature of their studies. As William J Reese wrote,

The social functions of the modern high school had to expand to weaken the iron grip of traditional academics. Schools had to better prepare adolescents for life, not for college, and the social side of going to school needed to grow, like student enrollments already had exponentially. (Reese 2005, p.189)

So the debate continued, was secondary school purely an academic institution as it had traditionally been set up and as the Committee of Ten suggest it continue? Or was its function more democratic, as Horace Mann had intended, in that it prepare all children for the complexities of life in the working world?

In 1918 another committee, appointed by the National Education Association, known as The Commission on The Reorganization of Secondary Education, gathered in order to hopefully

resolve and reconcile some of the conflicts between “academic” and “practical” curriculum in the secondary school system. This committee was led by Clarence D. Kingsley, the current Massachusetts state high school supervisor. Their goal was to create “a new focus that would take into account individual differences, goals, attitudes, and abilities. The concept of democracy was decided on as the guide of education in America.” This committee came up with what they termed the “seven cardinal principles of secondary education.” It is the attempted implementation of these principles, as an effort to teach the “whole child” that was at least partially inspired by the Europeans such as Pestalozzi, Froebel, and Herbart. This report, coupled with the then current, but not widely known philosophy of John Dewey and his progressive contemporaries, was profoundly influential in transforming the secondary or modern high school into the comprehensive educational institution we know today. These seven cardinal principles were

- Health
- Command of Fundamental Processes
- Worthy Home Membership
- Vocation
- Civic Education
- Worthy Use of Leisure
- Ethical Character

To summarize, by “Health,” the committee believed it was important that secondary schools should provide safe facilities and promote and instruct the students and the community in healthy activities and choices. Physical Education (P.E.) and extra-curricular sports were largely developed from this principle. The “Command of Fundamental” processes included the

traditional curriculum, that is, “the three R’s,” but stressed that these core subjects should be approached using the most modern “progressive” techniques. “Worthy Home Membership” “calls for the development of those qualities that make the individual a worthy member of a family, both contributing to and deriving benefit from that membership.” It was also stressed in the language of the report that this principle should be taught through literature, music, social studies, and art. The report goes on to say,

The social studies should deal with the home as a fundamental social institution and clarify its relation to the wider interests outside. Literature should interpret and idealize the human elements that go to make the home. Music and art should result in more beautiful homes and in greater joy therein. (Kingsley 1918, p.12)

The fourth principle, “Vocation,” attempted to address the need for the secondary schools to take on vocational training for the many students that would not pursue more “professional” fields of study, and to emphasize how this type of training could benefit the individual as well as society. There was much heated debate around this particular principle, largely due to the fact that other institutions such as the family and apprenticeships had traditionally imparted these skills to the next generation, and it was believed by many that this was not the role of the “academic” secondary school.

The fifth principle is summed up in the following quote from the report, “The main focus of the ‘Civic Education’ principle was to convey an appreciation of community and government and the importance of working together to reach a common goal, therefore developing empathy for others.”

The sixth principle, “Worthy Use of Leisure,” attempted to impart the positive use of what was then a new found “abundance” of leisure time, and discourage anti-social and potentially criminal behavior,

Education should equip the individual to secure from his leisure the re-creation of body, mind, and spirit, and the enrichment and enlargement of his personality. This objective calls for the ability to utilize the common means of enjoyment, such as music, art, literature, drama, and social intercourse, together with the fostering in each individual of one or more special avocational interests. (Kingsley 1918, p. 14)

The last principle, “Ethical Character,” “...involves instilling in the student the notion of personal responsibility and initiative. Appropriate teaching methods and school organization are the primary examples that should be used”

It should be reiterated at this point that the Cardinal Principles were primarily a call to the American school system to attempt to fully and fairly educate all of its citizens, whether their strengths be academic or vocational. These seven principles were meant to be unified in a cohesive curriculum that would theoretically truly provide what Herbart termed “Educational Teaching.” The sixth principle especially, Worthy Use of Leisure, underscores this ideal and helps paint a picture of schooling as an all-around endeavor, not just aimed at traditional, academic prowess, but to include an emphasis on the arts. Not so much an “art for art’s sake” philosophy, but arts for the individual, and therefore society’s sake.

It was just two years prior to the publication of these recommendations that another influential work would appear on the educational horizon, a work whose author’s philosophy had

much in common with the seven Cardinal Principles. John Dewey's *Democracy and Education* (1916) is considered by many the "progressive" education movement's manifesto, and Dewey himself is given much credit, or blame, for its profound impact on the American educational system.

Many critics, and even Dewey's supporters, often claim that Dewey's influence on American education is either overstated or understated, but regardless of his true influence, John Dewey must be acknowledged when discussing the history and curriculum of modern education.

Dewey's main ideas put forth in such works as *Democracy and education* (1916), *The Child and the Curriculum* (1905), and his first published work, based on his lectures outlining his experiences as the creator and driving force behind the University of Chicago's experimental Laboratory School, *The School and Society* (1898), were probably influential on, and certainly in alignment with, the primary goals of the Cardinal Principles. In fact, many of these common tenets were echoings of their European predecessors, Pestalozzi, Froebel, Herbart, and also Prussian school system disciple Horace Mann. Specifically,

- Importance of appealing to student interest
- Educational benefits of experiential or process-based learning
- Efficacy of group or community learning in teaching how to function, and contribute to a democratic society

It is the author's belief and a major tenet of the research, that these three principles are most effectively conveyed through an arts-based curriculum.

The following excerpts From Dewey's, *My Pedagogic Creed*, first published in *The School Journal*, Volume LIV, #3(January 16, 1887) articulate these three major ideas in Dewey's own words,

Appealing to student interest

...The child's own instincts and powers furnish the material and give the starting point for all education.... Without insight into the psychological structure and activities of the individual, the educative process will, therefore, be haphazard and arbitrary. If it chances to coincide with the child's activity it will get leverage... Education, therefore, must begin with a psychological insight into the child's capacities, interests, and habits. It must be controlled at every point by reference to these same considerations. These powers, interests, and habits must be continually interpreted - we must know what they mean.

(Dewey 1887, p. 4-6)

The educational benefits of experiential or process based learning,

I believe that education, therefore, is a process of living and not a preparation for future living. I believe that the school must represent present life - life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the play-ground.

I believe that education which does not occur through forms of life, forms that are worth living for their own sake, is always a poor substitute for the genuine reality and tends to cramp and to deaden. (p. 7)

The efficacy of group or community learning in teaching how to function and contribute to a democratic society.

I believe that the only true education comes through the stimulation of the child's powers by the demands of the social situations in which he finds himself. Through these demands he is stimulated to act as a member of a unity, to emerge from his original narrowness of action and feeling and to conceive of himself from the standpoint of the welfare of the group to which he belongs... (p.1)

These concepts were not only a large part of the “progressive” movement but were also embodied in the Cardinal Principles, and due to these principles, along with major changes in society as a whole, for which the Progressive movement and the Cardinal Principles were designed to address, the public secondary school was gradually transformed into the now familiar comprehensive institution, the modern high school.

Dewey, who is often referred to as “the father of progressive education”, felt that that title was more aptly conferred on his predecessor and colleague, Colonel Francis Wayland Parker. “Colonel” Parker had been using child centered teaching principles since, like Mann, he had made a pilgrimage to Europe and adopted many of the techniques developed by Pestalozzi and his followers. Wherein Mann’s influence had more of an administrative and structural influence, Colonel Parker brought this influence directly into the classroom. Similar to Herbart, Parker’s major European influence, Parker believed the most effective learning was developed from the student’s interests and actual experiences, and he used a variety of methods, including object lessons, and the integration of music and art to teach an integrated curriculum.

At a time when drawing was first appearing on the American pedagogical scene, Parker made art a central enterprise of the practice school, arguing that

modeling, painting, and drawing were modes of expression... So it was also with music, the drama... all were seen as vehicles for child expression; all began with what had meaning to the children themselves. The job of the teachers was to start where the children were and subtly lead them, through language and pictures, into the several fields of knowledge, extending meanings and sensitivities all along the way. (Cremin 1961, p.132-133)

Parker's "Quincy Method," named for the town in Massachusetts where Parker as superintendent of schools first applied these educational concepts, by all historical accounts was an unqualified success. Parker himself was somewhat modest in his assessment of this success and denied that there was a specific "Quincy Method."

I repeat that I am simply trying to apply well established principles of teaching, principles derived directly from the laws of the mind. The methods springing from them are found in the development of every child. They are used everywhere except in school. I have introduced no new principle, method or detail. No experiments have been tried, and there is no peculiar "Quincy System." (Cremin 1953, p. 245)

Whether it was a formal system or not, despite its apparent success, it was not without its critics. It would inevitably be accused, as would similar "progressive" programs in the future, of having an inherent lack of structure and discipline,

Parker's disclaimer's notwithstanding, there were continuing charges in professional circles that the Quincy plan was falsely grounded, unoriginal, and extravagant in its claims. And in the community itself there were constant complaints that education was being subverted and the fundamentals ignored. (Cremin 1961, p.137)

It was these types of criticisms, specifically the lack of structure and rigor, that John Dewey would address in his last major work on education, *Experience and Education*, (1938) In it, not only does Dewey reiterate and clarify his philosophies in an attempt to defend it to its critics, he is also critical of what many considered to be too much liberty in the progressive classroom. Dewey decries what he terms an "Either-Or," or all or nothing philosophy, the concept that education is either "traditional" (teaching from without, teacher based) or "progressive" (teaching from within, or child based). Dewey would propose a hybrid that would combine the two philosophies in order to best educate the student.

In the following excerpt Dewey characterizes what he sees as one of the main pit falls of "traditional" education,

How many came to associate the learning process with ennui and boredom? How many found what they did learn so foreign to the situations of life outside the school as to give them no power of control over the latter? How many came to associate books with dull drudgery, so that they were "conditioned" to all but flashy reading material. (Dewey 1938, p. 27)

On the other hand, the other extreme too often found in "progressive" education does not escape Dewey's scrutiny,

The problems are not even recognized, to say nothing of being solved, when it is assumed that it suffices to reject the ideas and practices of the old education and then go to the opposite extreme. Yet I am sure that you will appreciate what is meant when I say that many of the newer schools tend to make little or nothing of organized subject matter of study; to proceed as if any form of direction and guidance by adults were an invasion of individual freedom... (Dewey 1938, p.22)

Dewey remained a staunch believer in learning through experience and students having the freedom to interact with their environment in order to have these edifying and beneficial experiences, but also, that these experiences be organized and guided by the teacher, grounded in theory, and have specific learning goals.

Another profound influence on the secondary school curriculum in the early 20th century was a movement known as “scientific management.” This principle was also known as the “Taylor System,” because it was first introduced by Frederick Winslow Taylor, in his book *Principles of Scientific Management (1911)*. Although these principles were originally intended for improving the labor and production efficiency of corporations and factories, it was not long before its goals of lowering costs and increasing production became a part of the active curriculum reform movement of the time. Briefly, “According to Taylor there was always one best method for doing any particular job and this best method could be determined only through scientific study.” The Taylor method usually consisted of breaking any necessary task down to its most efficient and simplified processes, and eliminating any waste in either labor or materials. This “science” as far as public education was concerned initially had the most impact on the actual administration of the schools and resulted in such common terminology as the “school

plant,” and experiments such as the “Platoon” or “Factory” school, but eventually it would have an inevitable impact on the classroom and its curriculum.

In 1909 the former superintendent of schools in Puerto Rico, Leonard Ayers, published his criticism and theory on the main culprit of inefficiencies in the public school system, *Laggards in Our Schools*. In it, Ayers suggested a more diverse curriculum, but unlike his progressive contemporaries such as Dewey and Parker and later Gardner, Ayer’s reasons for advocating this type of diversity had less to do with improving the effective education of the individual by appealing to their unique interest and abilities, and more to do with “weeding out” the “laggards” who were gumming up the educational “works.” Ayers even went so far as suggesting dummying down, at least for some, the curriculum in order to facilitate the advancement of the less academically oriented student, and therefore making the school system more efficient. In order to identify these “laggards” the recently developed standardized or I.Q. test came into play as the panacea for determining the right curricular “track” for each student to take. These trends, and many others made up what Raymond E. Callahan termed “the cult of efficiency” in his seminal 1962 work, *Education and the Cult of Efficiency*. Callahan attributes the so-called failure of the schools not on, as many would, the “soft” pedagogy of progressive educators, but rather on the obsession with efficiency exemplified by excessive reliance on testing, and the cost cutting efforts that resulted in over-crowded classrooms and over-worked teachers.

Certainly it shows that there were other more powerful forces at work than “progressive education” in undermining the intellectual atmosphere of the American schools.

Efficiency and economy as important as they are must be considered in the light of the quality of education that is being provided. Equally important is the inefficiency and false economy of forcing educators to devote their time and energy to cost accounting. We must learn that saving money through imposing an impossible teaching load on teachers is, in terms of the future of our free society, a very costly practice.

(Callahan 1962, p. 263)

Callahan concludes his book with the following statement emphasizing the importance of a quality education in a modern democratic nation.

Until every child has part of his work in small classes or seminars with fine teachers who have a reasonable teaching load, we will not really have given the American high school, or democracy for that matter, a fair trial. To do this, America will need to break with its traditional practice, strengthened so much in the age of efficiency, of asking how our schools can be operated most economically and begin asking instead what steps need to be taken to provide an excellent education for our children. We must face the fact that there is no cheap, easy way to educate a human being and that a free society cannot endure without educated men. (Callahan 1962, p. 264)

In April of 1930, at the convention of the Progressive Education Association, a study was launched to address the concerns that the modern secondary school and its more progressive, diversified and less traditionally academic curriculum was not adequately preparing the minority college bound students. Actually, the greater concern within the delegation was not that a more progressive curriculum was inadequate, but rather that the majority of the nation's schools were not progressive enough, due in part because of these reservations.

In the course of the two-day discussion many proposals for improvement of the work of secondary schools were made and generally approved. But almost every suggestion was met with the statement,

Yes, that should be done in our high schools, but it cannot be done without risking students' chances of being admitted to college. If the student does not follow the pattern of subjects and units prescribed by the colleges, he probably will not be accepted.

(Aiken 1942, p.5)

Under these conditions not many schools were willing to depart very far from the conventional traditionally academic high school curriculum. They could not take chances on having their candidates rejected by the colleges.

Therefore, a study was launched. This study, that would become known as “The Eight Year Study” sought to prove that students exposed to a more progressive, diversified curriculum could compete at the collegiate level with their more traditionally educated counterparts, and if this could be shown, it was hoped that not only would progressive education methods be vindicated, but in addition more high schools would be willing to more fully implement this more comprehensive curriculum. This curriculum included a concentration on an integrated, arts inclusive approach. Wilford Aiken, in his 1942 book on the study, outlines the educationally beneficial findings, findings that clearly articulate the profound implications of this approach, as well as an explicit affirmation of the beliefs of the researcher.

This increasing emphasis upon the arts in their various forms is the result of clearer understanding of their importance in the lives of young people. Teachers who are close to youth say that

- Experience in the arts gives most boys and girls sheer enjoyment. Through making something with their hands students express themselves in media other than words. This gives genuine satisfaction especially to the one to whom words do not come easily.
- By doing, as well as by reading or listening, young people gain great satisfaction and grow in strength and self-reliance.
- Creative self-expression often provides release from emotional tension and promotes mental and emotional balance and health.
- Understanding and increased enjoyment come best through experience in self-expression.
- By discovering through experience certain problems in any one of the arts and trying to solve them, the pupil becomes a keener observer of professional works and has greater appreciation of them. (Aiken 1942, p.

These and other values are all emphasized in this statement by an arts teacher of unusual insight:

I see over and over again the need for self-expression. The change from indifference to vivid interest when the student changes from the passive to the active in a learning situation is inescapable. Moreover, in teacher-pupil planning groups the students themselves recognize this need- "This term's art survey was better than the last one because the students talked and took part, instead of just listening." In dramatizing and acting one can see eager satisfaction as this need is met. Also, self-expression in creative ways satisfies the needs of the imagination. This need is not found in the so-called

"creative type" of student only. Self-expression then, as I have seen it, satisfies the need to be active instead of passive, and also to say or paint or dramatize one's imaginings.

(Aiken 1942, p. 206)

The above findings are also consistent with, and emphasize the previously mentioned three major educational benefits of arts based curriculum:

- Appealing to student interest,
- The educational benefits of experiential or process based learning, and
- The efficacy of group or community learning in teaching how to function and contribute to a democratic society.

The Eight Year Study found that not only did students exposed to the more progressive, arts inclusive curriculum perform equally well on standardized testing, but they also matched and often surpassed students of the traditional curriculum in the university environment.

Unfortunately this validation and vindication of progressive, arts based curriculum was overshadowed by the Second World War, closely followed by the paranoia of the Cold War that included a McCarthy like suspicion of many progressive educational theories and its proponents. The launch of Sputnik in 1957 also initiated a conservative swing back to a more "back to basics" concentration on math and science and away from the "frills" of arts centered, or even arts inclusive approaches.

The next few decades would be characterized by an apparent struggle between more conservative back to basics educational philosophies, exemplified by such reports as *A Nation at Risk* (1983) and the occasional resurgence of child-centered philosophies as promoted by Herbart

Kohl in *The Open Classroom* (1969). The current NCLB program and its emphasis, perhaps over-emphasis, on accountability and standardized testing are in danger of becoming another “Cult of Efficiency.” It is the purpose of this paper to hopefully show that although a certain amount of accountability and standardized testing is necessary in modern public education, there is a potential sacrifice of quality if this is taken too far. The researcher believes that a “Golden Mean” can be attained, as John Dewey suggested, by utilizing the educational benefits of arts inclusive curriculum, but also maintaining teacher control and guidance, and clear and attainable standards and goals.



CONCORDIA
UNIVERSITY

Chapter Three

Literature Review

In organizing this chapter and to remind the reader the purpose of the research, that the arts such as drama as well as music and other fine and performing arts should not be relegated to the margins of the purely extra-curricular and should remain a part of the core subjects, it might be beneficial to return to the previously stated three major educational advantages of an arts based curriculum,

- Appealing to student interest
- Educational benefits of experiential or process based learning
- Efficacy of group or community learning in teaching how to function and contribute to a democratic society.

It is the author's contention that these learning goals are very likely best addressed by arts inclusive, if not art's centered, curriculum.

The author will initially discuss the major arguments for appealing to student interest with an article from Joseph Watras, who indeed acknowledges the importance of appealing to student interest, while also conceding the complexities of the issue, and that there is no single approach or solution .

In Watras's 2004 journal entitled *Changing Ideas about Student Interest*, the author explores the historical background and ramifications of the attempts of educators to tap the

educationally beneficial aspects of appealing to student interest, as well as some of the criticisms to which these progressive educators would be subjected.

The article begins in 1980 with the election of Ronald Reagan and his administration's agenda to improve the "failing" school system. This resulted in the appointment of the National Commission on Excellence in Education and their consequent 1983 report, *A Nation at Risk*. This report recommended higher standards in graduation requirements, and more emphasis on traditional academic courses for entrance to the university. Watras continues, that several years after these recommendations were implemented, there were three major reasons these so called "higher academic standards" failed to achieve their goals of increasing effective academic instruction,

First, school districts offered courses that sounded academic but were not. Second administrators assigned teachers unfamiliar with the subjects to teach the newly instituted academic courses. Third, teachers did not explore ways to teach academic material to less able students; they depended on lectures and texts to convey the material. (Toch 1991 in Watras 2004, p. 129)

Watras goes on to describe Toch's ambitions to address a solution to some of these key issues, "Toch found himself favoring the aims of the excellence movement. He wanted to find a way to fuse the desire for academic excellence with the earlier aims of making schools fun for kids" Watras suggests that Toch provides another proponent for fusing the goals of higher academic achievement among students, and using the somewhat historically maligned progressive techniques to inspire student's interest, by making lessons experienced based (fun) in order to meet these goals.

According to Watras, while the goals of the commission were largely lauded by the educational community, the old scapegoat “progressivism” was cited by some as the main contributor to the current educational malaise. Watras cites, arguably the most noted example of this belief, in Diane Ravitch’s 2000 book, *Left Back: a Century of Battles over School Reform*,

Diane Ravitch complained that professional educators began in the early years of the twentieth century to identify with the progressive educational movement. To Ravitch, this was a serious error because she believed the progressive movement disparaged intellectual activities and favored anti-intellectual innovations catering to student interests or social needs. (Watras 2004, p. 130)

Watras also notes the contradictory position that Ravitch and others of similar views take when they harshly criticize and attempt to remove and alienate themselves from the progressive movement and its ideologies and methods, an example of what Dewey termed the “Either-Or” school of thought,

In her complaint, Ravitch argued that academic study was socially useful and that challenging academic studies could be fascinating. Thus, she seemed to want academic teachers to do the same things she claimed the progressives were wrong to have tried to do; present socially useful information and cater to students’ interest. (Watras 2004, p. 130)

Watras seems to agree with Dewey that these approaches need not be mutually exclusive in making the case that applying the method of appealing to student interest could be effectively utilized in traditionally academic subjects, despite the somewhat biased recommendations of

“throwing the baby out with the bath water” or again the “Either-or” approaches of Ravitch and other anti- progressives.

Watras’s journal returns to the turn of the century in reflecting on the NEA’s Committee of Ten’s famous report and some of the criticisms of its mostly academic centered philosophies. One of the report’s critics of the time, Charles DeGarmo again makes a case for applying student interest as well as the efficacy of group or community learning, and the art’s effectiveness in doing so.

...children had to be interested in what they study in order for the lessons to influence their conduct. This interest came naturally from the pleasure associated with learning something new, from the joy in finding the cause for some event, from the delight in contemplating beauty, and most important from the satisfaction of cooperating with other people. (Watras 2004, p.131)

Another conflict Watras explores in the article is whether it is most educationally beneficial to appeal to the child’s interests that are brought with him into the classroom, or if it was more efficacious for the teacher to inspire interest in the subject matter once the students had entered the classroom. Boyd Bode, the author of *Progressive Education at the Crossroads* (1938) was a proponent of this later approach,

He noted that educators could no more find out what children should learn by studying their interests than an architect could determine how to design a building by studying the material that would go into its construction...the way out of the problem was to realize that the environment of the children conditioned their interests. (Watras 2004, p.132)

This environment was and is primarily the responsibility of the teacher and the administration of the school. This was meant to address the common concern with progressive education techniques being *too* child centered, in that, the child's interests potentially dictated to the instructors and the school the curriculum and classroom environment. Again a more effective way to deal with this issue, the author believes, than dispensing with these interest inspiring techniques, would be to make certain clear teacher established standards and goals are maintained.

Jerome Bruner, author of *The Process of Learning*, according to Watras, was another skeptic in regard to designing curriculum to appeal to interests the student's brought into the classroom, like Bode he felt the curriculum should generate the interest and compel the students to learn.

The important point is that Bruner believed he could capture the children's interest with strictly academic lessons. The interests came when the children discovered the fundamental ideas on their own. This led to a thrill of feeling their minds functioning fully and they stayed on the tasks longer than they would for any other reason. (Watras 2004, p.133)

One of the most obvious pitfalls of relying primarily on the subject matter and the teacher's presentation of that subject matter, according to Watras, is the difficulty of finding teachers expert enough in their discipline and charismatic enough to convey that knowledge in order to inspire student interest. This also seems to be a debate over form versus content, Bruner seems to suggest that well presented content should be enough to inspire interest. The researcher

would posit that framing lessons in an art's context would even more effectively serve this purpose.

Watras in his conclusion also recognizes the complexity of the student interest issue,

If it is true that human interests are complex, it may be impossible to retain academic integrity while building on student interest. The interest must move in so many different directions and follow such a multitude of laws that curriculum planners could not think of ways to build lessons on them. (Watras 2004, p.134)

Watras concludes this journal with the following observation and criticism of Diane Ravitch's tendency to simplify this complex issue by adopting the "Either-or" approach and vilifying progressive educators and their approaches "Unfortunately, it appears that authors such as Ravitch want to separate themselves from the types of teaching they dislike. As a result, they ignore the complex problems that educators share."

In summary, Watras makes the point through presenting several viewpoints on the subject of student interest, that there are many beliefs and approaches, and even disagreements on its efficaciousness or even whose responsibility it is to bring to the classroom, but that ultimately it is a valuable tool to promote genuine learning and most certainly does not conflict, and in fact very likely enhances academic goals.

In continuing to discuss,

- Appealing to student interest
- Educational benefits of experiential or process based learning

- Efficacy of group or community learning

The subject of Howard Gardner and his theories of Multiple Intelligences (MI) cannot, and should not, be neglected. The reader will remember from the introductory chapter that Gardner is the American psychologist who developed the theory of Multiple Intelligences or simply put, that an individual's intellectual capacities were formed of not one or two integrated intelligences but were made up of several autonomous intelligences. Gardner originally identified seven of these in his ground breaking work *Frames of Mind*, (1983).

These were,

- verbal-linguistic
- logical-mathematical
- spatial
- bodily- kinesthetic
- musical
- interpersonal
- intrapersonal

Gardner would later add naturalistic intelligence to this list and suggests there may be others.

In 1996, thirteen years after the publication of *Frames of Mind* in which Gardner would first propose his theories, Gardner wrote *Probing More Deeply into the Theory of Multiple Intelligences*. In it, he attempts to address some of the misinterpretations and erroneous applications of his theories in the field of education. The following are some of the specific misinterpretations cited.

An intelligence is the same as a domain, discipline, or craft Gardner reminds, “Any domain can use several intelligences, and any intelligence can be drawn upon in numerous domains.” Another misconception noted, “There is an official Gardner or “MI approach” to schools.” Gardner expresses in no uncertain terms that “There is not such an approach, and I hope there never will be.” And finally that, “MI theory is not based on empirical data.” Gardner does not mince words in his rebuttal to this misconception, “This nonsensical view could not be held by anyone who has ever spent more than five minutes skimming through the book.”

(Gardner 1996, p.2)

Gardner concludes this litany with what he feels is the most erroneous misconception of all, a misconception that is reminiscent of criticisms leveled at many of the progressive educators earlier in the century,

That is a belief that I favor an un-rigorous curriculum, one that spurns the standard disciplines, hard work and regular assessment. Nothing could be further from the truth. I am actually a proponent of teaching the classical disciplines and I attempt to adhere to the highest standards, both for others and for myself. Unlike many readers, I see no incompatibility whatsoever between a belief in MI and a pursuit of a rigorous education. Rather, I feel that only if we recognize multiple intelligences can we reach more students, and give those students the opportunity to demonstrate what they have understood.

(Gardner 1996, p. 3)

This passage once again reminds us that when appealing to a student’s aptitudes, interests, or “intelligences” that rigorous standards and traditionally academic goals need not be abandoned.

It should be remembered, like John Dewey, Gardner's main vocation is not in education, he is primarily a psychologist. However, also like Dewey his best known works arguably have their most profound applications in the education field. Aware of this, Gardner suggests what he believes is a primary purpose and application of M.I. theory in education, a purpose that is reminiscent of Dewey, "The challenge confronting educators is to figure out how to help individuals employ their distinctive intellectual profiles to help master the tasks and disciplines needed to thrive in the society"(Gardner 1996, p.4).

Gardner reminds us in this article that these intelligences are more or less autonomous and that it is important for the teacher to avoid attempting to teach to an "all-purpose" intelligence, such as the more arguably academic verbal-linguistic or logical-mathematic, but rather a more varied and rich approach,

Intelligences only come into being because the world in which we live features various contents, among them, the sounds and syntax of language, the sounds and rhythms of music, the species of nature, the other persons in our environment and so on... There is in the last analysis, no generalized memory. There is memory for language, memory for music, memory for spatial environments, and so on. (Gardner 1996)

It is in acknowledging this complexity of the human mind that Gardner implicitly, if not explicitly, makes the case for a varied curriculum that not only includes the arts, but employs their unique ability to stimulate and encourage these varied intelligences. Ultimately, Gardner believes that it is the role of the educator to discover how best to utilize M.I. theory in the classroom.

A concrete example of this utilization of Gardner's theories is presented in Kimberly C. Gray and Jan E. Waggoner's article, *Multiple Intelligences Meet Bloom's Taxonomy* (2002). In it the authors explore the educational efficacy of combining Gardner's M.I. theory with one of the most respected lesson planning and standards inclusive tools of *Bloom's Taxonomy of Educational Objectives: Cognitive Domain*, or more widely known as Bloom's Taxonomy. In the support of Gardner's theories being used in school, Gray and Waggoner state that,

In case studies of six diverse public schools...that had used MI for five years or longer, researchers found that using MI boosted basic skills at all grade levels, regardless or whether a school is large or small, rich or poor, inner-city or suburban. Students consistently outperformed peers in their districts, counties, and states, as well as nationally on recognized state assessments and standardized tests. (Gray & Waggoner 2002, p.185)

The educational merits of "threading" the more experimental Multiple Intelligence theory through the universally respected and accepted Bloom's Taxonomy, seemed obvious to Gray and Waggoner, this resulted in the matrix seen below,

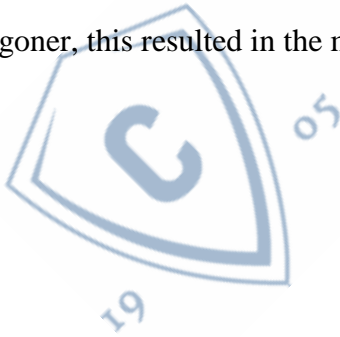


Figure 2

Multiple Intelligences: Threaded through Bloom's Taxonomy

	Verbal/ Linguistic	Logical/ Mathematical	Visual/ Spatial	Musical/ Rhythmic	Bodily/ Kinesthetic	Naturalistic	Interpersonal	Intrapersonal
Evaluation	recommend verify	assess measure test rank value	critique appraise	critique judge rate	select measure rate	measure select test	defend argue support	evaluate validate
Synthesis	propose synthesize compose	build combine translate formulate	create design invent organize	create produce compose	invent make up construct assemble	organize reconstruct	present summarize	imagine integrate
Analysis	criticize relate question	analyze infer deduce	compare contrast diagram	differentiate distinguish classify	separate diagram sort take apart	sort discover examine categorize	debate draw conclusions	determine simplify
Application	communicate discuss derive	solve prove compute convert	illustrate apply chart	perform produce	demonstrate construct dramatize	record investigate keep records	translate interview discuss	interpret model plan
Comprehension	explain infer describe	simplify account for express	code group locate	recognize show	express locate	group classify recognize	paraphrase report	interpret review
Knowledge	name define state	label find list	select write	state recite	label select	name find identify	recognize quote	memorize know recall

The authors then suggest three steps in planning and designing effective lessons that utilize this matrix and, therefore, achieve the desired goal of improved academic achievement by engaging higher level thinking skills through the combined use of Bloom's Taxonomy and Multiple intelligence theory, these are,

- Select content--consult the standards and curriculum guides.
- Use the matrix-- select Bloom's cognitive level and use MI for methods to teach classroom activities.
- Design products assess the cognitive level and choose MI activity. (Gray & Waggoner 2002, p.185)

Gray and Waggoner then present an example lesson plan that is constructed using this method. In their example, a core curriculum social studies lesson, they note “that this one plan uses verbal/linguistic, musical, interpersonal, and intrapersonal intelligences, encourages higher-order thinking skills, and meets several curriculum standards.” With the possible addition of a creative drama aspect within the lesson, they could add bodily-kinesthetic and spatial to intelligences accessed in the lesson.

The Matrix presented here provides educators with a teacher friendly visual tool that can be used easily to ensure that students explore content, honor diversity and support M.I. By using the matrix to maximize their time, teachers can differentiate instruction in their classrooms to enable students to learn as deeply as possible. (Gray & Waggoner 2002, p.187)

This unique application of M.I. theory through the already familiar Bloom’s Taxonomy is potentially a very effective way of merging academic scholarship and higher level thinking skills through utilizing an arts related content. The matrix also provides a simplified tool for teachers, as well as a document to show that these types of lessons are addressing standards and cognitive skills, and not just providing “entertainment.” This type of “documentation’ is also an important example of accountability as well as an effective rebuttal to criticisms that these types of lessons are not academically grounded or structured.

Of course, not all educators feel the MI approach is the most effective way of getting the most educational benefits from a lesson utilizing for example, a creative drama context. In *Howard Gardner: Knowledge, Learning and Development in Drama and Arts Education*, the authors Bill Roper and David Davis attempt to “probe the usefulness of Gardner’s approach”

specifically in a Dramatic Arts context. This attempt is made manifest in the body of the journal in a kind of compare and contrast between a Gardner M.I. approach and its assumptions on predetermined internal or a priori “intelligences” and the more empirical approach of L.S. Vygotsky, the developer of “the zone of proximal development” and his emphasis on a more external mentor/student relationship. The authors’ apparent bias is revealed in the following statement prior to this exploration,

Thus Gardner appears to dismiss any notion of humanizing education with all its social, political and historical dimensions, instead replacing it with the task of meeting a set of intelligences, domains and disciplines sanctified by an amalgam of cognitive science and a distillation of Readers Digest type biographies. This is then packaged as an educational philosophy dedicated to the development of individuality and specifically marketed to appeal to the middle classes. (Roper & Davis 2000, p.225)

Roper and Davis employ a lesson from Saxton and Miller’s 1996 book, *Drama Matters*, and its example lesson of a second grade class’s pond study that “they (Saxton and Miller) suggest could serve as a benchmark example of the valuable role drama can play in preparing children to be part of the current globalization.” The authors then outline what they consider the main goals and or objectives of the lesson, and which of the two hypothetical approaches, Gardner or Vygotsky, more effectively teach these,

...combining knowledge of pond life with key concerns of how to prepare young people to deal with often conflicting priorities in a period of rapid global change, rather than focusing on symbol systems, which is what a Gardner approach would seem to demand.

In fact one can conjecture that this whole theme would be unlikely to have been seized on

for its learning possibilities in a Gardner approach, but as a means of developing performance skills and knowledge of the symbol systems that the children are being inducted into. (Roper & Davis 2000, p.229)

This criticism of what Roper and Davis seem to conjecture as a loss of educational opportunity in the “Gardner approach” is expanded on later in the article,

The very focus on symbolic forms would take priority over the pedagogic aims as they are presented in the original description of the drama. Again what needs stressing is that such interesting material might not have been chosen at all if working from a Gardner perspective, as this presupposes a key interest in content rather than form. (Roper & Davis 2000, p. 229)

It is obvious the authors prefer the Vygotsky methodology and its supposed concentration on the content of the lesson, that is learning about pond life and how to communicate and deal with conflict in a globalized society, as opposed to what they assume is the Gardner emphasis on the symbols and conventions of drama itself. Or, in other words, the authors seem to hold that a more “process” oriented drama is more educationally relevant than a drama that is developed in order to be performed, “by process drama is meant a combination of forms of drama activity where central purpose is for the experience and learning of those participating rather than working toward a performance.” Again Roper and Davis seem to be falling into Dewey’s “Either-or” trap, the researcher believes that there is much valuable learning in the communal “process” of working together in order to complete an artistic production for performance, and in that process you have engaged the students by appealing to their interest, involved them in a hands on experiential learning environment, as well as given them an opportunity to work

together in order to achieve a unified goal. Elliot Eisner, who we will discuss at length in the next section, disagrees strongly with Roper and Davis' apparent view that "the play is not the thing" and would argue that this artistic aspect and form of the lesson is equally important and should not be subordinate to the more academic content aspects of the lesson.

It might be a helpful segue from Gardner to Eisner to begin with an article by Elliot Eisner on what he views as a conflict between Gardner's MI theory and its possible applications to the school curriculum, and contemporary reforms that concentrate on standardized testing. In his article *Multiple Intelligences: Its Tensions and Possibilities* (2004), Eisner points out some of the inherent contradictions between appealing to students' unique aptitudes and abilities as promoted in MI theory, and the methods and goals of the standardized testing movement. Eisner describes this seemingly insurmountable contradiction in the following passage,

We are much more concerned with standardization and homogenization than with the cultivation of variance in a group's performance. Our anxieties about the performance of our students in our schools lead to remedies that stress uniformity of content, uniformity of assessment procedure, uniformity of outcome...If schools use different curricula or differentiate programs for students on the basis of their distinctive intelligences, the ability to make meaningful comparisons across students, classrooms, schools and school districts is compromised. Again uniformity makes comparability possible, and common tests provide the data through which such comparisons can be made. (Eisner, 2004 p.33)

Eisner makes the parallel between the modern standardization and accountability school reform movement and the prior century's "Cult of efficiency" discussed briefly in the previous chapter.

Eisner gives an example of the creative stagnation and educational tediousness this dated approach can lead,

...while this movement is in play, there is a strong policy push to keep practices and outcomes in line, to replay the efficiency movement if not in every detail, in spirit. For example, some approaches to the teaching of reading not only tell teachers what students should say after a question is posed to them but also prescribe to teachers the way in which those questions should be raised...such a culture leaves little space for professional innovation. All too often the teacher becomes a handmaiden to the tests whose scores provide the basis on which teachers, schools and students will be judged. Thus the irony of a conception of multiple intelligences that acknowledges, and indeed embraces, the cultivation of diversity in schools while schools are driven by policies that provide increasingly little space to pursue the vision that multiple intelligences adumbrates. (Eisner 2004, p.34)

Eisner articulates in the preceding passage one of the negative impacts of what is often termed “teaching to the test.”

As an arts educator, a core concern of Eisner’s is what he views as a marginalization of the arts in schools. Eisner feels that at least part of this marginalization can be attributed to standardized testing. This is apparently due to the fact that in this era of federal accountability and testing, the curriculum is primarily based on teaching mastery of these tests and the arts are not, or perhaps cannot be part of these types of tests. Eisner suggests the only way to change this focus is to change the culture to value the arts more and consequently find ways to include assessments in these tests for the arts disciplines.

Another way Eisner feels the arts are marginalized is discussed at length in his article *Getting Down to Basics in Arts Education* (1999). In this article Eisner refutes the somewhat popular notion among arts curriculum and MI theory advocates that the arts provide a kind of panacea for learning and student achievement. In fact, Eisner makes the case that we are doing a disservice to the arts and their unique contributions to individual's learning, when we merely apply them as, if you will, a kind of sugar coating to the more traditional core subjects. Eisner suggests that when the arts are used in this way, they automatically become subordinate to these subjects and therefore become marginalized, or part of the extra-curriculum at best, when they should be regarded as part of that core. In the following passage Eisner uses the discipline of music to illustrate this concept,

...that music is an art and that the arts have consequences for our lives that need not be justified by their contributions to achievement in other subjects, even those as seemingly important as computer literacy, geometry, or basic reading skills. Music matters because of what it does to and with experience, by the way it helps us explore, as he says, the possibilities of our subjective life. (Eisner 1999, p.145-46)

Eisner then continues in the article to show that no major scientific study has proven that an exposure to arts courses and/or more arts inclusive or inspired lessons leads to higher academic achievement in other subjects, primarily math and science, and higher standardized test scores. Eisner does however cite some studies that show significant improvement in reading and writing ability after exposure to the arts. Eisner's primary concern here is that educators, and in particular arts educators, do not fall into what he terms "a give the people what they want" mentality by promising results that the arts cannot and should not be expected to deliver.

Eisner returns to his main point, the potential of doing the arts as a scholarly subject “more harm than good” when regarded primarily as an avenue to teach more “important” subjects,

...to use the arts primarily to teach what is not truly distinctive about the arts is to undermine, in the long run the justifying conditions for the arts in our schools. When arts educators accede to their expectations it’s a way of saying, “You’re right, the arts are not really important in their own right. Their importance is located in their contributions to more important subjects.” (Eisner 1999, p. 153)

Eisner then focuses on the inherent educational value of the arts as a separate discipline. In attempting to do this, Eisner first presents what he considers the three tiers or contributions of arts education. These are,

- Arts-based Outcomes of Art Education
- Arts-related Outcomes of Arts Education
- Ancillary Outcomes of Arts Education

The first of these tiers is concerned with what specifically the particular arts subject is designed to teach, Eisner provides us with the following examples,

...if an aim of a curriculum is to enable students to hear and be able to talk discerningly about the form and content of a piece of music...or a play by Tennessee Williams, an arts-based assessment would disclose the extent to which those outcomes...were achieved. Such outcomes reside in perceptions and discourse unique to the arts. (Eisner 1999, p.153-54)

He then describes the second tier and how it differs from the first,

...arts courses that enable students to notice and respond to the aesthetic configurations of phenomena such as cloud formations, the dynamic flow of a city street, the cacophonies of a city during rush hour are examples of Arts-related Outcomes of Arts Education...A critical difference between the two is that (an artist) works with a tradition, ...has intentions,...has something to say that she herself, working within her tradition, both constrains and makes possible. Trees, to consider a work of nature, have no intentions as far as I know, participate in no tradition save their own genetic necessities, and provide no symbolic meaning except those we assign. The difference between works of culture and works of nature is critical. Arts-based Outcomes pertain to those outcomes that require an understanding of the culture and the personal side of the artist's work.

(Eisner 1999, p.154)

The final tier Ancillary Outcomes, "those outcomes like the effects of arts education on student performance in reading, math, or other academic subjects" are the outcomes Eisner fears are the main justification and rationale for any kind of arts education, and that concentration on these outcomes Eisner warns us, have the potential to rob the arts of their important and unique contributions to the education of the student. Eisner proposes that the best way to avoid this potential pitfall and marginalization of the arts is to concentrate on what the arts can uniquely teach. He attempts to illustrate this through the identification of "outcomes" of the first two of the previously mentioned three tiers of arts education, Arts-based and Arts-related outcomes.

- Students should acquire a feel for what it means to transform their ideas, images, and feelings into an art form

- Arts education should refine the student's awareness of the aesthetic qualities in art and life
- Arts education should enable students to understand that there is a connection between the content and form that the arts display and the culture and time in which the work was created
- Arts education provides a willingness to imagine possibilities that are not now, but which might become, a desire to explore ambiguity, to be willing to forestall premature closure in pursuing resolutions, and the ability to recognize and accept the multiple perspectives and resolutions that work in the arts celebrate

What a rich potential for engaging the much sought after higher level creative thinking skills, as well as a phenomenal example of the three proposed benefits of arts education, that is, appealing to student interest that is inherent in working with and within an art form, active experiential learning that is necessary in creating as well as experiencing and interpreting art, and finally communal and problem solving skills as exemplified by the last two outcomes.

Eisner, in his conclusion to his article *Art's Education Policy* (2000) reflects on Gardner, his own, and other's work and their present and future impact on education in general and more specifically, arts education and its potential to unlock and expand the development of creative and higher level thinking skills,

...growing interest in the forms of thinking that the arts promote. Theories of multiple intelligences (Gardner 1983) research on the effects of music (Rauscher 1993). My own work on forms of representation and their relationship to modes of cognition (Eisner 1994)...and other theoretical contributions have tended to promote a more complex,

pluralistic conception of mind. The times seem receptive to the possibilities of the arts as a way not only to enrich human experience in its own right. But also to promote the development of what might be too narrowly called mental skills. (Eisner 2000, p.6)

Daniel Pink, bestselling author of *A Whole New Mind* (2005), should be added to this list of researchers who believe that the future belongs to the creative thinkers. In the following section we will explore his ideas and their potential impact on art's education.

In the recent New York times bestseller, *A Whole New Mind, Why Right Brainers Will Rule the Future*, author Daniel Pink purposes the theory that the aptitudes and skills found and controlled primarily in the right hemisphere of the brain, are the aptitudes that will be more useful and therefore more valued in future society.

The future belongs to a very different kind of person with a very different kind of mind, creators and empathizers, pattern recognizers, and meaning makers. These people, artists, inventors, designers, storytellers, caregivers, counselors, big picture thinkers will now reap society's richest rewards and share its greatest joys. (Pink 2005, intro)

The right hemisphere of the brain is the seat of creative and artistic aptitudes, as well as the part of the brain that is capable of the higher level thinking skills of synthesis, use of metaphor, contextual thought, and aesthetic sense. These capacities, the reader will recall, are processes that are part of what Eisner termed Arts Related and Arts Based outcomes, the type of outcomes that utilize these higher level skills that are directly derived from lessons and instruction centered on the Arts.

Pink gives his rationale for what he refers to as a shift from the importance of “knowledge workers” in the current, but according to Pink, passing “Information Age”, and the approaching ascendancy of “creators and empathizers” in what he terms the “Conceptual Age”. According to Pink this shift is the result of three major factors, the three A’s, Abundance, Asia, and Automation,

- Abundance- the modern consumer has so many affordable choices that goods and services must distinguish themselves creatively, aesthetically, and perhaps even spiritually
- Asia- more and more routine computer and customer service jobs will be outsourced to other parts of the world, forcing workers “to command a new set of aptitudes. They’ll need to do what workers abroad cannot do equally well for much less money, using R-Directed abilities such as forging relationships rather than executing transactions, tackling novel challenges instead of solving routine problems, and synthesizing the big picture rather than analyzing a single component”
- Automation- as computers become more and more sophisticated replacing routine “Knowledge Worker” jobs, importance will necessarily be placed upon uniquely human creative and empathetic skills (Pink, 2005)

Therefore the implications on education is clear, if these higher level creative and empathetic thinking skills should, and apparently must be developed in order for students to compete in the modern world, what is the best way to engage and develop these skills? The

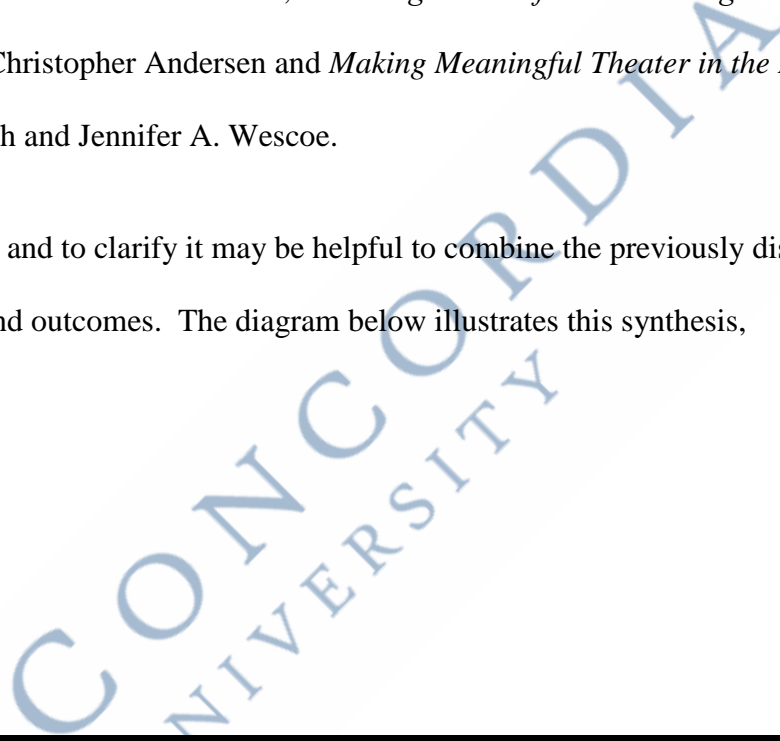
answer of course is arts education. To more fully illustrate this correlation let us present what Pink describes as the “Six Conceptual Age Senses.” These are,

- Design—“It’s no longer sufficient to create a product, a service, an experience, or a lifestyle that’s merely functional. Today it’s economically crucial and personally rewarding to create something that is also beautiful, whimsical, or emotionally engaging.”
- Story—“The essence of persuasion, communication, and self-understanding has become the ability also to fashion a compelling narrative.”
- Symphony—“What’s in greatest demand today isn’t analysis but synthesis, seeing the big picture, crossing boundaries, and being able to combine disparate pieces into an arresting whole.
- Empathy—“What will distinguish those who thrive will be their ability to understand what makes their fellow woman or man tick, to forge relationships and to care for others.”
- Play—“...too much sobriety can be bad for your career and worse for your general well being. In the Conceptual Age, in work and in life we all need play.”
- Meaning—“We live in a world of breathtaking material plenty. That has freed hundreds of millions of people from day to day struggles and liberated us to pursue more significant desires: purpose, transcendence, and spiritual fulfillment.” (Pink 2005, p.65-66)

Although Mr. Pink gives many examples of how the individual may develop these *senses* his intended audience, unlike most of the previous authors, are not those in the education field.

For our specific purposes the researcher would like to explore these “senses” and at the same time return to our three purposed *benefits* of an arts centered curriculum, *engaging student interest*, *experiential learning*, and *communal learning*, as well as consider Mr. Eisner’s Arts-based and Arts-related *outcomes* through exploring how these specific elements can be engaged in the discipline of Dramatic Arts in the articles, *Learning in “As-If” Worlds: Cognition in Drama in Education* by Christopher Andersen and *Making Meaningful Theater in the Empty Space* by Joseph M. Shosh and Jennifer A. Wescoe.

As a reminder and to clarify it may be helpful to combine the previously discussed benefits, senses and outcomes. The diagram below illustrates this synthesis,



	Student Engagement (Aesthetics)	Experiential Learning (Doing)	Communal Learning (Synthesis)
Eisner’s Outcomes	Arts education should refine the student’s awareness of the aesthetic qualities in art and life.	Students should acquire a feel for what it means to transform their ideas, images, and feelings into an art form.	Arts education should enable students to understand that there is a connection between the content and form that the arts display and the culture and time in which the work was created. Arts education provides a willingness to imagine possibilities that are not now, but which might become, a desire to explore ambiguity, to be willing to forestall premature closure in

			pursuing resolutions, and the ability to recognize and accept the multiple perspectives and resolutions that work in the arts celebrate.
Pink's Senses	Design Story Play Meaning	Design Story Play	Story Symphony Empathy Meaning

In the aforementioned two articles, the most striking and significant difference between the two is the focus on type of drama learning. In Mr. Andersen's article the focus is on process oriented drama, while Shosh and Wescoe focus on product oriented drama. Anderson in his article describes the differences,

...drama in education (process) differs from theater that is performed as scripted dialogue on a set in front of an audience...as a result these dramas do not sharply distinguish between actor and audience; the learner is both participant and observer, playing in a role while interacting with others in a role...In drama in education, the process is the end in itself. The learning emerges out of choices and decisions made during the development or improvisation. (Andersen 2004, p.282)

The primary educational benefit that Andersen believes is derived from the implementation of what he terms “drama in education” is what he refers to as an “as-if” recreation of “situating learning within authentic context” or in other words, if you cannot bring the students to the laboratory, recreate the laboratory within the classroom using a dramatic “as-if” scenario.

Drama frames can be constructed with essential elements of authentic contexts, thereby bringing the laboratory (or studio, archeological dig, and so on) to the classroom. Though obviously not identical to its real life referent, the frame’s inclusion of essential elements from the authentic context may be a sufficiently effective simulation that situated learning is supported. (Andersen, 2004)

Andersen lists six benefits of this type of situated learning,

- *Acquiring implicit knowledge*, uses situated learning to promote the acquisition of the implicit knowledge of a practice
- *Grounding theoretical knowledge*, ...when new knowledge arises from within an authentic context...skepticism is reduced and learning is perceived as more meaningful
- *Learning in everyday rather than academic contexts*, by situating learning within a context similar to that in which it will be applied later avoids being isolated with school acquired knowledge and becomes accessible for solving real world problems
- *Facilitating transfer across domains*, transfer of concepts and skills from one context to another

- *Acquiring habits of mind*, using habits of mind in a meaningful setting rather than just studying about them
- *Changing motivation*, knowledge is acquired to solve problems, build explanations for phenomena, and satisfy intellectual curiosity. As a result students have a personal commitment to the learning. (Andersen 2004, p.283)

In looking at the above it is fairly clear that the three benefits of *engagement*, certainly *experiential learning* and perhaps to a lesser degree *communal learning*, are all engaged in this approach in using drama as a teaching tool to present other subject matter. However, some might say, Elliot Eisner for instance, that the real value of the arts and their ability to stimulate some of the more profound higher level thinking skills such as the uses of synthesis, aesthetics, metaphor and so on, as well as some of Pink's Conceptual Age Senses, are not fully utilized unless one concentrates on the art form itself as the subject matter.

In *Making Meaningful Theatre in the Empty Space*, authors Shosh and Wescoe illustrate the potential ability of the focused study and participation in an art form. In this case, drama, or more specifically the production of a play, to create unique and meaningful learning experiences for those involved. The authors take the reader through the various steps in producing a school play. In the article a student describes the differences in reading a play in class and actually rehearsing and performing it on stage:

To me, reading a play in class is one dimensional. Performing, on the other hand is as three dimensional as someone can get. It may be the same story, the same plot all the same characters, but a new element arises when you step foot on that stage and enter your character's environment. (Shosh & Wescoe 2007, p.43)

It is pretty clear that the benefits of engagement, experiential learning and many of their ancillary “outcomes” and the developing of “conceptual age senses” are intensified in this more specifically arts focused approach. An example of communal learning and synthesis is presented in this section of the article, “Having cast members involved in all facets of play production helps them to care more about the success of the company as a whole and develops a sense of respect for that which they might otherwise take for granted.” (Shosh & Wescoe 2007, p.43)

Also, in this process of producing a play, both a process and product are emphasized, so there is the added benefit of avoiding the “Either-or” trap. In the process of play production and performance all of the benefits, outcomes and senses are engaged. Along with engagement, experiential learning and communal learning, all of Eliot Eisner’s Arts Related and Arts Based outcomes are clearly evoked as well as all six of Pink’s Conceptual Age Senses; Design, story, symphony, empathy, play, and meaning.

The researcher believes the case is clearly made that the play is indeed the thing, and although the researcher would not discourage using the arts to teach across the curriculum, it is important that specific arts disciplines such as drama, music and other fine and performing arts are not, as they too often are, relegated to the margins of the purely extra-curricular, but take their proper place and hopefully remain an integral part of the core curriculum.

Chapter Four

Conclusion

In researching the question, “Why should, and how could, the arts be integrated into the core secondary curriculum to enhance learning?” It has been clearly established that including and integrating the arts into the general curriculum can and does affect learning in profound and positive ways. The researcher has discovered that it appeals to a variety of student interests and therefore engages the student in active learning. The researcher also has found that working with and within an art form is one of the best ways to involve students in the rich and edifying world of the art form, and in doing so they reap the educational benefits of experiencing their learning, and not just being passive receptacles of information. They are active in the learning by doing, a much recommended method, as the reader has learned from such great educational minds as Rousseau, Pestalozzi, and Dewey. The researcher has discovered that involvement in the study of the arts fosters a learning and appreciation for working with others. The example of producing a school play was given, but almost any performing arts production would serve as an example of an experience that is both process and product oriented and therefore brings the benefits of both types of learning.

Before this research began, the potential for enrichment of the whole person through exposure and experience in the arts was probably not in doubt. The question was whether the arts contributed enough to the main purpose of education, that is, “to give the young, the things they need in order to develop in an orderly, sequential way into members of society” (Dewey), and therefore should be taken from the margins of the extra-curricular where they are often relegated, and made a central part of the core curriculum. The researcher believes that in this

enlightened progressive educational age where educators recognize the importance of differentiated instruction and appealing to individual students interests, and or “intelligences” that it will also be recognized as one of the best, if not the best way to do this is through the implementation of the arts into the core curriculum.

It is important to acknowledge the issue of accountability and standardized testing when attempting to resolve this under utilization of such an important educational tool. As was discussed in the readings, in Eisner and others, the creative thinking skills and talents developed through exposure and working in the arts are not often part of these tests, therefore, because of the high stakes involved, most school hours are devoted to the subject and skills that are indeed addressed by these tests, unfortunately leaving the arts again neglected, or in worse case scenarios abandoned completely. The obvious solution to this problem is to find ways to make assessment of the types of creative thinking skills addressed and developed by the arts a part of these tests, not just for the sake of the arts in the schools, but because these types of skills are instrumental in success in not only higher academic institutions but also in the future places of employment, as made evident in Daniel Pink’s work *A Whole New mind*.

Educators must also be aware of the potential pitfalls of what has been historically a criticism of progressive techniques, that is, a certain lack of discipline and structure when employing these engaging and child or individual centered methods. A solution to this is simply being aware and implementing the established standards and benchmarks, as well as the instructor maintaining control of the lessons by having clear and obtainable learning goals as they would in any math or science lesson. Standards and benchmarks have been clearly

established for the arts disciplines so it is the teacher's responsibility to remember to use them in planning lessons.

The researcher hopes that this study has made the case for a more commonly central location for the arts in the modern curriculum, where the importance of human creativity and empathy becomes more and more important to society as a whole, and to the whole individual. The author would like to close with a quote from John Dewey's *Art as Experience*,

Art is a mode of prediction not found in charts and statistics, and it insinuates possibilities of human relations not to be found in rule and precept... But art, wherein man speaks in no wise to man, only to mankind, art may tell a truth. (Dewey 1934, p.363)



CONCORDIA
UNIVERSITY

References

- Aiken, W.M. (1942). *The Eight year study*. New York, NY: Harper & Brothers.
- Anderson, C. (2004). Learning in "as if" worlds: Cognition in drama in education. *Theory Into Practice*, 43(4), 281-285.
- Ayers, L.P. (1909). *Laggards in our schools: a study of retardation and elimination in city school systems*. Ithaca, NY: Cornell University Library.
- Callahan, R.E. (1962). *Education and the cult efficiency*. Chicago, IL: The University of Chicago Press.
- Cremin, L.A. (1953). The Curriculum maker and his critics: A persistent american problem. *Teachers College Record*, 54(5), 234-245.
- Cremin, L.A. (1961). *The Transformation of the school*. New York, NY: Random House, Inc.
- Dewey, J. (1934). *Art as experience*. New York, NY: The Penguin Group.
- Dewey, J. (1934). Individual psychology and education. *The Philosopher*, 12, 1-6.
- Dewey, J. (1938). *Experience and education*. New York, NY: Kappa Delta Pi.
- Dewey, J. (1897). My pedagogic creed. *The School Journal*, 54(3), 77-80.
- Eisner, E.W. (1999). Getting down to basics in arts education. *Journal of Aesthetic Education*, 33(4), 145-159.
- Eisner, E.W. (2000). Arts education policy? *Arts Education Policy Review*, 101(3), 4-6.
- Eisner, E.W. (2004). Multiple intelligences: its tensions and possibilities. *Teachers College Record*, 106(1), 31-39.
- Eisner, E.W. (2005). Opening a shuttered window: an introduction to a special section on the arts and the intellect. *Phi Delta Kappan*, 87(1), 8-9.

- Gardner, H. (1983). *Frames of mind: the theory of multiple intelligences*. New York, NY: The Perseus Book Group.
- Gardner, H. (1996). Probing more deeply into the theory of multiple intelligences. *National Association of Secondary School Principals Bulletin*, 80(583), 1-7.
- Good, H., & Teller, J.D. (1947). *A History of western education*. London, England: The Macmillan Company.
- Gray, K.C., & Waggoner, J.E. (2002). Multiple intelligences meet bloom's taxonomy. *Kappa Delta Pi Record*, 38(4), 184-187.
- Hilgenheger, N. (1993). Johann friedrich herbart. *Prospects: the quarterly review of comparative education*, 23(3/4), 649-664.
- Holcomb, S. (2007, January). State of the arts. *NEA Today*, 35.
- Kingsley, C.D. (1918). Cardinal principles of secondary education. *Department of the Interior Bureau of Education Bulletin*, (35).
- Mann, H. (1848). 12th annual report for the massachusetts state board of education.
- Pink, D.H. (2005). *A whole new mind: Why right brainers will rule the future*. New York, NY: Penguin Group.
- Reese, W.J. (2005). *America's public schools: from the common school to "no child left behind"*. Baltimore, MD: The Johns Hopkins University Press.
- Roper, B., & Davis, D. (2000). Howard gardner: knowledge, learning and development in drama and arts education. *Research in Drama Education*, 5(2), 217-232.
- Rousseau, J.J. (1762). *Emile*. London: J.M. Dent Orion Publishing Group.
- Shosh, J.M., & Wescoe, J.A. (2007). Making meaningful theater in the empty space. *English Journal*, 96(5), 42-47.

Silber, K. (1960). *Pestalozzi: a man and his work*. Law Book Co of Australasia.

Taylor, F.W. (1911). *Principles of scientific management*. New York, NY: Harper & Brothers.

Watras, J. (2004). Changing ideas about student interest. *American Educational History Journal*, 31(2), 129-134.

