

A comparative review of the works of Feldman, Sternberg, Gardner and Eisner and the resulting practical application for the secondary art classroom

2011

Heather Denmark
University of Central Florida

Find similar works at: <http://stars.library.ucf.edu/honorstheses1990-2015>

University of Central Florida Libraries <http://library.ucf.edu>

 Part of the [Art Education Commons](#)

Recommended Citation

Denmark, Heather, "A comparative review of the works of Feldman, Sternberg, Gardner and Eisner and the resulting practical application for the secondary art classroom" (2011). *HIM 1990-2015*. 1117.
<http://stars.library.ucf.edu/honorstheses1990-2015/1117>

This Open Access is brought to you for free and open access by STARS. It has been accepted for inclusion in HIM 1990-2015 by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.

A COMPARATIVE REVIEW OF THE WORKS OF FELDMAN, STERNBERG,
GARDNER AND EISNER AND THE RESULTING PRACTICAL
APPLICATION FOR THE SECONDARY ART CLASSROOM

by

HEATHER DENMARK

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Art Education
in the College of Education
and in the Burnett Honors College
at the University of Central Florida
Orlando, Florida

Spring Term 2011

Thesis Chair: Dr. Jeffrey Kaplan

Abstract

Some fields come and go, but there will always be a need for older generations to teach the younger generations. For this reason, teachers will always be needed. The material that they choose to teach can sometimes determine the outcome of a nation. Take a look into German and Roman histories; they are littered with teachers convincing students that their way is right. I think that it is imperative that we research the full potential of what we are teaching our students. For that reason, my thesis will consist of analyzing and synthesizing the research of Feldman, Sternberg, Gardner and Eisner, gathering information on their works and applying them to art education. I will apply my findings to the modern day secondary art classroom; whether it is classroom design or visual handouts, I will use the knowledge gathered to better equip the room to the advancement of multiple intelligences in hopes of inspiring my future students to be creative and lifetime learners.

Dedication

The teachers throughout my journey that have gone a step above their “requirements” were large influencers in my life. Mrs. Johnson, in high school, showed me how to learn even if it was only for me. To Rose Casterline, my painting professor, who affirmed in me that I was an artist no matter what my experiences in art were in my adolescence. Most importantly, I want to dedicate this thesis to the honor of my family who supported me and kept a roof over my head.

Acknowledgements

I would like to thank Professor Ilenia Colón Mendoza whose ten-second announcement changed my mind to try again with the Honors in the Major program. I would also like to thank Dr. Sherron Roberts for her kind corrective words, a blend that is unparalleled in education. Finally, I would like to thank Dr. Jeffrey Kaplan who graciously took on the opportunity to work with a student that he'd never met before and helped me immensely on my thesis.

Table of Contents

INTRODUCTION	1
CHAPTER 1: EDMUND FELDMAN	4
THE MULTIDIMENSIONAL PHILOSOPHY OF ART EDUCATION	4
Social Dimension	4
Economic Dimension	4
Political Dimension	5
Psychological Dimension	5
Cognitive/Moral Dimension	5
PRACTICAL ART CRITICISM; THE FELDMAN MODEL	6
Describe	6
Analyze	7
Interpret	7
Judge	8
APPLICATION TO ART EDUCATION	8
CHAPTER 2: ROBERT STERNBERG	11
BACKGROUND	11
REVIEW OF LITERATURE	12
THE TRIARCHIC THEORY OF HUMAN INTELLIGENCE	14
Analytical intelligence	14
Creative intelligence	14

Practical intelligence.....	15
APPLICATION TO ART EDUCATION.....	16
CHAPTER 3: HOWARD GARDNER.....	19
BACKGROUND.....	19
REVIEW OF LITERATURE	20
MULTIPLE INTELLIGENCES.....	23
Linguistic Intelligence	23
Musical Intelligence.....	23
Logical-Mathematical Intelligence	23
Spatial Intelligence.....	24
Bodily-Kinesthetic Intelligence	24
Interpersonal Intelligence.....	25
Intrapersonal Intelligence.....	25
Naturalist Intelligence	25
Spiritual Intelligence.....	26
Existential Intelligence.....	26
APPLICATION TO ART EDUCATION.....	28
CHAPTER 4: ELLIOT EISNER	31
BACKGROUND.....	31
REVIEW OF LITERATURE	32
Boundary Pushing.....	32

Inventing	32
Boundary Breaking	33
Aesthetic Organizing	33
APPLICATION TO ART EDUCATION.....	35
CONCLUSION.....	37
APPENDIX A:.....	43
TREE OF ART EDUCATION.....	43
REFERENCES	45

Introduction

The idea of applying value to people of different intelligences first appeared in my life around the age of 10. That was when I realized how different my parents were. My father is extremely logical and is sometimes perceived as cold; whereas my mother is known as a hugger, in addition to being overly emotional. Those severe opposite sides of the spectrum questioned my own brain on which way was correct and not until many, many years later did I start to think that both were right (a thought which rocked my entire way of thinking). My dad is what is commonly called intellectual, he doesn't need too much guidance, things do not need to be repeated, and he has a quick wit. I would say that the world overall values these types of people. Mom, on the other hand, is considered to be a touchy-feely person, she needs to be around people and is very warm and expressive. In addition, she is not what one would call book smart. Growing up I always felt as though my mom was lacking in intelligence because society did not value her intelligence, which was how to make people feel better when their hurting and listening to people. Two things that take much patience and development of the brain; I mean how much money to people spend talking their issues out to a shrink when they could just come talk to my mom? And they did, my mom was known by everyone in the neighborhood as Mom, not Mrs. Denmark but Mom. She listened and tried to help when she could and because of my mom we took in countless amounts of people who had been kicked out or had no other place to go. Not until later in life, did I start viewing my mom as being intellectual. When that revelation hit, it opened the floodgates in my brain to think about what other misconceptions had I learned? What

other forms of intelligence were out there? Then when I started looking, I realized just how little the education system in the states teaches our students.

In the late 19th century a university student by the name of Franz Joseph Gall noticed similarities within his schoolmate's abilities and a seemingly direct correlation between the sizes of their skulls. This led Gall to develop a theory that suggested there were thirty-seven different "organs of the mind" (Gardner, 1993b). When his theories were publicized, many people jumped on board in support of his initial thought. Gall suggested that there was a scientific way to ascertain what a person's mental capabilities would be at the time of their birth merely based on the size and shape of one's head (Gardner, 1993b). This theory in today's society does not hold up because we have proven those theories to be inaccurate and determined no scientific way to measure a person's cognitive capabilities simply based on size and shape.

Following Gall (1758-1828), in the study of human intelligence, was Jean Piaget (1896-1980) who was the first to distinguish from a baby's egocentric desires for life, to the developed humans' abilities to contemplate the future in accordance with themselves and others (Atherton, 2010). Also around the same time Alfred Binet (1857-1911) developed one of the first tests to scientifically determine a person's intelligence. Commonly called the I.Q. test, I.Q. stands for Intelligence Quotient. In response to France deciding that every child between the age of six and fourteen must be attending school (Hothersall, 1995), the following

"The I.Q. and Piagetian approaches all focus on a certain kind of logical or linguistic problem solving; all ignore biology; all fail to come to grips with the higher levels of creativity; and all are insensitive to the range of roles highlighted in human society.

Consequently these facts have engendered an alternative point of view that focuses precisely upon these neglected areas” (Gardner, 1993b, p.24).

During the 20th Century, the North American classroom was comprised of one teacher and anywhere from 4-30 students in one room ranging in age from 5-18. The teacher was required to educate all of the students at the same time. It is likely that a student that was 15 would have had the same reading level as a student that was only 7 years old (PBS, 2001). When the class sizes got too big, they divided the only way they knew how, by age, which created elementary and secondary schools. This method of convenience is still practiced today only to a greater degree. We separate our children initially, based on age, and secondarily, on cognitive ability. Perhaps reassessing how we are identifying intelligence which, as a result, may call for a new form of classroom separation, in response to the information collected.

In this thesis, I review the literature of Edmund Feldman, Robert Sternberg, Howard Gardner and Elliot Eisner. I chose these revolutionary teachers because of their work and reputation in the education field as well as the art sector. These great pedagogical thinkers were chosen because they are the leaders in their field of art, and education. Additionally they link together the idea of education having different intelligences, just like my parents. My thesis will not only review their philosophical works, but explain how they can be applied to the art education field, although most of their work can be adjusted to all forms of education.

Chapter 1: Edmund Feldman

The Multidimensional Philosophy of Art Education

According to Feldman, creativity of thought is exemplified in art education. “Art education is an enterprise that encompasses teaching and learning to make and understand art, as well as finding out about the world and ourselves through art” (Feldman, 1996, p. 2). The “5 major departments of human thought and action as they impinge upon art teaching and learning” (Feldman, 1996, p. 4). These are the criterion which make art education vital to school curriculum, by fostering a student in the following dimensions,

Social Dimension

Often, for this dimension, students look for a give and take within dialogue, acceptance, curiosity and interaction which depends on the teacher and other students. Art allows people to stimulate a need to be sociable, not merely through verbal interactions, but allowing other people to see a piece of them visually. It shows a form of communication that is not based in linguistics (Feldman, 1996).

Economic Dimension

Those that exhibit creative ability can typically focus that energy into a marketable skill like entrepreneurship. It does not have to be as overt as a person becoming a painter, but using the same skills learned in an art classroom like, thinking outside the box, which makes them more marketable and inevitably desirable to the public. Take, for example, the movers and shakers of the world. The critics offer reviews on what movies to watch or the fashion experts

that tell the masses about style trends; they perpetuate a great deal of how the world spends its money (Feldman, 1996).

Political Dimension

Art teachers are, in a way, political leaders; they encourage, accommodate, listen to their “constituents” and inevitably, have the power to change lives (Feldman, 1996). Art and the creative process can be used to help or hinder one’s aspirations. Skills taught in creative classes train people to work together unlike other classes where the work is typically solitary (Feldman, 1996).

Psychological Dimension

Feldman states that sometimes art is used as a therapeutic tool and “even the traditional goals of art education, the identification of talented individuals, training in hand-eye coordination, and the practical application of design principals, have a large psychological component” (Feldman, 1996, p. 68). This is not to say that those are the only functions that art and psychology converge on, but rather it is a beginning point to state that art is one of the rare subjects where people experience the psychological dimension (Feldman, 1996).

Cognitive/Moral Dimension

Although unintentional, creativity does happen. The majority of creative thought comes from knowledge and practices that make art a cognitive subject. According to Feldman, for years art has received a negative light on the subject of intelligent learning because of people being unable to express knowing how to do art. This is largely because art is a visual discipline and not

always verbal. The morality of a person has a large link to craft or craftiness and if not properly learned, art can have a bad connotation (Feldman, 1996).

Practical Art Criticism; The Feldman Model

In the words of Edmund Feldman, criticism “affects what artists make, what the public sees, and what collectors buy” (Feldman, 1994). Art criticism can also affect how we teach. Criticism is a great motivator for an artist. When criticized, the artist typically acts by taking the criticism and changing their path to fit the public need, or by ignoring the critic and becoming more extreme. No matter which way, the criticism of art is the only way to universally determine whether or not a piece can be understood as a work of art and to what degree that work is labeled. The Feldman method is devised of four methods for critiquing a work of art, which are as follows;

Describe

When describing a piece of art a person takes into account the artist’s name, title of their work, country of origin, and medium used. Something as simple as a title can change the entire out look of a painting (Feldman, 1994). Take, for example, if Leonardo had named his painting “Cousin Mona” instead of the “Mona Lisa”. It could have changed so many things about his career. The mystery of the woman in the painting is there because there was not a formal description of who she was. The artist is at liberty to disclose or to hold on to information with the mere scribbling of a title.

In addition to those forms of description, the description provides words associated with defining a piece like “line (straight, curved, jagged, and so on), shape (square, triangular, and circular), color (red, blue, green and so on), and texture (smooth, coarse, and grainy)” (Feldman, 1994, p. 25). This section of the Feldman method is not to disclose feelings about the piece, but to describe what it is.

Analyze

According to Feldman, “analyzing the facts (dealing with visual evidence) is an advanced type of description” that can only be performed after the initial description has taken place (Feldman, 1994, p. 26). Take, for example, the description of a line. Instead of just saying that the piece is linear, a critic would further explore the description of the line, is it “straight/curved, thick/thin, horizontal/vertical, open/closed, sharp/dull, hard/soft, flowing/jagged, continuous/interrupted, etc” (Feldman, 1994, p.26). The critic would continue to break down or analyze the piece by taking every mention in their description further.

Interpret

Interpretation is the meaning of the piece. It answers the questions, “What did it make you feel like, sound like, look like or remind you of?” (Feldman, 1994, p.34). It takes into consideration who the viewer is supposed to be, the era it is supposed to be portraying and the emotion that the artist wants the view to feel. Each of these things can be different to different people, but a critic tries to understand what the artist wanted people to know (Feldman, 1994).

Judge

The judgment portion of the criticism of the piece of art is the most critical aspect that most critics skip to. They don't bother going through the first three steps of describing, analyzing and interpreting. This is why most critics are thought to be overly opinionated without sound judgment. According to the Feldman model, judgment of an artwork should include "formalism, expressivism and instrumentalism" (Feldman, 1994, p. 38).

"There is a sense in which every work of art is one-of-a-kind and therefore incomparable. But if that is true, we should stop right now: criticism without comparison, or implied comparison, seems to me worthless" (Feldman, 1994, p. 36). When proper critics judge, they take into account things like period, culture, subject matter, style, etc. Not just a random opinion given based on personal interpretations. Still an opinion, but based on criterion which is the difference.

Application to Art Education

Feldman explains a great need for art not only for positive student social interaction, but for advancing creative cognitive ability. In addition, he suggests that students who excel in academics are not as successful as those who excel in both a creative field and academics. The public views a person deemed to have a highly intelligent brain in one light while the person that exhibits successful intelligence is usually the one to prosper.

Feldman also gives us a way to structure a universally acknowledged way of critiquing or assessing a work of art. Through the use of the Feldman Model we can use a more widely

accepted approach to critiquing a work of art by describing, analyzing, interpreting and judging. This seems to be the first step towards the standardization of art curriculum.

Through Feldman's multidimensional theory on art education, principals can come to a better understanding on why art is so vital to a full education. I agree with Feldman in thinking that by not implementing the arts into normal school curriculum that we are stifling students' abilities to excel in the real world. In job situations where one person was more qualified on paper than another person, sometimes the person that felt like a good fit to the employer was the one who got the job (Feldman, 1996). Is it all just random or is it something that the second candidate reflected? If there is a need for that kind of education, why aren't we promoting it? Perhaps we can foster a student's relatability to other people by working collaboratively. They can see how others work together in creative settings versus business settings. There could be a lesson on mural painting where they have to work together then they have to curate their piece and finally market it to the public. All of these steps force students to work that social dimension that is going to help them with jobs in the future.

When Feldman developed the Feldman model, art educators do not believe he intended it specifically and only for the art education curriculum, nevertheless, your novice art teachers are looking at the Feldman Model when grading their students' works. Using the Feldman model as a form of assessment is one of the first steps towards developing an art curriculum that can be universally taught and measured. Not only does he mention that creativity should be encouraged across all subject areas, but that creative classrooms such as art should be structured. He, in my opinion, tries to blend the two worlds, of creativity and structure, which he does not consider to be mutually exclusive, but have traditionally been separated.

In the next chapter we will look into the life of Robert Sternberg, his story, his life's work and his approach to the education system. These leaders in art and education have done so much for the field of art education that their research is imperative to the further study of the field. Following Sternberg we will dive into Howard Gardner and Elliot Eisner, who lead us into the idea of intelligences and creativity.

Chapter 2: Robert Sternberg

Background

When I began reading the works of Robert Sternberg I was captivated and I needed to understand where he had come from in order to relate with his work. I need the context behind his theories. Before we dive into his work I thought I would give a little taste of his life and how he became the man he is.

Robert Sternberg was born in New Jersey on December 8th, 1949 (Plucker, 2010). Throughout his adolescent academic career he, suffered from test anxiety, particularly with I.Q. tests and even though he was a bright student he received low test scores. There were two main highlights that changed the course of his educational career. The first occurred in 4th grade with his teacher Mrs. Alexa. Even though she saw on paper that he was a low scoring student, she encouraged him to do his best and reassured him that he was an excellent student. Soon after his grades started to change, he was performing better on the tests which led him to new discoveries (Plucker, 2010). The second highlight, which stemmed from the interactions with Mrs. Alexa, was when he associated his anxiety to poor performance on his tests. He discovered during 7th grade that he was still having anxiety with test taking but, when as a seventh grader, he took the same test in a room full of sixth graders, he performed much higher. This led him to develop his first I.Q. test, in 7th grade called the “Sternberg Test of Mental Ability”, where he paralleled the results from his test to the traditional Stanford-Binet intelligence scales (Spear, 2010). These initial circumstances set his academic goals in motion and he was accepted into Yale University, where he got a B.A. in Psychology (Spear, 2010). During his first semester, he

performed so poorly in his classes that he was advised to change majors. Instead, he gathered information and discovered that he learned the least when a class was focused on memorization. He ended up graduating summa cum laude and was a professor for a time at Yale University (Spear, 2010).

Review of Literature

In the words of Robert Sternberg, “I define intelligence as your skill in achieving whatever it is you want to attain in your life within your sociocultural context by capitalizing on your strengths and compensating for, or correcting, your weaknesses” (Plucker, 2010, p.1). As stated before, Sternberg was heavily influenced by two situations in his life where he realized that although the information being given to him merit, there was information lacking to provide proper conclusions.

“Once students get low scores on aptitude tests such as an IQ test, the SAT, or the ACT, they come to think of themselves as dumb. Even if they achieve, they may view themselves as achieving in spite of their being dumb” (Sternberg, 1996, p. 124-125).

Sternberg argues that schools focus on students memorizing information and being able to recite it when in practicality, if a person cannot remember a certain bit of information they usually just look it up. In today’s technological society, an abundance of information readily available with the click of a few buttons. It would be more prudent of schools to produce students who can navigate the web in order to locate proper information rather than trying to have them memorize a small bit of a large knowledge base (Sternberg, 1996).

One of Sternberg’s philosophies is that of successful intelligence which is sometimes more important than any other intelligences (Sternberg, 1996). Sternberg uses the following

example in order to demonstrate how successful intelligence can be more beneficial. Two boys are hiking and encounter a grizzly bear. One boy, who is deemed intelligent according to test scores, calculates how long it will take the grizzly bear to overtake them, and thus, panics. The second boy, who is known for his low test marks, quickly takes off his back pack. The first boy asks, “What are you doing?” He replies “Getting ready to run” to which the first boy condescendingly states “You will never out run that bear!” The second boy again replies saying “I only need to outrun you!” In this scenario, the second boy exhibits what Sternberg calls successful intelligence.

According to Sternberg, successful intelligence means that a person can “think well in three different ways: analytically, creatively, and practically” (Sternberg, 1996, p. 127). The only one valued form in the school system is analytical intelligence. Not to say that the intelligences suggested by Sternberg are mutually exclusive. A person can achieve the best use of intelligence when all three fields are working together simultaneously (Sternberg, 1996).

While Sternberg was on the Board of Admittance for perspective students into the psychology department at Yale University, many students were overlooked although they expressed great creative intelligence because their test scores were not as high as other perspective students. At the same time, students with mediocre work and test scores were admitted due to the fact that met all of the requirements which shows a good grasp of practical intelligence, but does not necessarily benefit a community, but rather an individual (Sternberg, 1988). He did not seem to believe in a traditional definition for intelligence because the idea of intelligence is primarily based on how you are perceived by the mass public. In order to achieve

successful intelligence you would need to be fluent in all three forms of Sternberg's Triarchic theory of Human Intelligence.

The Triarchic Theory of Human Intelligence

Analytical intelligence

Analytical Intelligence stems from “metacomponents which are the executive processes used to plan, monitor and evaluate problem solving” (Sternberg, 1988, p. 59). This intelligence is what school systems focus on and usually praise as being the highest form of intelligence. It enables a person to properly assess an algebraic equation or put together a puzzle. This form of intelligence is highly praised in schools, but in adult life and the real world is less helpful than someone who possesses more creative and/or practical intelligence. For example, a person may go to school to become an art teacher and do well in school, thanks to their very developed analytical intelligence, but when faced with real classroom decisions where students are running around, or perhaps a student has a serious problem, they do not have time to consult a book on what to do. In this case they may even be the worst art teacher even though on paper they are far more distinguished than their peers. Many students graduate college and go into their desired fields completely unable to handle any situations, but their paperwork shows them to be of a high intelligence (Sternberg, 1996).

Creative intelligence

Creative Intelligence is made up of “performance components which are lower-order processes used to implement the commands of the metacomponents” (Sternberg, 1988, p.59).

People with a more developed form of creative intelligence typically fare better in unplanned situations. They know how to adapt and think in an abstract manner. People with a higher degree of creative intelligence typically does not like routine; they instead see how they can change a situation to look at it in a different light. This stems not only from an artistic standpoint, but rather a path of original thought. Many students who have a more developed creative intelligence might be told “they think outside the box” and “they are unusual thinkers”, but these passing comments give no validity on progress reports or certificates. These comments do not honor the merit of that type of intelligence (Sternberg, 1996). Creative intelligence can be found anywhere, a scientific hypothesis, an abstract painting, an imaginary story, etc. Although creative intelligence is found in nearly every subject and form of learning, we do not regard it with any type of importance.

Practical intelligence

Practical Intelligence involves “knowledge-acquisition components which are the processes used to learn how to solve the problems in the first place” (Sternberg, 1988, p. 53). Practical intelligence enables people to operate effectively in the real world. It is the part of human intelligence that allows us to grasp situations and make decisions in regards to them. People that exhibit practical intelligence can perform at a mediocre level on tests and projects, but do outstandingly in real life situations, like find a job. Not because they are more/less qualified, but because they can adapt to the situations around them and quickly decide what they need to do in order to get what they want. This type of intelligence is often called “street smarts”, but doesn’t necessarily apply to an urban setting, but can even be adapted for a business environment (Sternberg, 1996, p. 142).

These intelligences are in no way to act solely from one another, but rather in a cohesive rhythm. In my opinion Sternberg's intelligences are much like going to the gym to work out, if you only strengthen your upper body muscles the rest of your body is still going to function, however, you may start to look a little disproportionate. When that is applied to the education system (as it seems to be) students tend to only learn how to think analytically and completely skip over their creative and practical intelligences, which leaves them lacking in preparation for the real world (Sternberg, 1983).

Application to Art Education

Every student experiences different and unique situations, however, in my opinion students who take art at the secondary level are more apt to actively work on enriching all their forms of intelligence. A typical school year for a high school student will include math, English, science, history during freshman and sophomore years, a foreign language, and a physical education class, leaving only one possible option for them to choose a creative outlet. It is difficult to go from an analytical way of thinking all day in science, math and the rest of the "academic" courses then, change into a creative way of thinking, but those that take on the added challenge of creative classes will enrich their minds and will gain a new perspective.

In Sternberg's Triarchic theory he suggests that intelligences should not work separately from one another, but rather together. All day students are focusing almost entirely analytically with a little bit of practicality thrown in here and there. Obviously, the art classroom is a place that nurtures creativity, but it can also show how these types of intelligences can work together. For example, a lesson on one-point perspective; students need to understand the mathematics of a room or landscape in order to identifiably create a space. In addition, student will need to think

practically when creating a cityscape or interior space in order to avoid drawing ridiculous spaces. A person without practical intelligence would put a door on the top of an outside wall on the 32nd floor. This one lesson encompasses all three forms of Sternberg's theory.

Students in today's world are pressed to do more than they have ever been asked in the past, so naturally some things will suffer. This semester in my senior internship I wanted to gauge whether the students really understood the vocabulary words taught in art class, so I administered a pre-test. I informed them that this would not count as part of their grade, but encouraged them to try the best they could. I assumed that they would just try and trust themselves to figure things out and at least give it their best shot. Most of the students immediately became completely overwhelmed and thought they could not even try. One of the questions I got bombarded with was, "what is a cityscape?" Most did not even try to answer the question. My practical intelligence told me to break down the word in "city" and "scape", and a handful of the students came up with theories like "escaping the city" and a "city cape/jacket". Those students, even though wildly incorrect, showed me that they could think creatively; the majority of students, however, did not follow this way of practical thinking.

In art education, I think fostering students who can develop the creative part of their brain alongside of the practical and analytical is important. In order to do this we may need to stop using our classrooms in such a heavily analytical light. Although important to grow their analytical intelligence, the art classroom is one of the few places that creative intelligence is not only allowed, but encouraged. Perhaps we should praise new ideas and concepts to a higher degree, by rewarding those that come up with original thought, even if it isn't always correct, that way we can express that creative intelligence has a value. In Sternberg's Triarchic theory of

intelligence, students should have been more rounded by this time in high school to make a educated guess at words or things they are unfamiliar with. When I saw that they were unable to do so it reminded me how analytically we educate our students, when we need to focus on other sections of intellectual development.

In my senior internship I developed a way to reward creativity without using too much analytical intelligence. I came up with creative candy, which was in response to this thesis in which I gave a Snickers or Reeces to a student that went above and beyond their assignment tapping into their creative intelligence. Now for some this concept flabbergasted them, one student was so thrown by the idea that for the next following few minutes after I announced the first creative candy recipient he just sat there in shock. This led me to think, why is it so difficult for students to accept reward for creatively thinking? I concluded that it was because they are usually punished for not following directions to the letter, but there has to be a way to encourage their creative minds while still meeting the standards that our classrooms demand.

Chapter 3: Howard Gardner

Background

Howard Gardner's parents, Ralph and Hilde Gardner, fled from Nürnberg, Germany in 1938, just five years before his birth on July 11, 1943 (Smith, 2002). Also, just before Gardner was born his older brother, Eric, was killed in a sleighing accident. This subject was never breeched during Gardner's adolescents nor was the knowledge of his Jewish heritage mentioned around the dining room table. Due to the circumstances of Eric Gardner's death, Howard Gardner was discouraged from sporting and outdoor activities, and instead given direction to follow a more academic path (Smith, 2002). This mindset on his upbringing is a direct correlation to his success in the world of academia. Gardner claims that "his education began in earnest when he arrived at Harvard College in September 1961. There he studied history, sociology, and psychology, and audited a record number of courses that spanned the curriculum" (Winner, n.d., p. 1). While attending Harvard University, he became one of the founders of Project Zero, which was "a group that is dedicated to the study of higher cognitive processes, with a special focus on creativity and the arts" (Winner, n.d., p. 1). He is still on the Project Zero Board at Harvard, but focuses his time these days on his family comprised of four children "Keith (b. 1969), Jay (b. 1971), Andrew (b. 1976) and Benjamin (b. 1985)" as well as his marriage in 1982 to Ellen Winner (Winner, n.d., p. 1).

Review of Literature

During Howard Gardner's years of instruction at Harvard, he primarily focused on the aspect of human intelligence. First, Gardner defined what intelligence in a new light. He concluded that some forms of intelligence are built into other categories that people often misconstrue as intelligence when in actuality culmination of intelligences exists (Gardner, 1993b). For example, in mathematics, if a formula can be broken down it must be reduced into simplest form, so to must intelligence be reduced. Gardner does not believe that all of the intelligences have yet been discovered and assessed. Art classrooms may have students that excel in an intelligence that has not yet been distinguished. So he proposes, in his book *Frames of Mind*, eight criteria that an unevaluated intelligence must have in order to be classified as an intelligence (Gardner, 1993b). Those criteria are as follows;

1. "*Potential isolation by brain damage*" (Gardner, 1993b, p. 63).

An example of this criterion would be if somehow a person were to suffer a blow to the head and damaged a specific part of the brain, the injury would conclude in a retardation or halt of a specific function (Gardner, 1993b).

2. "*The existence of idiot savants, prodigies, and other exceptional individuals*" (Gardner, 1993b, p. 63).

This criterion is based on people who are extremely talented in one area as well as those who have a strong deficit in an area. For example, those who at an early age can play Mozart by heart versus those that are tone deaf. This polarization of aptitudes is the thing that suggests a person's ability to possess intelligence in a specific area (Gardner, 1993b).

3. "*An identifiable core operation or set of operations*" (Gardner, 1993b, p. 64).

This criterion is defined by individuals who innately have knowledge of a subject without being formally taught. An example of this is a person who can quickly replicate a person's body movements back to them, that person would be of a higher bodily intelligence (Gardner, 1993b).

4. “*A distinctive developmental history, along with a definable set of expert ‘end-state’ performances*” (Gardner, 1993b, p. 64).

For this criterion check a person must not only possess a gift, but be able to develop the gift. This is one of the easiest ways that a person with an aptitude for a certain way of thinking can advance themselves and is already set in place in the public school system by taking advanced or AP classes (Gardner, 1993b).

5. “*An evolutionary history and evolutionary plausibility*” (Gardner, 1993b, p. 65).

What Gardner is trying to say in this criterion is that to be classified as an intelligence not only does the intelligence that one possesses have to grow and modify, but that it must show signs of growing and changing. Adaptability would be a good way to define this (Gardner, 1993b).

6. “*Support from experimental psychological tasks*” (Gardner, 1993b, p. 65).

This criterion suggests that a person who is indeed advanced within a specific intelligence would be able to carry out two tasks of opposing intelligences. For example doing a crossword and carrying on a conversation are both linguistic whereas walking and talking involve bodily-kinesthetic and linguistics (Gardner, 1993b).

7. “*Support from psychometric findings*” (Gardner, 1993b, p. 66).

These are non traditional tests that assess whether or not a person has a given intelligence. The main reason for this way of testing is because our formal evaluation of testing is largely based in linguistic and logical-mathematically advanced people. A person may know the correct

response, but may not be able to accurately express that in words, on the opposing side a person may be very good at math and know how to manipulate a multiple choice exam in order to acquire a passing grade without knowing any of the information (Gardner, 1993b).

8. “*Susceptibility to encoding in a symbol system*” (Gardner, 1993b, p. 66).

Symbol systems are created instead of developing on their own, to help convey what they are trying to express to the mass public. The following are examples of symbol systems: written language, math, road signs, drawings and sign language (Gardner, 1993b).

After giving considerable study to the definition of intelligence, in 1993, Gardner settled on seven forms of intelligence: linguistic intelligence, musical intelligence, logical-mathematical intelligence, spatial intelligence, bodily kinesthetic intelligence, interpersonal intelligence and finally intrapersonal intelligence. Later, in 1999, he added three more to the mix; naturalist intelligence, spiritual intelligence and existential intelligence, which in total makes his theory include ten multiple intelligences to date. Certainly more could be added in the future. Some argued for a humor intelligence or even a sexual intelligence; however, Gardner has not found those to be sound with his criterion of intelligence (Gardner, 1999). To date Gardner had defined ten different forms of intelligence known commonly as the multiple intelligences. In the next sections we will review the definitions for those intelligences and see how they can be practically applied to the secondary art classroom.

Multiple Intelligences

Linguistic Intelligence

This form of intelligence is one of the primary learning skills that are undertaken even babies babble trying to express a need or desire. Children who are deaf and have never heard a spoken word also will babble to try and communicate. People who are adept at proper syntax and enunciation tend to gravitate toward developing this intelligence whether it is through poetry or writing novels. Linguistic intelligence is often more focused upon because of our American educational system and related assessments. Gardner noted that linguistic intelligence is the platform that educators focus on in their teaching (Gardner, 1993b).

Musical Intelligence

This intelligence is one of the first that children learn, although we do not know why (Gardner, 1993b). In my opinion, music is one intelligence through which creativity is most easily expressed and most commonly enjoyed. This intelligence links a person's ability to pick up a tune with their effectiveness in learning to play an instrument. Musical intelligence uses pitch, beat, rhythm and mood all at the same time in order to emit a sound that is pleasing or sometimes not so pleasing to one's ear. Scholars propose that linguistics, music and communication all spun off from a central source thousands of years ago, however, it is just a scholarly theory and currently unable to be proven true (Gardner, 1993b).

Logical-Mathematical Intelligence

People sometimes believe that the mere act of counting would be the basics of a logical-mathematical intelligence, when in fact, that is still just linguistic intelligence. When a child

actually learns the value of the number that corresponds to the number in the sentence, only then do they learn to develop their logical-mathematical intelligence. This form of intelligence is one of the harder if not the hardest intelligence to ascertain. It is also said that it is the hardest to express to those that are not gifted in this form of intelligence,” quite possibly, the most central and least replaceable feature to the mathematician’s gift is the ability to handle skillfully long chains of reasoning” (Gardner, 1993b, p. 139). Additionally, I think that those that are gifted in Logical-Mathematical intelligence tend to lack relatability to others, which in Gardner’s words is, Interpersonal intelligence.

Spatial Intelligence

Spatial intelligence, more commonly known as visual-spatial intelligence, is defined by a person’s ability to draw a mental image and the degree to which that thought is imagined. Take for example you are told to imagine a horse, and then asked which was higher, the bottom of the mouth or the tip of the hind quarter. A person’s ability to mentally draw a picture of a horse will enable them to respond to this type of problem (Gardner, 1993b). The extension of spatial intelligence does not stop in the mind, but rather begins there and ends up quite possibly on a piece of paper, or a movie director’s chair. It is basically the beginning of the artistic movement within a person. In addition, spatial intelligence has to do with memory and one’s ability to solve puzzles (Gardner, 1999).

Bodily-Kinesthetic Intelligence

“All skilled performances include a well-honed sense of timing, where each bit of a sequence fits into the stream in an exquisitely placed and elegant way,” also, those attuned to

their bodies and how their bodies function (Gardner, 1993b, p. 208). The abilities that a person can possess in this intelligence range from the perfectly timed use of the whole body to the intricate details of an isolated part. People that are more adept to bodily-kinesthetic intelligence will typically gravitate toward activities like sports, or dance, yet the education system doesn't really recognize and affirm this as an intelligence, but rather a 'special' activity (Gardner, 1993b).

Interpersonal Intelligence

The phrase "people person" encompasses the passion of those with a higher level of interpersonal intelligence. Individuals that are talented in interpersonal intelligence understand motivations, intentions and desires within people, in addition to, working well with them. Some people realize this early on and learn to manipulate people and situations for a selfishly desired outcome (Gardner, 1999).

Intrapersonal Intelligence

Express an understanding of self. People who have a high intelligence in this area are contemplative and desire to know the intricate workings of their thoughts, actions and personal motivations (Gardner, 1999).

Naturalist Intelligence

This newer intelligence refers to those that are able not only to identify plants and animals, but they can also determine something that is harmful versus something beneficial. This is not to limit them to the known plants and animals, but to include those which have not been identified. As with all intelligences, the naturalist intelligence can be developed; however, some students are more sensitive and aware of surroundings; for example, those that can see a plant

and know right away that it is poisonous even though they've never seen it before (Gardner, 1999).

Spiritual Intelligence

The most difficult intelligence to back up within the scientific community, because there is no concrete proof, however, almost every culture has a spiritual philosophy. People seem to respond to spirituality whether a tarot card reader, a preacher, ghosts, Buddha or Jesus.

According to Gardner, most of the world claims to have some inclination towards a spiritual force (Gardner, 1999).

Existential Intelligence

This intelligence is closely linked to that of the spiritual however, not the same. People who acknowledge their existential intelligence observe the world on a grand scale and congruently themselves in that same world and or universe. Those who have contributed using this existentialist philosophy are people such as Mother Theresa and the Dali Lama. Adversely those who see the world and universe for that matter for what they can get out of it like terrorist and Adolph Hitler.

Howard Gardner originally wanted to be able to conduct tests in order to determine whether or not a person was gifted in a specific area, but was unable to do so. The tests that would need to be administered require being highly individualized in an effort to make the subject more comfortable and subsequently the results more accurate. As of 1999, Gardner has been unable to craft a blanket test that can be administered and has concluded that he does not foresee one being created that can adequately determine a person's intelligence (Gardner, 1999).

In the 1980s and early 1990s, a group of eight women educators decided to develop a curricular program based on Gardner's theory of multiple intelligences (Chen, Gardner & Moran, 2009). This program was thought to include curriculum for grades k-12. The program utilized the resources from parents, students and teachers and was in response to the overabundance of standardized testing. Instead of the typical letter grade scale from A to F, students were assessed in this way:

“instead of subject area, the progress report has a space to indicate the student's motivation (intrinsic, extrinsic, passive or disruptive) and whether the student is making steady (S) progress, rapid (R) progress, or needs help (N). At the high school level, teachers indicate where the student falls along the continuum of cognitive development in each intelligence and a narrative for each intelligence completes the report” (Chen, Gardner & Moran, 2009, p. 294-297).

While this method of teaching has resulted in varying responses, the realizations of modifications to the method are needed. With the enforcement of government mandated testing, the schools have had to focus more on formal ways of assessment in order to prepare their students for the government tests. In addition, they observed that grouping students not by age, but by cognitive ability seemed to result in higher progression rates. In this way, the researcher's combined first and second grade as well as separate grouping of third, fourth, and fifth grade, kindergarten remains isolated (Chen, Gardner & Moran, 2009). In fact, the *Harvard Magazine* (Harvard University's periodical) reported in 2010 that no more traditional exams will be administered at Harvard; professors are working to come up with more creative ways of assessment. Harvard, an Ivy League school, is universally assessed as one of high academic

achievement, and has made a priority in terms of intellectual reform (Long, 2010). In my opinion, this reform is at least partially due to Gardner's theories of intelligences.

Application to Art Education

One of the main drawbacks to formal or traditional assessment across subject areas, is that they are basing measurement on linguistic and logical-mathematical intelligences. Gardner attempted to find a way to assess students' intelligences within a classroom by formulating tests that would accommodate different types of intelligences. Instead, he ended up discovering that creating that kind of test is only reinforcing the poor testing procedures that had already been established. With the knowledge of that guiding him, he decided that instead of bringing the "students to the assessment he would bring the assessment to the students" (Gardner, 1999, p. 137). Gardner and his team developed a multiple intelligence classroom, and in his words "we created an environment with inviting resources and let the children demonstrate their spectra of intelligences in as natural a fashion as possible" (Gardner, 1999, p. 137).

Another issue for applying this to the art classroom, or any classroom for that matter, is that with the knowledge of different intelligences, come the labels associated with specific traits, which can actually hinder cognitive thought rather than encouraging it. Students are usually excited to discover what makes them tick and what they are good at, but by not achieving a high score in an area the results foster a posture of failure, which typically has more negative drawbacks than positive ones (Gardner, 1999).

The problem with this form of teaching is that there is not a universal way of assessing a student's progress. The basis for how much they learn is completely determined by the interest that they possess. When this idea is applied to teenagers, I believe the outcome will be that of only focusing on interpersonal intelligence. However, after a certain point students will be interested in other aspects and the mere form of communication with their peers won't be enough. Although I do concede that enabling the students to explore a subject such as art through their own intelligence will make them more susceptible to peak an interest in the subject. I do not know if it is practical for today's classroom management situations.

Gardner states in his work that "I have been concerned chiefly with those findings that emerge from naturalistic studies of children, who attend school, but who do not receive appreciable training that would equip them to handle our measures of artistic skills" (Gardner, 1990, p. 23). Most schools do not currently possess the proper tools in which to foster multiple intelligences. Gardner worked with a program entitled "arts PROPEL" in which he discovered that, to assess an intelligence, it is vital that the student have the opportunity to work intensively with material and to become familiar with their possibilities and limitations" (Gardner, 1990, p. 44). An example of this would be if a person was handed a guitar and briefly shown how to play a guitar by someone who had been playing for years, then told to work on it for approximately 45 minutes to an hour and a half. That is the most common form of education in the western cultures school system. Gardner is suggesting that we change our classrooms to let the student engage and discover more naturally, which will also develop their individual intelligences. Unfortunately this form of education is not easily tracked in progression and would result in extreme level differences among grade levels, ages and entire schools. Our western culture

values statistics so heavily that I do not think this form of education would be an easy transition if ever accepted.

Students who attend a public high school in Western society are told that they must participate in 4 math, 4 English, 3 science, 2-3 history, 2 physical education and 8+ electives. This system gives no merit to artistic fields, but discredits knowledge of the past, bodily-kinesthetic knowledge and even manages to slightly discredit science. Our development of formal education is what is hindering us. “A program rich in the arts school assume a significant role in the school. Otherwise, it will be difficult to address the range of intelligences exhibited by students and teachers” (Gardner, 1999, p. 148). In my opinion the main focus of Gardner’s theories of multiple intelligences, in regards to the Art classroom, is not necessarily to incorporate all the intelligences into every lesson, but rather to set up an environment, by collaboration with the entire school, that establishes equal merit to all intelligences and allows those intelligences to blossom. In addition, his theories suggest that classrooms be set up in a manor that foster individual growth in opposition to direct regurgitation of the lesson provided.

In the upcoming chapter I will be discussing the educational research of Elliot Eisner, along with how he came to be an inspirational teacher. I will further dive into the idea of creative intelligence that Sternberg suggested and the spatial intelligence that Gardner mentions, focusing on a less vague category that Eisner theorized. Additionally, I will discuss the collaborative approach that can be taken to meld Eisner’s research with the secondary art classroom.

Chapter 4: Elliot Eisner

Background

Elliot Eisner was born in Chicago in 1933 (Smith, 2005). When he was young his mother heavily encouraged him to pursue his artistic abilities and he was expected to be a commercial artist. In elementary school art class was a type of salvation for him, in his own words;

“arithmetic was problematic and frustrating, handwriting was and is at present not particularly good, spelling was a relentless bore and English grammar, the diagramming of sentences whose features remain before me as vividly now as they were then, was largely meaningless, even when I was able to correctly indicate the difference between a direct and an indirect object, But in art, ah, that was another story, I was good at art; indeed , I was the “class artist” (Eisner, 1998, p. 57).

The elementary teacher suggest to Eisner’s mother that he been enrolled into special art classes, to which his mother obliged. That teacher could have very well changed the course of Eisner’s life merely by investing the time to ascertain her student’s talent.

He ended up going to college in Chicago and majoring in art education rather than just fine arts. He then went on to get his doctorate in art education while teaching at the high school and college levels. “From an early point in his career Elliot Eisner was worried that most schools, by failing to properly appreciate the significance of art, were offering an unnecessarily narrow and seriously unbalanced approach to education” (Smith, 2005, p. 1). He now works at Stanford University in three different fields’, arts education, curriculum studies, and qualitative research methods (Smith, 2005). He has received multiple awards and grants for his philosophies and

research in the art education field. He has been the President of the National Art Education Association.

Review of Literature

While Eisner was working at the University of Chicago he developed “a typology of creative behaviors found in the visual arts. Arguing that it might be useful to think of various types of creativity rather than creativity as a single behavior, Eisner analyzed four types of creativity:” (Bruce & Matthews, 2005, p. 4)

Boundary Pushing

Eisner’s idea of boundary pushing, “refers to extending the limits of known objects or materials by applying them in unique and novel ways” (Bruce & Matthews, 2005, p. 5). This is the person that when trying to create a super hold on glue ends up inventing post-its from his failure, or the person that uses the eraser of a pencil as a rubber stamp. They take objects that have a specific purpose and re-purpose them (Bruce & Matthews, 2005).

Inventing

The idea of inventing, “refers to activities in which known objects and materials are put together to create something new” according to Eisner (Bruce & Matthews, 2005, p. 4). These are the blenders of the world, people that would for example, put a carrot peeler and apple corer together to create one instrument that performs both tasks. When this type inventing is done on a musical level it is called a mash up, most recently made popular by the television show GLEE.

Artists do this all the time, like Robert Longo who took the uptight looks of people in the business world and put their clothes and body positions in that of street dancers, blending the two different worlds.

Boundary Breaking

A person that is known as a boundary breaker is “one who questions the very premises upon which current practices in a field of inquiry are based” (Bruce & Matthews, 2005, p. 4). These are the curious people of the world not always related to dare devils, but certainly not excluding them. It could be a sculptor who instead of requiring a person to walk around a sculpture has the sculpture rotated so it’s walking around the viewer (Bruce & Matthews, 2005). It is also the same idea as the person who flies the jet into the danger zone to test if the plane can take the new height. It is more of a rejection of preconceived thought and the action following that thought which forms the creativity (Eisner, 2005).

Aesthetic Organizing

One of the most common forms of creativity is aesthetic organizing which “refers to a type of creativity in which something new is not created, Rather, the producer utilizes component elements in order to produce a product which is quite beautiful or moving or satisfying” (Bruce & Matthews, 2005, p. 4). This is more like the student who can draw the one point perspective piece that the teacher instructed very accurately, but doesn’t really give it any personal marks.

Eisner does not care for objectives in a curriculum guide stating that, “If educational objectives were really useful tools, teachers, I submit, would use them. If they do not, perhaps it is not because there is something wrong with the teachers, but because there is something wrong

with the theory” (Bruce & Matthews, 2005, p. 5). Eisner wrote several art education curriculum books, so his ideas are not just one mans opinion; his opinion reflects a lifetime of research in the art education field. In 2000 the United States reformed schools and with the reformation a lot of them took out art programs (Eisner, 2005). Eisner argues that the people that are creating the legislation when it comes to the classroom are not the people that should be. What kind of population are we trying to build by making everything standardized? (Eisner, 2005).

Eisner uses his boundary breaking ideas to suggest that teaching itself is a form of art.

“There are classrooms in which what the teacher does, the way in which activates are orchestrated, questions asked, lectures given, constitutes a form of artistic expression, What occurs is a performance that provides intrinsic forms of satisfaction, so much so that we use the adjectives and accolades usually applied to the fine arts to describe what the teacher does while teaching” (Eisner, 1994, p. 155).

What would it look like if creativity mattered on a report card just as much as algebra? What if there were parent-teacher conferences that were called because the student is not pressing themselves in there creative cognitive ability? What if creativity was one of the highest forms of achievement, what would the world look like if that were the case? These are the arguments that Eisner gives towards the teaching of art and other creative classes (Eisner, 1994).

The arts are a way for the human brain to explore, “indeed the arts provide a kind of permission to pursue qualitative experience in a particularly focused way and to engage in the constructive exploration of what the imaginative process may engender” (Eisner, 2002). This idea of exploration in elementary terms can be associated with the word play. Typically that

word is often associated with things that are unprofessional and childlike, but what does it take to have a great thought that inevitably will change the world? In a word, creativity (Eisner, 2002).

Application to Art Education

Eisner's theory of the creative behaviors of humans not only benefits the art classroom, but all classrooms. It bears the question, how can I take this knowledge further? That mindset can be scary for teachers. If the teacher is not as knowledgeable they may lose the respect of their students. On the flip side, students may achieve more and learn higher order things because of "pushing the boundary" as Eisner would say.

Inventing is usually something that is associated with the sciences. I believe it's in seventh grade here in the states when everyone has to submit a science project where a lot of students follow the "aesthetic organizing" form of creativity and make a bubbling volcano (Bruce & Matthews, 2005). However, those that truly are driven expand their horizons and create new things. In my opinion, the single greatest task that we can teach our students and that is to dream, then act upon that dream.

"The primary mission of art educators is not simply to understand something, it is to facilitate the artistic development of human beings" (Eisner, 1997, p.65). I think that the use of creativity is something that all teachers are encouraged to use in their classrooms. Most of the time we are given a set of guidelines then told specifically to "be creative". Why then are we not giving precedence, as Eisner would suggest, to the art field in schools? We can teach our students to think abstractly instead of just thinking in a linear fashion.

The final chapter will address how these great theorists can be applied to the secondary art classroom. Also, I will examine how their information can be blended together to collaboratively make their ideas more fluid. Lastly, I will give my opinion on their ideas and the implications they have on the education system.

Conclusion

When I started out on this project I thought it would be a great way for me to learn about how my students think and how I think as well. I thought it would be a great resource for me to use in my future classroom so that I can be more perceptive with students who aren't like me. I had no idea the amount of knowledge I would consume. I've learned that not only are fine arts a healthy way for students to express themselves emotionally, but that cognitively we need more programs that encourage students to be creative. When children attend recess, they create games and build relationships that guide major moments in their life, by the time they get to high school, students are so overwhelmed with work and extracurricular activities that if given the free "play" time, they would just use it to talk with a friend or catch up on work. When we give students that 30-45 minute break in the day from analytical thought to think creatively it sometimes changes their entire day, and sometimes their entire career (Eisner and Sternberg are examples of this).

It could even be argued that as a need for emotional response. I was reading Leo Buscaglia's book entitled LOVE when I discovered this startling statistic;

"Harold Skeels, a noted psychologist and educator, reported recently on his most dramatic long-term study conducted on orphaned children where the only variable was human love and nurturing. One group of twelve children remained housed in an orphanage. Each of the twelve children, in a second group, was brought daily to be cared for and loved by an adolescent, retarded girl in an institution nearby. After over twenty years of study he has found that of those in Group I who remained in the institution, without personal love, all were at present, if not dead, either in institutions for the

mentally ill. Of those in Group II, who received love and attention, all were self-supporting, most had graduated high school and all were happily married, with only one divorce” (Buscaglia, 1972. p. 78-79).

Evidently there is more to teaching and to human interaction than we are focusing on in the traditional curriculum. This excerpt showed me that our words and actions have a great deal power to affect the people around us. And, if it is argued that our emotional responses have power, we as educator will affect people either positively or negatively, there is no middle ground. All of the theorists seemed to be intellectually encouraged from an early age. This could be a practical way of applying emotional support to students that will effectively influence students to pursue learning.

In response to Gardner’s Theory of Multiple Intelligences, I wholeheartedly agree with the fact that the western school system primarily focuses on and singularly praises students with great linguistic and logical-mathematical intelligences. The rest of the known intelligences are deemed good to have, but not held at the same level. I don’t think that his theory is complete because I think that there are more intelligences than he suggests there are, all of which I think are important, but the theory itself seems flawed to me. Sternberg Triarchic Theory of Intelligence seems all encompassing with analytical, creative and practical intelligences working together and separately in order to grow cognitive ability. Again I don’t believe Sternberg has been able to identify all of the intelligences a human brain can possess, but in my opinion it does a better job of including the majority of them in a simple form.

Feldman’s research shocked me, in my gut I knew, but I had never thought of art being used as a psychological tool or to teach morals. I even have a friend that went into music therapy.

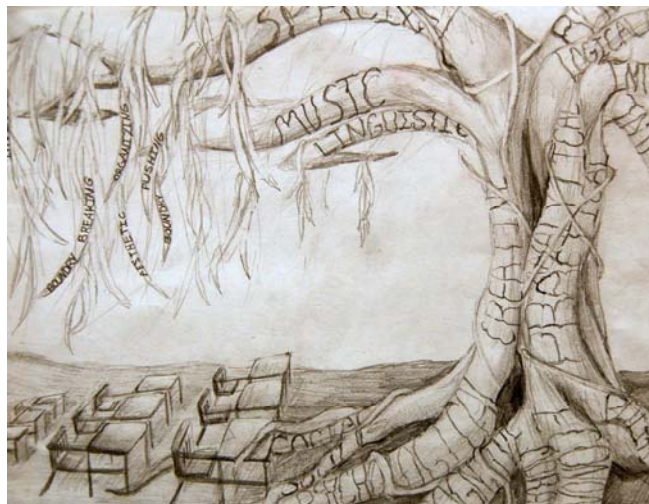
There must be something in it that just innately makes us experience a range of emotions. In music there are certain songs that make people cry, some that make you feel invincible and some that annoy the heck out of you. The same thing can be applied to fine art, sometimes there is a piece that you just can't stop looking at it just captures a part of you. We are not usually taught this; it is just how our being reacts to the creativity. On the same idea, we as teachers can use art to teach a person morally. I love how Feldman used the example of students being crafty and how that usually have a negative connotation because craftiness is not being taught and those that exhibit that cognitive ability tend to use it for selfish purposes. I think that the Feldman method of critiquing a work of art is a step in the right direction for devising a way to universally judge art, but at the same time I'm leery of that knowledge. I don't know if something that is so personal to every human being should become popularly appraised.

Eisner's work over the years is outstanding; he has challenged not only his students, but the entire education system and used his own ideas of boundary pushing to get art programs into schools. Honestly I don't understand why they are of so little value when it comes to writing curriculum. Math and English are used usually everyday for adding bills and talking with people, however, creativity is used just as much and yet those classes that focus on creativity are elective and in no way mandatory. In fact, the majority of the time those classes are used for students to do other things like making up tests or even having student conferences.

When you take all of these bodies of works and try to find a commonality there are only two that seem to be resounding. The first is that education, at least in the public sector, is severely lacking in educating students to their full potential. We have created all of these boxes that students, teachers, curriculum, etc, are supposed to fit into and forgetting to take into

account the individuality of people, situations, locations or even something as basic as resources. The second commonality between Feldman, Sternberg, Gardner and Eisner is the value of creative intelligences and practices. They all believe that creativity is the money maker of the future and one of many things that will be irreplaceable to students in the future. It is one thing to understand how to do material or fill out forms properly but it is a complete other thing to realize that the form you've been using the past 20 years is ineffective and then come up with a solution to better address the information on the form. In order to accomplish that it will require a fully developed creative thinker, this isn't just innate, but according to all four of these education reformers can be learned and developed.

As I wrote my thesis I tried to think of a way to meld the ideas of these men together. This led me to create the *Tree of Art Education*,



The roots of the tree focus on why art education is important. It expresses Feldman's views of social, psychological, cognitive/moral, economic, and political benefits that every student could gain from because of participation in a creative environment. Moving up into the trunk of the tree, it portrays the three intelligences that Sternberg suggests every person needs to achieve a

successful range of intellect. Moving from those three main intelligences, into the branches, comes a further break down of multiple intelligences as theorized by Gardner. For example, the creative intelligence part of the trunk breaks off into spatial and musical intelligence. Then, from those branches we can develop a way to apply those creative avenues to our students (the classroom desks) through Eisner's boundary pushing, aesthetic organizing, inventing, and boundary breaking. All of these things can be separated by merely focusing on one section of the tree; however, the design suggests that they should work cohesively as one unit.

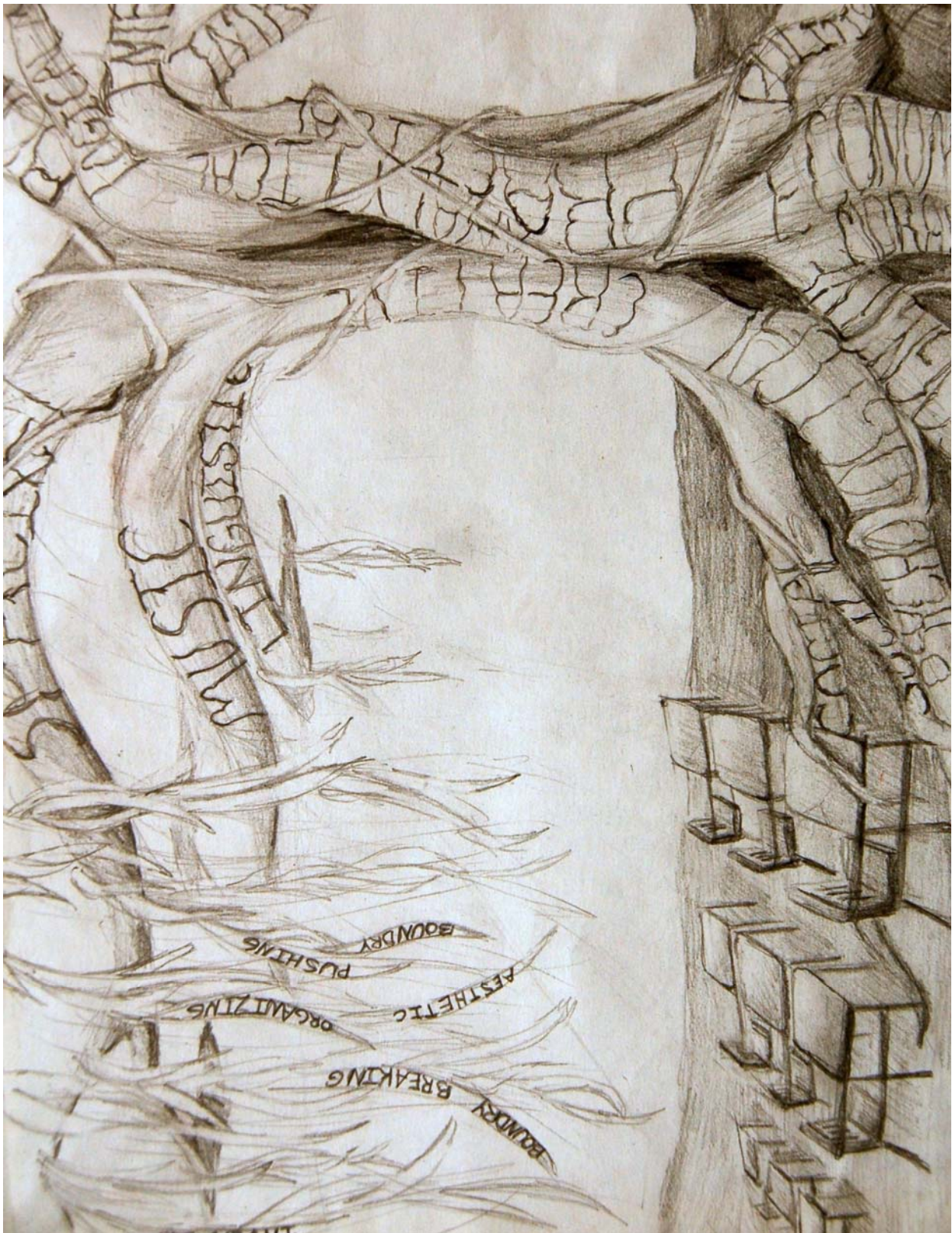
Many strides need to be taken in the pursuit of art education, but the question of whether or not it is necessary is a resounding yes. A recent article in the Harvard Crimson (Harvard University's newspaper) reported that no more exams will be administered at Harvard; they are pushing their professors to come up with more creative ways of assessment. Harvard being an Ivy League school (universally assessed as one of high academic achievement) is on to something in the way of intellectual reform. It is critical for educators to implement learning opportunities for all forms of growth including artistic intelligence. If we in the United States continue to undervalue creativity and the arts we will be impairing our future generations and endangering our country.

As a final thought, teaching started out as a way for a culture or community to grow and prosper by making their people intelligent. This original idea of what Eisner calls 'boundary pushing' is what shaped most forms of education (Bruce & Matthews, 2005). I think that is what we need get back to in order to grow as a society. In doing that, we need to ask ourselves really tough questions. What systems do we need to get rid of? What has worked in the past but isn't working now? What can the new teacher starting out today contribute? What can the teacher of

yesterday contribute? Can we successfully standardize the nation in education? Sometimes a revolution starts with the asking of a simple question.

APPENDIX A:

TREE OF ART EDUCATION



References

- Atherton, J. (2010). *Learning and Teaching: Piaget's developmental theory*.
<http://www.learningandteaching.info/learning/piaget.htm>.
- Berube, M. (2000). *Eminent Educators: Studies in Intellectual Influence*. Westport, CT: Greenwood Press.
- Bruce, P. & Matthews, J. (2005). *Intricate Palette: Working the Ideas of Elliot Eisner*. Columbus, OH: Prentice Hall.
- Buscaglia, Leo (1972). *LOVE: A Warm and Wonderful Book About the Largest Experience in Life*. New York, NY: Fawcett Crest.
- Chen, J., Gardner, H., & Moran, S. (2009). *Multiple Intelligences Around the World*. San Francisco, CA: John Wiley & Sons, Inc.
- Combs, A. (1979). *Myths in Education: Beliefs that Hinder Progress and their Alternatives*. Boston, MA: Allyn and Bacon, Inc.
- Eisner, E. (1997). *Education Artistic Vision*. The Macmillian Company.
- Eisner, E. (1998). *The Kind of Schools We Need: Personal Essays*. Portsmouth, NH: Heinemann Educational Books.
- Eisner, E. (2002). *The Arts of the Creation of the Mind*. New Haven & London: Yale University Press.
- Eisner, E. (2005). *Reimagining Schools*. New York, NY: Routledge.
- Feldman, E. (1987). *Varieties of Visual Experience*. New York, NY: Time Mirror Books.
- Feldman, E. (1994). *Practical Art Criticism*. Upper Saddle River, NJ: Prentice-Hall Inc.
- Feldman, E. (1996). *Philosophy of Art Education*. Upper Saddle River, NJ: Prentice-Hall,

Inc.

Gardner, H. (1990). *Art Education and Human Development*. Los Angeles, CA: The J.

Paul Getty Trust

Gardner, H. (1993). *Creating Minds: An Anatomy of Creativity Seen Through the Lives of*

Freud, Einstien, Picasso, Stravinsky, Eliot, Graham, and Gandhi. New York, NY:

Basic Books.

Gardner, H. (1993). *Frames of Mind: A New Theory of Human Intelligence*. New York,

NY: Viking Pr.

Gardner, H. (1999). *Intelligence Reframed: Multiple Intelligences for the 21st Century*.

New York, NY: Basic Books.

Hothersall, D. (1995). *History of Psychology*. McGraw-Hill Inc.

Karlson, J. (1978). *Inheritance of Creative Intelligence*. Chicago, IL: Nelson-Hall, Inc.

Katz, J. (1988). *Arts and Education Handbook: A Guide to Productive Collaborations*.

Washington, DC: National Assembly of State Arts Agencies

Lazear, D. (1999). *Eight Ways of Knowing: Teaching for Multiple Intelligences*.

Arlington Heights, IL: Skylight

Leslie. (n.d.). *Wilson's Newer Views of Learning: Robert J. Sternberg's Views on*

Intelligence and the Triarchic Mind. Retrieved from

<http://www.uwsp.edu/education/lwilson/learning/sternb1.htm>.

Long, M. (2010). Crimson Ties. *Harvard Magazine*, Retrieved from

<http://harvardmagazine.com/2010/07/bye-bye-blue-books#>

Mensh, E. & Mensh, H. (1991). *The IQ Mythology: Class, Race, Gender, and Inequality*.

- Carbondale and Edwardsville, IL: Southern Illinois University Press.
- Moody, W. (1990). *Artistic Intelligences: Implications for Education*. New York, NY: Teachers College Press.
- PBS. (2001). *School: the Study of the American Public Education*. Retrieved from http://www.pbs.org/kcet/publicschool/evolving_classroom.
- Plucker, J. (2010, October 07). *Human Intelligence: Robert J. Sternberg*. Retrieved from <http://www.indiana.edu/~intell/sternberg.shtml>
- Rockefeller, D. (1977). *Coming to Our Senses: the Significance of the Arts for American Education*. New York, NY: ACA Books.
- Shearer, B. (2009). *MI at 25: Assessing the Impact and Future of Multiple Intelligences for Teaching and Learning*. New York, NY: Teachers College Press.
- Smith, M. (2002). *Howard Gardner, Multiple Intelligence and Education*. Retrieved from <http://www.infed.org/thinkers/gardner.htm>
- Smith, M. (2005). *Elliot W. Eisner, Connoisseurship, Criticism and the Art of Education*. Retrieved from <http://www.infed.org/thinkers/eisner.htm>
- Spear, J. (2010). *Encyclopedia of Psychology* (Robert J. Sternberg), Retrieved from http://findarticles.com/p/articles/mi_g2699/is_0003/ai_2699000333/
- Sternberg, R. (1983). *How Can We Teach Intelligence?* Philadelphia, PA: Research for Better Schools.
- Sternberg, R. (1988). *The Triarchic Mind: A New Theory of Human Intelligence*. New York, NY: Viking Pr.
- Sternberg, R. (1996). *Successful Intelligence*. New York, NY: Simon & Schuster.

Winner, E. (n.d.). *The History of Howard Gardner*.

http://www.howardgardner.com/bio/lerner_winner.htm