

Project Number: SST-CART

ART ON CAMPUS

An Interactive Qualifying Project Report

submitted to the Faculty of

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Bachelor of Science

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Date: December 12, 2004

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Abstract

This proposal explores the usage and effectiveness of art on WPI's campus. Working from literature, surveys, and interviews, we will define what art is and how it can be used on a university campus. We will assess the use of art on the WPI campus, and discuss proposed changes that could be made to enrich the educational environment.

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Chapter 1: Introduction

Art is a facet of culture that is prevalent in many campuses throughout the nation and the world. The importance of art is very easy to overlook when considering a technical education at a school such as WPI. However, art's prevalence in seemingly all facets of life makes it important to consider even in an environment where the final products of labor are not necessarily artistic in nature, such as on a technical college campus.

Our Art on Campus IQP explores the usage of art on Worcester Polytechnic's campus in Worcester, Massachusetts. We began our journey by delving into resources written about art to discover viewpoints about the different uses of art. As we will explain later on in this project, art can not be simply grouped into a single category or single definition.

After we gained an understanding of various viewpoints, we used these points to create three broad definitions of art in our own terms. These broad definitions were intended to envelop all major thoughts or trends of thinking about art in a precise way so that we can easily distinguish between them. These definitions were necessary to frame the project and give us a starting point for our evaluation of art on campus. We illustrated these three views by using them to evaluate what we thought to be the most prominent piece of art on the WPI campus, the fountain. Each view focused on the different aspects of the fountain and emphasized different values of a work of art.

In addition to our three definitions of art, we explored phenomena related to art such as transfer and dualisms. Transfer shows the possibility that art can be directly beneficial to our learning experience, while dualisms are prevalent concepts throughout western society and are considerably influential in cultural thought and expression.

To further explore the possibilities of what it is that makes something a piece of art, we also examine the general concepts of creativity and context of art. Creativity seems to be an inherent feature in a piece of art, but was not specifically tied to a particular definition of art. Context is another feature of a piece of art that may or may not be a determining factor in whether or not a piece is art.

We brought our literature review to a close by examining the role of a university, the influence of art in education, and more specifically the usage of art on a university campus. With regards to education, art is not simply another discipline, but can be used as a learning tool to compliment other disciplines through means of transfer. Examining the role of a university is essential for a study of art on a campus because to learn the influence of something, you must know the details of what is being influenced. Finally we focused on a set of questions to be answered in our methodologies.

In our methodologies we used these questions to frame our investigation of the usage of art on the WPI campus. We used an interview method to find out what the WPI administration thought about art on campus, and what goals they

may be trying to reach. We interviewed numerous WPI administration figures who we thought would know of these plans.

In order to evaluate whether or not the goals that were discovered in the interview process were met, we administered a web-based survey to the entire population of WPI. This brief survey consisted of half textual input answers and half multiple choice answers to provide data in both qualitative and quantitative form. This is so that we can use both concrete number for analysis, while at the same time probing the community for opinions and ideas that may easily be passed over in a strictly multiple choice survey.

We analyzed the data from our interviews and surveys by looking for major patterns and in the data, and a number of interesting and unexpected results arose. The primary means of determining the validity and significance of our data is by searching for convergence, especially for the qualitative interviews. Since the majority of the methodologies and analysis was based on qualitative information, convergence indicates when the information begins to repeat itself, and patterns emerge. Specifically in the interviews, when the questions answered by the interviewees begin to sound similar to previous interviews, convergence has begun. These patterns are the key to our analysis, for they are the only source for later finding the larger implications and significance of the project.

In the end, we plan that our project will fulfill the goal of the IQP system by bettering our community. By observing the current state of art on campus and in general, we ultimately hope to have learned enough about how it has existed in

the past and the present, to make useful recommendations for making the art on the WPI campus as beneficial as possible.

Chapter 2: Literature Review

Introduction

This research into art on campus begins with many definitions to discover or create. A good definition always starts with the right questions. The main questions are: What is art? Where does it come from? What does art express and how do we, as humans, make and view art? Finally, how does art affect, and how is it affected by the technical college campus environment? At the end of this chapter, we will shift our focus to our experimental question: does WPI's application of art on campus reach WPI's artistic goals as seen by the members of the campus? These are the questions that we will explore in our readings and conversations, and that we will examine and evaluate in this writing.

The Merriam-Webster online dictionary defines art as “the conscious use of skill and creative imagination especially in the production of aesthetic objects; *a/so*: works so produced.” While this definition is concise, it has a narrow focus that only encompasses what is generally thought to be art. For example, this definition excludes natural phenomena that may be considered art. A broader set of explanations is needed to incorporate all of what art is, where it comes from, and how it relates to the people who make and experience it.

Many things are considered art: paintings, dances, ceremonies, and even nature are forms of art according to humanity. Given such a vast category, it becomes difficult to quantify and qualify the concepts that define a work as art. Instead of distinguishing between performance art, painted art, computer generated art, and however many other types of art one can come up with, we chose to develop a view of art in terms of how art is defined. Finding many

disagreements, both in the text and within our group, we decided to develop three contrasting views of art in order to obtain a broad definition. At the same time, we still maintain what is generally thought of as art. The following is an extraction of literature, discussion, and personal reflection.

The first view of art that will be discussed is the traditional definition of art. This view focuses on what is commonly referred to as art, and essentially defines the stereotype of what art is. The biological view defines art as an evolutionary phenomenon. Since it directly benefited the species, it has become incorporated into our genes through evolution. Finally, the “everything can be art” defines art based on meaning and perspective. This view argues that anything can be art by applying meaning, which is always relative to the observer.

Concepts Related to the Meaning of Art

While all views of art are unique, certain themes occur in each, and these themes need to be defined before anything. They are extremely general ideas that follow many types of art and assist to augment all three views being developed.

Dualisms are important philosophical concepts that are extremely prevalent in western thought, and therefore applicable to western art. A dualism is a restricted view of a matter in terms of two polar opposites, such as mind and body, male and female, or objective and subjective. Oftentimes, and arguably erroneously, these concepts are projected onto evaluative dualisms such as good and bad, or superior and inferior. While dualisms are useful tools of

reference for larger concepts, they are often taken for granted as being the only viewpoint on many common subjects and often ignore what are considered anomalies or the “gray area” of certain subjects. The dualism of mind and body tends to ignore the fact that the mind is also simply another organ in the body. The gender dualism generally looks over those who have both or no gender, and completely misses the concept of homosexuality. It needs to be understood that the power of dualisms is inherent in their restrictions in viewpoint; they make concepts easier to understand because they make the building blocks simpler. Dualisms are important here because their symbolic power makes them of great use in culture, art, and philosophy.

The emphasis on dualisms in western thought and tradition affects our perception of art in somewhat dramatic ways. It is inherent in the western culture to easily distinguish between objective and subjective, spiritual and physical, negative and positive, or good and bad, among many others. The traditional conception of art generally tends to consider that which reflects the spiritual or intellectual as art, rather than that which reflects the physical or bodily (Dissanayake, 1992). This western dualism of intellectual vs. bodily is intricately tied with that of male vs. female, which implies that the traditional definition of art neglects at least half, probably more, of the potential meaning in the human experience (Sonbanmatsu).

A much more eastern form of thought and expression is balance, rather than opposition. It is our group's belief that balance is at the heart of every dualism. Furthermore, balance is the more universal concept. In order to have a

dualism that reflects a relation, the imbalance of the relation will dissolve the lesser concept. In order for both concepts to be of equal enough contention to comprise a dualism, there needs to be some measure of balance. This concept of balance then tries to transcend the oppositional component of a dualism or any concept. It views the greater picture of how the system works together as a whole. This therefore becomes a possibly even more useful concept for analyzing art than dualisms, since it incorporates the ideas of opposition while maintaining a complete view.

With the help of the proceeding definitions, the exploration of art will be somewhat smoother.

The Traditional Definition of Art

Through the lens of the traditional definition of art, perceptions related to skill, humanity, creativity, and culture are critical. However, if one were to interview two random people in America, the probability is strong that neither one would give the same definition of art. Their distinction for the boundaries of artistic expression will differ, which leads to the lack of a formal definition. However, among most people there are similarities between their perceptions and these perceptions compose the traditional definition. While art remains eternally fresh due to the lack of a formal definition, there will always be a commonality of what it is and what it should be. Henceforth, this well known but informal concept will be referred to as the traditional definition of art.

To understand a definition that everybody recognizes yet whose constructive words no one agrees upon, there is no better place to look than the cultural artifacts that rely on it. Typically, an art appreciation guide will contain pictures of the cave paintings in Lascaux on the first page, continue through Christian iconography, and end with an example of post-modernist work. What is it that all these works have in common, and what makes them distinct?

To search for the common attributes of a traditional definition of art, a logical place to begin examining is the root of all art regardless of its definition: its creation. The methods of creation for what is generally called a piece of art are so diverse that it is a poor indicator of what is in fact true art. Since the beginning of culture, the media of art have progressed from crushed berries to rivets and stainless steel sheeting. Dexterity skills, once a prerequisite for greatness of any discipline, have evolved to the boundary of human capability (Eisner, 2002). Eventually, man began creating works like Michelangelo's David that were essentially equivalent to their biological counterparts in every way. Due to this developmental dead end in the creation of art, physical skill has become unnecessary to have one's work considered praiseworthy, let alone considered "art" at all. Works by Jackson Pollack, who focused less on physical dexterity and realistic form, now hang in the same building as Claude Monet (moma.org).

While the literal means of creation are too diverse to define art, the figurative creation is more universal. The answer lies not in creation, but in the state of consciousness of the creator: creativity. Creative is defined as "having the quality of something created rather than imitated; imaginative" (Merriam

Webster Online). Since the creation of art strives to be original, it is a constantly evolving and growing phenomenon, changing both in methods of creation and purpose or symbolism behind the work.

Creativity certainly appears to be a factor in defining art, but this term is so broad it can essentially be applied to anything created by man, directly or indirectly. The definition shows that creativity is a function of imagination, which is dependent on a highly developed consciousness (Csikszentmihalyi, 1990). Therefore, only beings with a developed brain can create and experience art. This leads to a general idea that only humans are associated art, according to the traditional view.

Context is another common element that can be seen in virtually all works of traditional art. Art has usually been created to tell a story, to represent something, or just to be beautiful. Yet how would a layman discriminate between identical works hanging next to each other in a gallery, one a piece worth millions, and the other its forgery? The apparent difference is in the intent, or context, of the creator. The artist of the original intended to represent some image or emotion, and did so creatively. The creator of the forgery was most likely intending to make some money by way of deceit, or to criticize the art world by showing how easy a masterpiece is to fake. Another way to illustrate the importance of the context of creation is to point out how art is interpreted differently if it came from a different region or time period.

The importance of the context of creation of a piece of art brings up the question of the context of display. Will a piece of art that is displayed in a

museum be interpreted differently than a piece of art that is sitting in an alley next to trash? This is a question we plan to explore in our next chapter. It ties in with our “everything can be art” view by emphasizing the interpretational aspect of art.

To further explore the traditional definition of art, perhaps an easier question would be to ask what art is not. Under this view, the only concrete attributes for “what is art” are that it is something created by man because creativity is universal in art and it is generally looked upon as a human attribute. Neither nature, animals, god, nor the universe may demonstrate the imaginative creativity of consciousness that art is concerned with. Therefore, to find an example of non-art, it is necessary to start thinking about the more abstract things in humanity since nature and the universe have already been excluded. So typically, under a traditional definition of art, a thought, concept, or idea cannot be considered art in and of itself. Purely conceptual matter cannot be considered art because thoughts are fleeting, and cannot be expressed without a medium. Many media of art can survive for centuries, and these survivors are used by historians to define the culture and the time period.

The primary reason art has flourished and been worshipped for millennia is because it is one of the most distinct products of culture. Without art, culture would have a greater chance of dying out with the generation that created it due to the loss of a major means for transmission (Eisner, 2002). The fact that humans can infer volumes about their ancestors from one piece of work supports this dependency argument. Art transcends its role as superfluous entertainment created by civilizations, and becomes the phenomenon that sustains the very

civilization that created it. The important caveat however, is that this would not be possible without something sensible to share with mankind (Eisner, 2002). While concepts can be beautiful and skillful, without a means of passing on their expression via the senses, they become something isolated and disconnected from culture. Culture is completely reliant upon the senses of its population to interpret and react to the environment, and art is a product of man and reflects upon its culture (Eisner, 2002). Therefore art must be responsive to the senses as well. This is the beginning of an important branch of art study known as aesthetics.

Under a traditional definition of art, every work has another important feature in common with every other work: the aesthetic experience. To understand the aesthetic experience, it is important to ask the theoretical question: why, traditionally, art is created. The human race is born into an environment that is defined to us via our senses which connect us to where we live. In addition to imagination, we eventually develop beyond the senses to complex cognitive development such as representation. Representation is a method of communicating what the senses have described, but in a way such that the idea can be inscribed, edited, or communicated on a grander scale (Eisner, 2002). Through these developed skills, humanity further builds, sustains, and passes on culture, which ultimately distinguishes us from nature. The manipulation of representation, or, art, is the key to changing not only what is represented, by more importantly, what is then experienced. It is this experience that forms the foundation of aesthetics.

The word aesthetic originates from Greek, where it means sense perception. With this origin in mind, art's direct link to the senses is intrinsic in the language we use to describe art. On the other hand, anyone who works with art will describe how looking at a piece of art doesn't necessarily equate with experiencing it. The aesthetic experience is an exercise in intelligence, emotion, and reflection. Initially, one might have a knee-jerk reaction to a work, become overwhelmed by their opinions, and walk away without giving the work a chance to be judged by less superficial merits. Beginning to look at a work is only the first step. A trained individual will analyze why forms and colors are used, and let the imposed feelings guide the eye (Perkins, 1994). The work might remind them of personal histories or it might provoke strong emotions. Educated thought may allow for one to draw important implications of the work if they have previous experience of the piece of art, or possibly the artist's style, based only on its context, such as when, where, why, or who made it. Background knowledge plays an integral part in enhancing the experience of a piece of art. A seemingly meaningless dot on the wall might be ignored, but placed into the context of someone who understands abstract art, it could easily become enthralling. Unlocking the less obvious significance of the work is the challenge of the aesthetic experience that many claim to be the greatest source of pleasure.

When asked what the experience feels like, some claim truly great works of art provoke spiritual transcendence, while others simply describe it as losing sense of one's surroundings for a moment (Csikszentmihalyi, 1990). In either case, the experience has been similarly linked to what is known as "flow". This is

the phenomenon of consciousness' temporarily quieting, allowing for experience and intuition to take control. Flow can be seen in activities such as hobbies or sports in which the participant is deeply involved. The significance of flow is that the individual participates in the activity despite a lack of external reward. The participation is its own reward, and the word flow describes the ease of advancement in the activity (Csikszentmihalyi, 1990). The significance of the experience of art being its own reward is directly linked to the existence of art itself. If art was not appreciated, it would have no way of perpetuating itself.

But to empirically describe the aesthetic experience is a daunting task. While it is safe to say that the majority of Western accomplishment has centered on rational thought, the aesthetic experience is anything but rational due to its focus on emotion. Unfortunately, for centuries since the beginning of Western science and philosophy, the emphasis on logic and rational processes invalidated more visceral structures like feeling or intuition (Csikszentmihalyi, 1990). It was many years before newly found components of the mind became relevant to the luminaries of the world. One early proponent of these components was Alexander Baumgarten who first used the term "aesthetic" to describe art. He was one of the first to argue that sensation was a perfectly valid form of knowledge. As a corollary, the value of a piece of art could be judged by its capacity to produce sensation. Since the years Baumgarten first began to focus upon it, this sensation has been described as a union of "intuition and understanding" according to famous philosophers such as Kant. His ideas were based on more radical concepts that implied that art did not so much display the

reality of the world, but more importantly, the immortal spiritual beings behind it (Csikszentmihalyi, 1990).

Kant presented a different conceptualization of the aesthetic experience, the idea of conveying more than basic representation through the window of art is corroborated by expert's descriptions of what they feel. While certainly not scientifically definitive, their descriptions tend to fall between the categories of perception, emotion, intellect, and communication, or a combination of each. Perception refers to when the experience emphasizes feelings related to the tangible, such as an appreciation of form, color, and texture. Emotion involves a connection to past associations and experiences through the art, and this is often so powerful that it obscures deeper meaning for the individual. Intellect is the application of knowledge during the experience, such as recalling what city a work was painted in and how it affected the artist. And finally, communication is the dialogue that art opens between the viewer and the artist, and how it conveys so much intimacy of the artist and a time that could be long past away (Csikszentmihalyi, 1990). While the scientific quantification of the aesthetic experience may only currently be supported by descriptive evidence, the importance of attempting is simply to one day better understand art and the mind.

As we have presented it, the traditional view interprets art based on the aesthetic experience of the interpreter, in addition to the meaning created by the artist. The context of the piece also seems to be a contributing factor to how the piece is viewed, with respect to when and how it was made, and when, how, and where it is displayed.

The Biological Definition of Art

A second important view of art is the biological view. It argues that art is an evolutionary advantage by not only helping to develop and express our emotions and skills, but also because it is necessary in the development of a human being and the human species.

Art is a reflection of humanity's experience of dealing with important things (Dissanayake, 1992). The term "important things" refers to anything that the individual creating the art deems important enough to create something about. This is the basis of the biological argument, and is deemed "making special" by Ellen Dissanayake. It argues that art is the act of making something symbolically important, oftentimes by some form of aesthetic appeal. "Making special" is intricately tied with an emotional aspect that is connected to the important thing that is being made into art (Dissanayake, 1992). Anyone who makes a piece of art for enjoyment, which is argued later to be inherent in art, is required to put a good deal of effort into the art. This essentially requires the artist to care about whatever message or emotion they were trying to portray. This effort and caring for the placement of importance and meaning upon an object is highly important to a definition of art. For example, the meaning behind a painting is what makes it art, not simply the fact that it is paint on canvas in a frame.

Connections can be drawn between art and human society by analyzing art against another topic to draw connections and derive meaning. Under this perspective, art should not be analyzed alone, but rather juxtaposed against

another aspect of human culture. (Dissanayake, 2000). The usage of symbols in human culture shows our connection between artistic qualities and objects, which is another way humans apply “making special” and hence create art. An example of this type of connection is how humans commonly associate the human emotion of love with the artistic color red. Another similar example is the association between girls with the color pink, and boys with the color with blue. Humans create art as a means to convey important concepts with symbols. If one were to consider art by itself, they may miss the importance of the symbols. Symbols appear frequently in human culture, surrounding the average person with common messages and patterns in their society.

The act of “making special” can be seen throughout the entire animal kingdom. While it may appear that certain animal behaviors are simply instinctual, the reality is that they are applying “making special” for reasons completely unnecessary for their survival. Some birds place colored berries and leaves in the nest and refresh them daily. This enhances their conception of their nest’s importance (Dissanayake, 1992). The behavior of cows has been shown to change when listening to certain types of music, and many other animals have been shown to carry out different forms of art. Dissanayake argues that these artistic actions have been beneficial to the species in an evolutionary manner (Dissanayake, 1992). This consistency of art throughout the entire animal kingdom shows the evolutionary beginnings of a universality of art.

It can easily be shown that different cultures have different conceptions of what art is, but within each of these cultures art is very similar. This implies that

art is based on “nurture,” or environment, since the consistent environmental factors produce consistency effects. However, it is also true that all societies have practiced some form of art (Dissanayake, 1992). This shows that our “nature,” or inherent characteristics of humans, also has an impact on the development of art. The general conclusion of the traditional nature versus nurture debate seems to be that, yes, both play a direct role in the development of art.

Patterns are a common theme in many forms of art that can add a sense of connectivity across a medium.

Patterns manifest themselves in human lifecycles through such forms as the imitation of parent’s body movements by infants, the modeling of parental behavior by children, and the rhythms in music and speech. The arts manifest themselves in human reproduction and early development through patterns. From the beginning a baby is born, they will try to learn and reproduce universal rudimentary actions they see, therefore creating patterns in human development (Dissanayake, 2000). The word infant for example literally means “unable to speak”, therefore unable to create vocal expression, so infants attempt to express themselves in other ways. A human baby’s body will follow pitches in voice; high pitches will often result in the movement of a leg or arm in response to pitch change. Infants have chubby cheeks, soft skin, a large head, eyes, and a smile to instantly appeal attractive to nurturing adults (Dissanayake, 2000). Babies will also imitate the facial expressions of their parents. Children imitate their parents in artistic ways by following behavioral patterns such as: “playing

make believe” and “going to the store” (Dissanayake, 2000). These patterns show how meaning is consistently expressed in artistic forms throughout the developmental process of a human, and is arguably essential to this development.

Rhythms in music are similar to the patterns in human reproduction, and both are henceforth important forms of art in the biological view. The sensation of touch can be produced by the impact of music, such as feeling heavy bass in one’s chest. When adults speak to infants, their tone is similar to a song in which they will use words in repetition with a high variance in voice pitches. Baby talk is the way a child attempts to reproduce sounds made by parents in an attempt to imitate their behavior. These patterns and rhythms which seem natural to the childrearing process show how art is deeply integrated into the development of the child’s life.

The fact that art is prevalent in essentially all of human development and society and seems to be prevalent in all of the animal kingdom shows, by Darwinian Theory, that there was some inherent reason why art is beneficial to a species (Dissanayake, 1992). It is possible that the practice one gains while performing an art leads to enhanced skills and abilities through transfer, which will be discussed later. The biological theory of art, or the Darwinian argument of art, argues that art is recognized as a universal piece of the human or animal experience. Since art has had a direct benefit for the species, this trait has been maintained in the species through evolution. It is therefore fundamentally a part of the “nature” of a person or animal.

In general, a person's experiences of the arts are somehow physically pleasurable (Dissanayake, 1992). Initially, it is important to understand the scope of "physically pleasurable". The sensation does not exclusively imply only joyful feelings; a viewer could be angered and horrified by a work, yet may enjoy being horrified or angered in that way. In creating a piece of art, in order for the work to turn out decent, one has to enjoy making it; otherwise one would stop and make something else. In viewing art, in order for one to want to consider it art, one must enjoy looking at it, otherwise one would have a negative reaction and tend to avoid the piece. This inherent physical pleasure of art adds to the Darwinian argument of art by adding weight to the human emotional and bodily experience of art, and showing another way art provides an immediate benefit to the individual, and hence the species.

An interpretation of a work using the biological view of art would most likely reflect the benefit that piece might have to the human species. Oftentimes this benefit will be seen as practice for something later in life, but this benefit can come in many forms, and can also be looked at as the functionality of the piece. Since art is thought to be essential and beneficial to the human species, a person who holds the biological view will probably reflect upon how a piece of art is beneficial to humans and their development, and why it may have been thought to be essential to the community.

Everything Can Be Art

A third possible definition of art is that everything can be art, which builds off of the biological view of “making special” and adds the element of perspective. This definition makes the concept of “what is art” relative to the context of the viewer. In light of the extraordinary cultural differences of art, the context seems to be a facet the biological argument overlooks. The concept of “making special” entirely holds true in this view of art. What is considered art still reflects importance and meaning. However, there seems to be another art defining concept. This idea is the “perspective of reflection.”

This idea is that a person can mentally “make special” any noun they can think of, if they have enough interest, by projecting importance and meaning upon any facet of that noun’s existence. Ellen Dissanayake defines making special as the act of placing importance such that it evokes an emotion, or a reflection of the human experience. The “everything can be art” view argues that any noun is inherently important by being recognized by humans as something that exists. It therefore has played some part in the human psyche.

Beyond this, a person can directly make anything into art by reflecting upon its meaning through an analysis of its inherent characteristics. This “meaning” can be anything an individual thinks is important enough to reveal a greater understanding of the universe. For example, a viewer believes the forms in a painting are presented in a way that reflects a greater sense of what that person thinks is fundamental beauty than simply paint on canvas. If all this is true, then the viewer is looking at art. If a person believes the structure, function,

beauty, or design of a plant or animal signifies some greater or smaller system of the cosmos, then this plant has become art to that person.

With this frame of mind of reflection and analysis, any noun can become a piece of art. A mathematical concept, such as the fact that the derivative of sine is cosine, can illustrate the possibility of perfection in the universe to an astounding degree to anyone who has the correct frame of mind of reflection, and therefore can become art to a person. Each of these perspectives of reflection also has corresponding human emotions associated with them: thinking a painting is beautiful invokes pleasure caused by aesthetics; a reflection towards a larger system of the universe invokes awe.

Something can be interpreted as art to one person but not to someone else. This difference is based two qualities. These are first, their unique opinions of interest and importance, and second, their mental ability to see the connections between the object and the proposed meaning. Someone who has not learned trigonometry or calculus cannot possibly appreciate the reflective possibilities of the aforementioned mathematical concept. Someone who does not like or care about plants may be less likely to reflect upon them in terms of meaning or importance. Likewise, someone who is allergic to paint may be less likely to take an interest in painting, and is therefore less likely to want to contemplate the structure or form of classic works of art.

The statement “everything can be art” may seem to be so broad a definition that it becomes useless, especially since the majority of humanity seems to have distinct ideas of what is and is not art. Therefore it becomes

extremely useful to qualify “everything can be art” in newer terms. What is and is not traditionally considered art is no longer valid in a view where everything is art, regardless of quality. What used to be considered art is now termed “good art” and what is not considered art is now termed “bad art”. It seems appropriate to term art that is conducive to a perspective of reflection as “good”, and that which is not as “bad”. It is also very useful in western society for superficially distinguishing between two groups. In other words, just because the majority of humanity has determined that something is art or not, it is not a reflection on its quality. It just means that the majority of humanity may think similarly about one piece. “Good” art would be a painting or sculpture, or anything that we would generally think of as portraying a greater message. “Bad” art would be something that would be more of a stretch, such as thinking about how molecules are a metaphor for the greater cosmos.

Another useful set of qualifiers for “everything can be art,” as a subset of good and bad art, is positive and negative art. This refers to the emotions that are linked with the meaning of the object that is being reflected upon. This idea of positive and negative emotions is tied to the western dualism of good and bad, which is based in the human experience of pleasure and pain. Most people are drawn towards positive art, or that which evokes beauty or awe or any other pleasure related emotion. However, it should not be neglected that there are a fair number of people who are drawn towards negative art, or that which evokes disgust or annoyance or any other emotion related to pain.

The main similarity between these three views of art is that at the core of all of them is the idea of meaning or purpose. The main difference, however, is in the interpretation of where this meaning comes from. The traditional view of art focuses on the meaning applied by the creator of a piece of art, essentially the context it was created in. The biological view of art interprets meaning based on the functionality it provides, by thinking about art as necessary for the advancement of the species. The “everything can be art” view focuses more on the meaning placed on the piece of art by the viewer. This interpretation is therefore more concerned with the context of the viewer, and their past experiences, current thoughts and maybe mood. Therefore, each view focuses on the meaning behind the work with concentrations on the creation, interpretation, or benefit of the piece of art.

Art's Relation to Intelligence

We have now defined what art is, so it is time to bridge the gap between art and the campus. We start by indirectly analyzing art's role in education by observing art's role in intelligence. Typically when someone thinks about intelligence, he or she will ask himself what will influence and shape the critical thinking skills. They might assume that only the core subjects like science, math, and history are essential for the task. “Second fiddle” subjects like art education are seen as amusing and possibly culturally enriching, but by no means crucial core curriculum (Eisner, 2002). This paradigm of education is responsible for the

increasing number of school districts that have no budget for programs in the arts, even though nothing could be further from the truth.

To analyze why this is so, it is first important to understand that the concept of intelligence is first of all a very abstract and complicated judgment of brain efficiency. While there is still much debate as to how many and what kinds of intelligences there are, one possibility is to narrow it down to three categories: neural, experiential, and reflective intelligence. Simply put, neural is the kind of intelligence that is a result of innate structure in one's brain. Similar to talent, it is a gift if one is born with it, and there's no changing it. Experiential is the intelligence one reaps from experience throughout life, such as not to touch a hot stove. Obviously, one can always gain more experience (Perkins, 1994).

Reflective intelligence is entirely different. It is the skills necessary to manage one's other intelligences. Based on reflection, reflective is a kind of self-awareness that is the result of a mind capable of clear, organized, thought. It is theorized that the act of simply reflecting on a work of art will, through directed analysis, train and enhance one's reflective intelligence. The patterns of thought used in the analysis and experience of art just happen to be structured such that they demand the individual to exercise his reflective processes (Perkins, 1994).

For example, to experience art, and not simply look at it, it is necessary to allow oneself to spend more time than what feels impulsive with a piece. This facilitates deeper interpretation than what superficially is evident. It is this type of simple self-management that is the essence of reflective thought. Secondly, art demands the viewer to think broadly, and not submit to hastiness. Where a

sculpture might suggest a clothespin to the hasty thinker, the broad thinker's reflective intelligence will guide him to more adventurous conclusions, such as an intertwined couple kissing. Association and the probing of experiential intelligence are also important to the reflective process. Thirdly, the decision to deliberately think clearly and deeply concludes the reflective exercises. Sometimes it is crucial to take a step back in order to avoid reaching false conclusions. Deeper reflection is important, such as asking why an artist chose something, or what might happen if a single component was removed (Perkins, 1994).

All these tools build a set of knowledge, skills, and attitudes that teach an individual to control their critical thinking skills. While it may appear to some that the preceding exercises would only develop critical thinking skills applicable to the study of art, this is not necessarily true, as transfer will show. Transfer is a psychological phenomenon, which describes when the skills or knowledge learned in one discipline are applied in a second. For example, if one played chess and learned the skill of divide and conquer, and later applied the skill as a politician, it would be transfer. The argument with regards to critical thinking and art is that if transfer occurs, it would be possible to use art to "learn how to think" and apply this skill anywhere deemed appropriate. A question might rise then, why is art necessary to build the dispositions of reflective intelligence? In short, it is not necessary, but certain intrinsic qualities appropriate art from other disciplines such as mathematics or history. These are qualities such as the sensory anchor nature of art. The ability to have physical material to focus on is a

great way to teach reflective thought. Or the instant access; whereas a more lingual discipline allows for little to reference upon re-inspection, art is generally available for a second glance (Perkins, 1994). Ninety percent of the time a person is conscious, he can rely on experiential intelligence to progress through the day, whether it be opening a can or stopped in traffic. But for that remaining ten percent, when the mind is needed for a task demanding skill and management, art will ensure than the mind is prepared for the challenge.

Art can reveal and emphasize facets of human culture that sometimes aren't as apparent without visual attention drawn to them. Unfortunately, conflicts can arise between aesthetic demands and functional attributes of an area such as lack of space in a classroom, the desire to keep an institution safe and secure, or demand for good return on real estate investments (Beardsley, 1992). It may be difficult to attain, but a sense of balance is necessary for an environment to achieve its greatest potential.

By assisting the human mind in obtaining intelligence via phenomena such as reflective intelligence, art is proven to be more than simply pleasurable eye candy. This significance is the first step in determining art's role in the college campus.

The Role of a University

As it is now apparent that art is indispensable with regards to intelligence, an important factor is still left to be analyzed; how is this intelligence conveyed via education? In other words, what is a University and its campus, and what is

the role of a University? Merriam-Webster defines campus as “a university, college, or school viewed as an academic, social, or spiritual entity” (Merriam-Webster Online). The academic component appears obvious. However, the social and spiritual possibilities are operative words that imply a campus relying on typical education alone is not sufficient. No matter how art is defined, art will always facilitate all things related to social and spiritual matters. This property of art makes it clear that a successful campus will need art in any form to fulfill its role as a social and spiritual entity.

As a campus itself, WPI’s necessities to fulfill its role as a university campus go beyond just academics. In order to appreciate what distinguishes the role of WPI as a unique campus, the document to look at is the mission statement. The following is the concluding (and arguably, most important) paragraph of the mission statement. “A WPI education encompasses continuous striving for excellence coupled with an examination of the contexts of learning so that knowledge is won not only for its own sake but also for the sake of the human community of which the people of WPI are part” (wpi.edu). This shows that simply conveying knowledge is not the only requirement of WPI, but also helping students to integrate themselves into the world community is a necessity.

Many people have struggled with the idea of the role of the university, and despite constantly changing economic, social and political circumstances, many educators believe there are distinct features that a university should have. One interpretation of the role of a university is to provide knowledge of all forms, or “universal knowledge” (Kenaw, 2003). Setargew Kenaw distinguishes between

two forms of knowledge; that which is useful, such as engineering and the sciences, and that which is knowledge for its own sake, such as philosophy and the arts. Kenaw shows that in a university that teaches all forms of knowledge, students will gain experience by living with students with contrasting interests and backgrounds. Since students can only choose one course of study, they will learn to interpret and respect other disciplines through interaction.

A second interpretation of the role of a university is that it provides universal knowledge in a more philosophical way, in which the student attains a greater sense of wisdom and knowledge for its own sake. In this sense, the university does not only focus on teaching the student something useful in order to get a job, but also focuses on the “cultivation of the mind” (Kenaw, 2003). This is done by instilling academic excellence in all forms in the students.

To narrow our focus to WPI, it is important to realize that a technical college campus is generally not a university. It is more like an institute teaching a special subset of all knowledge; the technical disciplines. This raises the question of whether these technical schools should incorporate the humanities and arts in their curriculum. Like WPI, many technical schools do have a humanities requirement so as to provide a form of this universal knowledge and create a well-rounded student.

At this point, art, education, and the campus are all clearly linked transitively. This relation is upheld even more directly when finally discussing physical art and the physical campus.

Art's Importance to University

As art and the campus individually contribute a large portion to education, the literal application of art on a campus likewise enhances the educational experience as well. When analyzing this role of art in a university education, it is necessary to view the campus itself as a work of art. A well-designed facility will exhibit a combination of thoughtful spatial concepts and the utilization of appropriate architecture. A superior blend will certainly add to the educational experience to a student. Art is another facet that an institution may incorporate their ideals and culture into a physical space.

Thomas Gaines proposes in his book The Campus as a Work of Art that art is typically composed of 2-dimensional pictures and 3-dimensional sculpture, but a college campus demonstrates a “Fourth Degree” of existence. Gaines declares that this fourth degree of art is function, and in the case of a campus, this function is education of students. In order to be a successful campus, the physical layout must support the role of a university as a significant cultural center. This cultural center is composed of educational areas, recreational areas, and social areas.

Art can be utilized effectively through architecture on important buildings to draw the attention of people nearby. Stone, steel and brick structures can convey a certain sense of strength, tradition, and timelessness in an area. Trees, vines, bushes and other vegetation add a feeling of a living and ever-changing development to a location.

The overall shape and area of the campus can also demonstrate the reflection of an institution's ideals into a physical landscape. Take for example the University of California at Irvine where Gaines describes, "The heart of the Irvine campus is a series of concentric rings – the inner with undergraduate facilities; the outer for grads and research. The ring-within-a-ring metaphor was intended to express a student's self-absorption during the first years of study and then growth out into the wider circle of the world beyond the campus" (Gaines, 1991). Irving incorporates the symbolic rings in an artistic manner to demonstrate the growth and education such like the rings of a maturing tree. Students and faculty experience a metaphorical and physical progression across the campus.

Facilities can utilize artistic qualities to draw attention to their important roles in facilitating education. Take for example a library, to which Gaines describes, "the function of a library is to obtain, catalogue, and shelf printed matter, and - through architecture, among other means – to suggest the importance of the printed word" (Gaines, 1991). After an attractive external design is implemented, it is necessary to utilize interior design to support the holistic importance of the structure. Architectural attributes can assist the educational experience within the facility if done correctly. Gaines suggests that great libraries are constructed of mostly glass on the exterior, allowing natural sunlight to shine into the building for reading. Museums that provide a place to store collections with educational value to be used as teaching tools provide a great benefit to the educational experience (Gaines, 1991).

These examples of art on campus are all conducive to the college environment, because they can all be seen as good, positive art, under the “everything can be art” view. A person looking through the biological view would agree, since the functional meanings in the concentric ring layout and the library are central to the advancement of the human species; they symbolize growth and learning. The traditional view would praise the architectural aestheticism and the context of the buildings.

A well-designed campus should contain recreational areas to alleviate stress and offer a place to exercise for individuals. Outdoor furnishings divert the eye and provide student meeting places in relaxed atmospheres. Socializing and relieving stress are critical elements to a productive learning experience. The spatial layout of facilities can also influence interaction and communication between people passing through an area. Gaines points out an example utilized at the Rochester Institute of Technology where the walkways intentionally expand and contract, forcing students to be in close proximity to one another at times. This coercive approach is an attempt to compel students to interact as they pass through the bottleneck in the walkway. Similar approaches are employed in hallways and indoor structures in an effort to facilitate interaction while in a specific area.

The investigation has now come full circle. Art and campus have been dissected down to the essence of humanity, and the two are evidently linked beyond what superficial observation might observe. We now attack the goal of any investigation: to link knowledge and application.

Applications of Our Views of Art

Given our three views of art; the traditional view, art as a function of biology, and everything can be art, it seems necessary to examine and evaluate the differences and tensions between the three. Furthermore, after seeing examples of well-integrated art on other campuses, we will analyze the application of art in the WPI campus. Since they are distinct ways of understanding what it is for something to be a piece of art, it seems valid to examine the artistic qualities of a single piece of art through each of the views. We chose a piece of art that is central to the artistic experience of our college campus: the fountain.

The traditional definition of art would interpret the fountain with an eye towards creativity, purpose and aesthetics. The fountain displays creativity and purpose by representing the transition from natural to man-made. By creating an unnatural flow of natural water surrounded by concrete, the fountain creates an aesthetically pleasing portrayal of the dualism between nature and man. The fountain is an example of the coexistence of two polarities, nature and man, striking down the concept of dualities in exchange for balance. The prominence of the fountain gives it its purpose because it becomes a defining symbol for the institution. Due to this symbolism, it is important that the fountain be aesthetically pleasing, so as to create a pleasing interpretation of WPI. At the fountain, the water is used in a beautiful spectacle within an area to meet with one's peers.

Conversely, in a biological perspective in reviewing the fountain, the water is used as a symbol of the creator and sustainer of life, which provides a clear way of showing the fountain's functionality to the human species. Another aspect of human existence is the arguable need for social interaction. As water sustains life, social interaction sustains culture. The fountain with its central location is a vital hub of social activities for the entire campus community. Members of WPI can meet between class to play a ten-minute game of hacky-sack, socialize, or take time to relax and reflect upon their college experience. This provides a social meaning that can easily be analyzed and used to reflect of greater social tendencies of people, or to compare the social activities of humans to, say, those of ants.

Art can be interpreted through the view "art can be everything" in likely an infinite number of ways. The interpretation of the fountain as a work of art under this view would definitely be a function of whoever is doing the interpreting. A more logically or mathematically minded person may reflect upon the straightness of the angles, possibly contrasting this to the lack of straightness of the water shapes. A more emotionally based person may interpret the social aspect of the fountain as great importance. One could return to the balance concept by noticing how the rough and rigid texture of the stone creates a visually smooth appearance. These dualisms or balance systems may become metaphors for other ideas that appear in life, which provide the interpreter with their own perspective on the meaning of the art that is the fountain.

A definition of art that encompasses all of our views is that art is something that has human-placed meaning beyond the actual matter that comprises the art. In terms of the campus as a work of art, this means that the campus holds a meaning in the eye of the students that is beyond simply the buildings and the faculty, and beyond even the learning that one experiences while attending the institution. The campus as a work of art makes that campus a symbol of all these things, reflecting the balanced whole that embodies the ideals inherent in educating high school graduates and preparing them for life after college.

The development of these views casts some light in a directed manner upon the topic of art on campus. It is hoped that these views will help organize thought and provide a way to evaluate the usage and effectiveness of art on the WPI campus. While each of these views focuses on meaning, the differences in the interpretation of this meaning has a definite impact on how art should be evaluated on the campus, as we have shown through the examples of interpretations of art through the three views.

The next step in utilizing the artistic knowledge we have gathered is to begin asking how all this information can be used to learn more information specific to WPI's art programs. Important questions arise based on this research that is related to both personal opinions at WPI, and administrative policies. Together, these entities have the most significant relation to art, and they will form the basis of our methodologies.

Chapter 3: Methodologies

Introduction:

After defining 3 theories of the definition of art, we begin the exploration of the role and people's interpretations of art, focusing less on the art itself. We began our study with a broad picture of the various meanings of art, and then switched to a more narrow focus, leading us to the question of: "Does WPI's application of art on campus reach WPI's artistic goals, according to the members of its campus?" In order to define WPI's artistic goals, we have decided to interview members of its faculty and administration to discover the intentions behind areas of the WPI campus with aesthetic qualities. Then, in order to determine if these goals were met, we will survey the immediate society of WPI, those who teach, study, and work at WPI.

We approached this project from a qualitative point of view, mainly because art is such an opinionated subject. We conducted an observational study because of its definition as being a designed study that is not a controlled experiment. Using an observational study, we selected our sampling units and then used sample surveys to collect opinions about art on campus. This is opposed to an experimental study where a treatment is applied and reactions are observed (Petrucci, 1999). It seemed rather arbitrary to attempt to assign numbers to people's very possibly complex and muddled opinions. Rather, we approached our interviews and surveys in a more exploratory sense, by attempting to see what opinions and trends in opinions are out there.

Interview, Reasoning:

In order to understand the process through which art is selected for erection or display on campus we chose to use purposive sampling to handpick subjects for our interviews that we thought would provide the best information (Decker 1997). To gain the information needed about the art on campus, we chose to go straight to the source – the administration of WPI. We chose to interview those who may have key positions that would facilitate this process of art selection. This interview approach enables a direct, concentrated study of why the art was put there, and if no clear reasons are provided, we may be able to collect data about the people and possibly determine what influences may have effected their decision.

Primarily, the historical data of the art on the WPI campus is needed because it sets a benchmark from which to compare all opinions of art (Dennis, 2003). The surveys, not the interviews, will obtain information from the population about views on many things related to the art on campus, specifically, its purpose. But with the addition of historical data that can actually define a purpose as official, rather than opinion, both sets of data become more meaningful because they have a point of reference.

Also, an interview approach is both flexible and adaptable, based on the ability to focus on more open-ended questions (Dennis, 2003). A well worded question could easily elicit a very different response from two different interviewees, both being very pertinent to our investigation. Unfortunately this is also a disadvantage using interviews. Interviewees may rationalize and view

decisions in a different light in hindsight than when they were initially made, creating response bias to the question (Petrucelli, 1999). A face-to-face interview enables us to inquire further along conversation routes we may not have considered, if we find it necessary. Finally, an interview approach for this portion of our project is best suited because of the ability to record and transcribe the interview for close study. This is necessary, since interpretation seems to be the key to understanding art.

Interview, Respondents and Sampling:

Since the interviews are designed to get a sense of the meaning behind the art that is on campus, we chose to interview the faculty and staff that would most likely have had a role in designing or creating the pieces of art on campus. Using purposive sampling, we chose Professors of Arts, the President of WPI, the Head of Plant Services, and others.

This investigation into the process and meaning behind the present works of art on the WPI campus is simpler than working with a huge, unmanageable population, since we can directly interview those responsible for the design and construction of the art. Additionally, due to the very subjective nature of art, mathematically valid data must be taken with a grain of salt. Our sampling method for the interviews is very simple. We will continue to conduct interviews with those who we think are most likely to affect the art on campus until we believe we have a relatively complete view of the process for determining what art is used on campus and why. Our view will be deemed complete once we

begin to observe saturation of information, and patterns begin to repeat themselves during the interviews.

By going to a wide range of administrative personnel with a wider range of personal backgrounds, current duties, and artistic opinions, we hope to have gained a complete view of the history, process, and current status of the art on campus. While diversity of interviewees, administrative power, and control over art were initially the only factors in determining who to speak with, the ultimate decision was based on time and availability. For example, we originally hoped to interview the current head provost. However, due to a lack of free time on his part, we instead interviewed the assistant provost, who ended up being crucial to the entire project. A diverse group helps eliminate response bias, because we want to focus on concrete policies and histories of WPI art, as opposed to focusing on personal opinions of the art.

The interview itself is semi-structured. While we do have a list of formal questions and introductions to the project, it is not like a questionnaire. Again, due to the subjectivity of art, obtaining information need not be very formal. In fact, formality could sour an interviewee into thinking there may be some sort of repercussion to an answer that may be perceived as “wrong”, and in turn create response bias. The interview is really more like a guided conversation. If the interviewee begins taking a response in a tangent, then a follow-up question could be created on the spot. Or if a formal question gets answered before it is asked, it can be moved or restructured.

Interview, Questions:

Before any information directly linked to art on the WPI campus can be gleaned from the interviewee, it is necessary to temporarily first focus on his or her life experience to discover any selection or response bias to questions due to an interviewee's personal background (Petrucelli, 1999). The entire purpose of the interview can be summarized as determining why the art on campus is on campus. Judging by general experience with institutions, the reasons could be related to purposes like function or tradition. However, more often than not, decisions related to art are completely based on aesthetics. For example, an individual might buy a painting for his living room because it looks beautiful to him, but not because he understands the painting's significance to the species as a whole. Aesthetics is the most significant part of the traditional view of art, and in turn, the traditional view of art is the most common. While we do not know whether this assumption about the significance of aesthetics is true or false, we can prepare for the possibility by asking the right questions about an interviewee's background.

Aesthetics are almost always interpreted subjectively by the individual. Therefore, knowing more about an individual's life and the factors that could have contributed to the opinion formation is important. If we cannot determine any sort of system for placing art on campus, we will at least know the personal histories than formed personal interpretation and contributed to certain selections.

By determining the role of the interviewee at WPI, we can judge topics like: Is this person responsible for art decisions? Are they concerned more with

function, or more with value? Is there a link between occupation and art interpretation?

Tell me about your current position at WPI in terms of responsibility and duties.

The next two are similar to the previous question, except more related to the formation of personal opinions.

What kind of jobs have you worked at before this?

The artistic choices on campus would be interesting to juxtapose with the professional background and training of the administrative decision makers.

What is your educational background?

Now that we have determined what could have contributed to the formation of certain opinions, it is time in the interview to ask what these opinions are. The opinions are basically related to the definition and role of art in general, but not the campus specifically. While their opinions may not fall exactly under one of our three definitions of art, the definitions will help us observe the patterns of opinions and views. Finding the definition of art is simply a huge part of determining the reason why certain art is on campus. The definition of what art

is, and what is good art, will directly affect what art is chosen to go on a campus. In addition, personal opinions about art are the essence of determining the personal value of individual art. Judging by typical institutional procedure, if an administrator does not personally consider a work to be good art or even art at all, there is not much chance it will appear on campus. Practical applications like function or tradition are typical goals for art decisions, but in reality, personal opinion will often take priority.

Besides helping determine personal art opinions, this next question has the importance of linking to our literature review. There are many possible applications of this information: How do administrative opinions line up with our predefined categories of art? How have personal biases changed the campus artistically? Do administrator opinions follow any trends? Does the art on campus reflect administrative opinions? Is there any disagreement among administrator opinions that have affected art on campus? Is there something all the art has in common, with respect to the definition of art?

In your own words, define what you think art is and isn't.

This question leans somewhat towards the traditional view of art, but is intended to determine if the administrator has a personal experience with art. If they do, then assumptions and implications can be made about informed decisions and how they factor into the decision making process. The inverse can be said if he or she has no experience with art.

How do you experience art? What is your experience usually when you visit an art museum? If you are an artist or have created art, what can you say about the process of art making for yourself?

After determining what could implicitly change the process of determining what art should be on campus, we move on to questions asking explicitly about the process. These questions are the center of the entire interview. While their intentions may be obvious, the reasoning behind the ordering of the questions is to discover any possible response bias by interviewing only subjects with similar intentions (Petrucelli, 1999). The question-refining process of piloting the interview within the group and with advisors determined that there is a good likelihood that an administrator will respond to a formal question like “why is art on campus” with a formal answer. A formal answer might sound like a quote from the WPI handbook. While this information may be useful, it is not the goal of the interview. Therefore, the preliminary questions are more straightforward and easy in an attempt to establish trust between the interviewer and the interviewee (Dennis, 2003). After being forced to think about their life, their opinion, and even who they are as a person, the interviewee will be more likely to answer a broad question like “why is art on campus” in terms of personal reflection, rather than institutional rhetoric. This approach was determined after dry-running the interview within the group and taking note of how the ordering of questions impacted their answers.

If an interviewee truly had no role in the art selection process, the entire interview is much less useful. The interview then becomes more like a survey about personal opinions of art, which is already covered by our surveys.

Did you have any say in deciding what art would be put on campus?

If there is no formal process behind the selection of art, the contingency plan is to at least learn about a specific piece of art's selection. By learning how one piece was selected, we can at least make some generalizations on how the process is defined. We chose the fountain simply because we find it to be the most prominent work of art on campus, and we've analyzed it elsewhere in the project.

Do you know if there was any meaning behind the fountain, and what the motivations were in designing it as it is?

This is the interview, summarized in one question.

Can you tell me anything about the process of deciding what art to put on campus at any point in campus history?

Similar to the previous question, the next question is a broad attempt to obtain the goal of the interview in one question.

What do you think the role of art on WPI's campus is?

We ask the following question as a sort of contingency plan, and as a method to force the interviewee to think about the topics we want. If we cannot get a clear answer to why art is on campus, or if the interviewee simply does not know, we try the inverse approach, and ask the negative question. By figuring out how art has changed the campus, figuring out the selection process might become easier.

How would the campus be different without art?

After determining the selection process, the interview grows one step more focused and asks about specific works on campus. Similar to the literature review, the interview begins with universally applicable ideas, and ends with an application of these ideas. Specific, literal questions and answers are easily counted, analyzed, and graphed. The interview will therefore contain a useful mix of quantitative and qualitative data.

The following question attempts to link personal opinion with administrative art selection policies. If the administrator has played a role in the art selection process, there is a good chance they are responsible for bringing their favorite work of art onto the campus. It follows along the line of questioning: Is the art on campus because someone thinks it is attractive, or is it serving

another (more important) purpose? Is there a more important purpose besides being attractive?

What is your favorite work of art on campus? What stands out about it?

This has similar reasoning to the previous question. A question to consider at this point in the analysis would be: Does favorite simply imply most attractive? Do people have different definitions of favorite? Is language itself an inherently flawed tool for working with art?

What is your least favorite? Why?

It is important to make a distinction between aesthetics and everything else positive regarding art. The following question attempts to bring the interviewee back to the goal of why art is on campus. The juxtaposition between the most prominent and the favorite pieces is crucial to the entire interview analysis.

Which is the most prominent? Why?

Finally, the interviewee gets an opportunity to impose their opinions and views on the larger administrative process. This question lends insight into possible problems with the art selection process, and how it might be improved.

While this is not the primary goal of the project, it can certainly be useful information for defining and analyzing the current art selection process and art on campus in general.

If you could change anything about the art on campus, what would it be?

Finally, we simply ask for tips on where to go next via snowball sampling. Nobody should know better about who to talk to than the people who are involved in the first place.

Do you have any suggestions for who to see or where to look for further information on the process of deciding what art to put on campus?

Interview Limitations:

Unfortunately, we were unable to interview many of the people who created the art, because they are no longer a part of WPI's immediate society, and therefore extremely difficult to track down, and somewhat outside the proposed scope of our project. Many but not all alumni, retired professors, and key historical figures in the development of WPI are virtually unavailable for questioning.

Another significant limitation of our interviews is that it would be virtually impossible to interview everyone who has contributed to art on campus to gain a census, especially under the "art can be everything" view where everyone is

always creating art. This is why we're content to interview the current key administrators (Petrucelli, 1999).

Interview Approach to Analysis:

The main goal of the analysis of the interview is to ultimately find out the role for art on the WPI campus, and to describe the process for selection, placement, and planning for the art. We want to spend as little time as possible analyzing trends in the interview data. The target population will be 5 or fewer individuals, and trends will not be very revealing of data relating to the entire WPI population, but rather focus on the opinions of the administration. We will be looking for convergence of responses concerning the role of art and the selection process. We will select where data is repeated, and use convergence as an argument for the accuracy of our conclusions. Since an oral interview is highly subjective and our selection process is not mathematically minded, most of the analysis will be qualitative. For example, if every interviewee claims similarly that the role of art on campus is to beautify the campus, then we will claim that beauty is probably a main role of art. We will not make any statements about percent of interviewees who definitely think beauty is the role of art, since descriptions are not foolproof and predefined categories are baseless.

However, complete convergence of responses is very unlikely. Therefore, we ask questions concerning personal opinions, backgrounds, favorite art works, etc. This data does not show us what the role of art is, but it does help us explain divergence in opinions on what the role of art is. For example, if an engineering

educated interviewee claims the role of art on campus is mathematical balance, and an art historian claims the role is to enhance humanities, we can make assumptions that the differences in the role of art is related to educational background.

Survey, Reasoning:

Our goal in administering surveys is to obtain a broad idea of what the campus as a whole thinks of art that can be representative of the whole without having to talk to every single person, by an exploratory study, which was explained above (Dennis, 2003). This lends itself to a surveying method, with both qualitative and quantitative aspects. The survey will be qualitative in that it focuses on the individual's own opinion of what art is and how it is reflected on campus, but also quantitative because we want to somehow judge and compare people's opinions with each other and search for trends in the study.

Besides being a good way to efficiently evaluate the opinions of a population, a survey presents an advantage in the form of the medium that it uses. We chose to conduct a web-based survey mainly due to advantages in timing. We originally planned on conducting a hand written survey which would be passed out in person with a clipboard, figuring that our peak surveying time would be the ten minutes in between classes. This was unfortunately not feasible as our pre-testing revealed.

Before deciding on one form of research, we cautiously tested our options by using a pretest. The pretest was simply an informal set of questions we

presented to friends who were kind enough to not only try our survey, but to answer a few questions about it on a second survey afterwards. The second survey asked questions like interest, time length, and wording of questions. To view the pretest, please see appendix B. Unfortunately, our pretest showed that it took roughly twenty minutes to complete the survey, and that even then people wished they had more time to fill out the questions. A web-based survey would give people all the time they wanted, and spare us the time it would take to administer the number of surveys needed.

The web survey also makes it very easy to compile results. Since the survey will be written in PHP, an extremely useful web-programming language, a program to easily view all the surveys, or all answers to one question, or the totals of a multiple choice question, can easily be written.

However, a few other issues arise from making the document web-based. It becomes much more likely for people to get bored and unmotivated with a web survey because they must be sitting in front of their computer, a place where people generally have a multitude of tasks before them. For this reason, we attempted to make as many questions as possible into multiple choice, and we put the more important questions at the beginning. This way, even if people don't finish the survey but still submit, we will at least get some worthwhile information. The focus on multiple choice questions helps to speed up the survey, but since this is a qualitative study, still about half of the questions are text fields.

It is also useful to examine why we did not decide to execute this portion of the project with another approach. An oral interview of the same complexity

would likely cause confusion, because people would want to respond more quickly without absorbing the entire question. Also, some questions are somewhat long and tied to explanations that could hinder an auditory understanding (Dennis, 2003). On the other hand, while the subject matter is complex, simplicity is also necessary in terms of speed and efficiency. An oral interview would consume vast amounts of time when trying to collect viable data from a large number of people. Small numbers of sets of questions like the interviews can be done orally because there are so few. Likewise, using pre-selected focus groups may bias the opinions of others in the group (Dennis, 2003). In a group, those with extremely abstract opinions may not voice them due to the fear of others' response. Many in a focus group may hear a strong opinion and simply latch onto it. Another factor that weighs heavily on focus group is the busy schedule of a college student, making it very difficult to arrange times when a number of people can meet to discuss our project. By using surveys, we are able to most effectively communicate to the individual with minimal interference and external bias.

Multiple-choice questions are provided to minimize the amount to which certain survey questions are open-ended. Many questions relating to art can be interpreted so many different ways that some direction in terms of possible answers is needed. Rather than having a question that would have many people asking us "what does that mean?" and therefore obtain useless data, we made them multiple-choice questions, to give possible examples of what we mean. To

avoid response bias, we included a wide spectrum of possible answers, and when appropriate, an “other” field (Petrucelli, 1999).

Survey, Respondents:

We chose to survey people who would be impacted by art on campus, which, as Gaines argues, is anyone who comes into contact with the art, either by creating or viewing it (Gaines, 1991). Since we are examining a collegiate environment, it makes sense to exclude those who are visiting the campus and do not actually have a role within the university, either as employee or student. This is because those who are not members of the campus will not have constant access and exposure to the art to enable transfer and provide familiarity with the objects. Also, not being a part of the campus will degrade people’s ability to enhance or create their own art in the society, an essential piece of Gaines’s cycle of art.

Survey, Sampling:

Our sample population is the society of WPI, namely those who work for or are a student of WPI. This population is spread throughout undergraduate students, graduate students, faculty, administrators, and other staff. The WPI administration indicates that this total population is 4378 (wpi.edu).

Our sampling method is to distribute a quick online survey to the campus, as opposed to a longer oral interview or gathering a focus group. This was accomplished through a broadcast email to the entire WPI society. We are also

offering a gift certificate to the most thoughtful survey to give respondents more motivation to fill out the survey well. Otherwise, as conversations with past IQP project members have shown, not many people will complete the survey. If these methods do not produce an appropriate number of respondents, which we estimate to be at least seventy five, we will schedule time for table sitting in the campus center with a computer and candy to get people to complete our survey.

Survey, Questions:

To understand the reasoning for our survey, we will analyze each of our survey questions and the logic behind them. Unlike our interviews, we do not have any interest in gaining an understanding of the respondents' background, other than whether they are a student, faculty member, staff, or a visitor. This is because we are not trying to reflect upon how their experiences lead to their understanding of art, as we were in the interview. The respondents are the members, and most importantly the viewers of the WPI campus, but were not necessarily involved in the creation of the art on our campus.

We begin our survey by giving a brief introduction to the respondents:

We thank you for your participation in our Art on Campus IQP. We are collecting opinions from WPI community members about the impact of art in educational institutions. We realize some questions may be difficult to answer, but we appreciate your thoughtful answers.

Our first question is to discover what role the respondent has on the WPI campus. We allow the respondent to specify their role in “Other” category if the first 5 categories do not apply.

1. What is your relation to WPI?

- a. Undergraduate student*
- b. Graduate student*
- c. Staff*
- d. Faculty*
- e. Visitor*

Our next section of questions attempts to isolate and evaluate specific objects on the WPI campus that may be easily perceived as art. We begin by asking the respondent what the most prominent piece of art on the WPI campus is. We give five options of objects that are highly visible on the WPI campus; the Fountain, Exhibits in the Gordon Library, and works of art in the Campus center, the Campus Center itself, and the WPI crest. We are assuming our pre-selected choices would be common responses and have assumed a slight bias in answers. To help counter this bias, we have left the 6th option as an “Other” fill-in answer. We chose a multiple chose format to allow us to compile the data into charts. After asking which piece is the most prominent, we proceed to ask what

makes the piece the most prominent with 6 options Likert rating scale, one of them being “I don’t know” as the last option (Mathieson, 2003).

2. *What is the most prominent piece of art on the WPI campus?*

- a. *The Fountain*
- b. *Exhibits in the Library*
- c. *Artwork in the Campus Center*
- d. *The Campus Center itself*
- e. *The WPI Crest*
- f. *Other: _____*

3. *What makes this piece stand out on the WPI campus?*

- a. *The meaning behind the piece*
- b. *The contextual significance of the creation of the piece (i.e. how/where/when/etc. it was created)*
- c. *The contextual significance of the placement of the piece (i.e. how/where/when/etc. it was displayed)*
- d. *The aesthetic value of the piece*
- e. *Other: _____*

4. *How much do you enjoy this piece of art?*

- a. *Strongly like*
- b. *Like*

- c. Neutral*
- d. Dislike*
- e. Strongly Dislike*
- f. Don't know*

After gathering information about a specific object, we ask the respondent why WPI may have placed this object on the campus. This open-ended question prompts the respondent into thinking about the role of the WPI administration throughout the creation of the campus. In addition, this question may also provide the respondent's view of the meaning of a piece in relation to its context within the WPI campus.

5. Why do you think WPI put that piece of art there?

The next set of questions directly address the qualifications of the three views of art and attempts to determine if the subject agrees with any of the three views of art that we have developed.

6. If there is any meaning behind this piece of art, what is it?

7. Is this meaning what fundamentally makes this piece art? Why or why not? Also, who or what is responsible for this meaning?

After gaining some basic information about the respondent's views of a piece of art on campus, we begin to explore the respondent's view of the role of art in education. To investigate the concept of the impact of art, we ask the respondent to elaborate on open-ended questions to gather their view of art in relation to education.

8. *In general, how does art, if it does at all, augment the educational experience?*

9. *How do you think the art on the WPI campus affects your education?*

By asking these questions, we hope to gain unique answers to issues that aren't often discussed. Unfortunately the uncommon element may add bias due to the lack of prior thought on the topic and somewhat stressful nature of an onsite survey. To gain a more general answer and compare results to the same question, we use a rating system for the second part of the same question:

10. *How much effect does the art on WPI campus have on your education?*

- a. *Very negative effect*
- b. *Some negative effect*
- c. *No effect*
- d. *Some positive effect*

e. Very positive effect

f. Don't know

We next attempt to identify any perceived differences between art on WPI's technical campus from other campuses with an open-ended question.

11. If you have been to other campuses, how is art on a technical campus different from art anywhere else?

After we have gathered the respondent's view of the role of art in education, we move onto the effects of context on a work of art. We give the respondent four scenarios of items that could be art, and ask them if they would consider the items art with a yes or no response. After the four given scenarios, we ask the respondent to define the criteria by which they judged the artistic attribute of each item.

12. You see the following items laid out in the middle of the quad. Which ones would you label with the word "art"?

a. A tire

b. A gold framed watercolor portrait

c. A drunken clown singing the national anthem

d. A magazine ad for Ritalin

13. What criteria did you use to judge the previous question?

After gaining an understanding of what a respondent would deem “art”, we ask if merely changing the setting of each object to a more formal context would change the respondent’s opinion of what is considered art. We then ask a question relating to the context of a piece to see if the respondent has different views about artwork if the piece were hanging in an art gallery or thrown away in the trash.

14. Would you change your opinion if all 4 were behind velvet ropes in the Campus Center Odium and a luncheon was presented beforehand?

15. What is the significance of the context of the creation of a piece of art? By context of creation, we mean how, when and by whom the art was created.

16. What is the significance of the context of the placement of a piece of art? By context of placement, we mean who, how or when, etc, the art was placed. For example, the difference between a portrait hanging in a gallery and the same portrait in a trash bin.

Our last section of the survey offers a series of questions with Likert scales for responses, seeking a common answer for which source contributes

the most meaning to a piece of art. These questions directly address the qualifications of the three views of art and attempts to determine if the subject agrees with any of the three views of art that we have developed. These are included at the end of the survey because we didn't want all the answers in the survey biased in terms of what we have been examining.

17. The functionality of art to a society or culture is what makes something a piece of art.

- a. Strongly agree*
- b. Agree*
- c. Neutral*
- d. Disagree*
- e. Strongly disagree*

*18. The meaning of a piece of art to the **creator** is what makes something a piece of art.*

- a. Strongly agree*
- b. Agree*
- c. Neutral*
- d. Disagree*
- e. Strongly disagree*

*19. The meaning of a piece of art to the **viewer** is what makes something a piece of art.*

- a. Strongly agree*
- b. Agree*
- c. Neutral*
- d. Disagree*
- e. Strongly disagree*

Our last survey question is an attempt to gather the respondent's current views and personal definitions of what is art. By using an open-ended question, we hope to collect answers that can fall into the three categories we defined, as well as possibly gather new views that members of the WPI campus may hold.

20. Define art in your own words.

Survey, Limitations:

One of the major limitations this survey possesses is the response bias which is introduced in drafting multiple choice questions (Petrucci, 1999). In providing answers, we restrict the subject's understanding of the question and try to direct their responses. This creates response bias by not allowing the subject to come to their own conclusions as to what we mean. However, this limitation allowed for a more focused range of likely answers, which helps to concentrate our study, and to speed up the survey process.

Another limitation that our survey has is that people may subconsciously attempt to predict what we are trying to get them to say, rather than giving their

own honest opinion. This is apparent in question 14, where it seems that the question wouldn't be there unless we wanted them to say "yes".

No matter how questions are formed, personal bias is integrated in our survey, simply due to the fact that we wrote the questions. Our experiences dictate how we think people will interpret and respond to questions, and therefore any questions that are written will be biased through the person who writes them, no matter how much they try to write unbiased questions.

Another limitation is non-response bias, which is the lack of response from a person, or the lack of response in a survey to a particular question (Petrucci, 1999). Since we are not using a very strict sampling policy, the lack of response of a person is less critical. However, the lack of response to a question hinders our data by creating holes in our argument. This is most likely caused by a lack of understanding of what we are asking, the feeling that our question is irrelevant, or a lack of motivation of a subject to think about a complex concept.

Survey, Approach to Analysis:

We chose to create a survey comprised of mostly qualitative and open ended questions in an attempt to converge similar answers into overall themes. We will further group the surveys by the respondent's role on the WPI campus, and identify any trends that may exist. We expect that not all surveys will be fully completed, but the large sampling size will provide enough information about each question to outline themes commonly shared by WPI members about the art on campus.

Chapter 4: Results and Analysis

Introduction to Results and Analysis

Our analysis is twofold, consisting of analyzing the interviews and the surveys. Both of our methods for collecting results provide mostly qualitative data which is analyzed for trends and converging ideas. The surveys also provided some quantitative data in the form of multiple choice questions which will be displayed in graphical form and discussed.

Interview Results

By completing the gathering of necessary data, the analysis process can begin. Analysis is the process of observing the data and discovering how they relate to one another. Since there are essentially two legs to the project, interviews and surveys, each will be analyzed individually before their relation to each other can be determined. The process of analysis for each basically involves looking for patterns and relationships between patterns. For example, if every survey that has the “Graduate student” radio button selected also has the “art has no effect on my education” button selected, the analysis process would reveal that the data implies most graduate students do not believe art affects their education. The interviews are somewhat less straight forward, because the analysis is far more qualitative due to the conversational nature of the data. However, patterns and relationships are still the keys to the entire analysis. By knowing what the data is actually revealing via analysis, we can then ultimately find the larger implications of our entire project.

After interviewing a total of five people in four separate interviews, the data obtained has begun to converge. This indicates that we have probably finished finding the significant data necessary for the interview section of the methodologies. By looking at the similarities within personal opinions and other statements, we make the assumption via convergence that the statements that are common to most or all of the interviews probably belong to WPI as an institution, as opposed to the individual. As just an example, if all five interviewees claim that the fountain was built to be the most prominent piece for WPI, there is a high chance that this is a common belief. Before the facts are analyzed, a summary of the interviewees is necessary.

John Miller is head of plant services, which means he is in charge of the oversight, maintenance, and construction of buildings. He is experienced with engineering and management, and knows a lot about architecture. His opinions of art focus on the traditional, but when talking about architecture, the key art for WPI is related to buildings themselves. He has personally made decisions on what art goes on campus, and he has a close relationship with art.

Lora Bruek is the assistant director of collection management in the library. This means she is in charge of cataloging new materials that come into the library's possession. She is also the former head of the WPI archives. She has a background in library sciences and fine arts. She is an experienced photographer and has a great love of traditional art in general. As an artist, she sees art as focusing on aesthetics, and appears to appreciate the hanging art in the library and around campus the most.

Rodney Obien is the head archivist in the WPI library and works closely with Lora. He is in charge of the protection and collecting of the materials in the WPI archive which not only document the history of WPI, but contain valuable other old materials that are used for humanities projects. He has a background in history and library science, and has worked with art and architecture in the past. He views art as a function of the aesthetic experience, and not only loves, but is in charge of the WPI gallery in the library. Like Lora, he is disappointed by the disinterest and small role for art at WPI.

Jim McLaughlin is director of the campus center and student activities. He is in charge of almost everything related to the campus center from hiring to furnishings, and as head of student activities, all clubs are essentially under his guidance. He has a background in history and sociology, and has worked as director of several campus centers before WPI's. Jim has a traditional view of art, and is a great appreciator of fine art in general. He was virtually in charge of selecting the hanging art in the campus center and takes great pride in knowing the significance or origin of each.

Lance Schachterle is the associate provost at WPI and is essentially in charge of evaluating the various programs in the undergraduate catalog. He has a background in English, and still teaches an English course and helps with humanities. He believes art is closely linked with technology, and believes art to be a way of representing "emotional and intellectual responses". Music is his favorite form of art, and appears to believe that WPI art is present, but does not

invoke a significant emotional response. The link between art and technology is the most important theme of his interview.

Interview Analysis

To begin, it is significant to note that every interviewee essentially summarized art based a traditional point of view. Rodney emphasized the “transcendent” experience that sounded very similar to the aesthetic experience. Something that’s felt and experienced but not necessarily described.” Mr. Miller talked about his love of sculpture, architecture, and his how much he liked going to the Dali museum with his wife. Lora is a photographer and thinks art is a “process that probably does not result in a practical thing” and Jim thought similarly. He said, “...stimulates one’s senses it stimulates feeling.” Dr. Schachterle was unique in the fact that he brought up art’s link to technology in his definition of art, but like at other points in his interview, it felt like he knew too much about what we were hoping to find, and his answers sounded rehearsed and tailored. “And I wanted to make a point as part of your introductory comments....” This is all important to note because as the people who are responsible as caretakers of the campus art, their opinions of what is and isn’t art will obviously influence what is allowed on campus and what is emphasized on campus. The significance of meaning was mentioned indirectly, but aesthetic value clearly took priority. Based on these views, it is not surprising that the most recognizable art on campus is painting, sculpture, and architecture.

WPI does not have an official institution wide policy concerning anything to do with art. To emphasize this point, Dr. Schachterle summed it up best: “...I

don't recall ever being in a meeting where the subject of art at WPI has come up." This is not to say that WPI does not care about art. After talking to everybody, it became clear that although WPI does have art, the reasons that art is on campus are usually disorderly and chaotic.

The best example of the WPI art policy can be seen as a microcosm in one building. Specifically, the art in the campus center is about the most "official" selection process for art ever undertaken at WPI. After the campus center was built, the walls were bare and depressing, so extra money was set aside specifically for art to cover the walls. "Yes I was one voice among a number of voices on our art committee that I established shortly after the building opened. We were so busy with LCD projectors and the computers and getting the building open we set aside funds for artwork..." Jim McLaughlin is head of the campus center, and it was his personal decision and responsibility to fill the campus center with art. In other words, it was not delegated down to him by anyone higher on the WPI hierarchy. As Lora, who was on the committee, indicated, "That maybe just the way he decided to do it." The process was essentially Jim bringing some faculty together who he knew cared about art, and even a few students he knew from the SGA. "Art contractors" and gallery owners were then brought in and interviewed by the group and they were shown catalogues of art and prints of art which were available for purchase. The group hoped to work with only one contractor to simplify matters.

In the end, the art in the campus center was selected based on price, size, and occasionally color. In response to “Were there any other factors besides attractiveness or looking like it fit in the campus center to consider?” Lora said, “I think the other factors are size. We looked at each room that we wanted to put artwork in and try to select pieces that would go together and fit into that room where we wanted artwork in that room.” Many of the larger pieces, such as those that fill the Odeum, are actually prints because large art is too expensive. Several pieces in the campus center were donations from friends and alumni of WPI, specifically the large tapestry on the 3rd floor. According to Jim, it was “a tapestry you’ll see in the building that was not picked out by the art committee but was a gift from the Gill Bain Construction Company.” Occasionally, donors who gave money for entire rooms in the campus center were given some say in what art should be placed in their room. Placement was mostly based on size and color, although there were a few pieces that did have significant meaning. For example, in the Office of Minority Affairs, there was a couple cut out collages featuring African women in traditional dress. And as an additional facet to the collection in the campus center, there are even two student created paintings of the French Rivera. There are even a few pieces that individuals who work there brought in for themselves.

The point about the campus center and about WPI as a whole is that even though the art is present, the role was never intended to be much more than add some color and form to what would otherwise be a depressing urban sprawl. This relates back to the general view of interviewees that art is primarily related to

aesthetics. When asked about how either the campus would be different without art, virtually everyone used a synonym for 'dull'. Jim said, "Pretty bland and boring." Dr. Schachterle said "more monotonous" and Mr. Miller said "it would look like hell." When asked about the role, the role was either non-existent, or related to 'looking pretty'. In relation to the art in the campus center, Dr. Schachterle again said it best when he compared it to "elevator music". In reference to the Campus Center, he said "The decorative art is intended to be reassuring. It's the visual equivalent of elevator music." Like elevator music, the art breaks up an otherwise lifeless and dull environment, but it's just not something you pay much attention, because it's somewhat dull and lifeless itself. He spoke about how in certain surroundings, it's just not appropriate to have art that actually provokes any sort of reaction. The problem is, without a permanent gallery, fine arts program, or official art policy, the vast majority of art at WPI falls into this innocuous category.

Interestingly, WPI appears to have attempted to spark some life into the art on campus. In the past and even recently, various small attempts have been made for assisting the art and the arts. Of the interviewees, for those who have been, the art in the library gallery is actually very original and exciting. Dr. Schachterle compares it to the rest of the campus by commenting "if you don't want to be challenged you don't have to go". The stipulation is "for those who have been". According to the two most recent heads of the gallery, Lora and Rodney, the WPI gallery always features up and coming artists, some of whom have actually found large success long after their work was displayed in the WPI

gallery. Again, Lora and Rodney are one the ones solely responsible for bringing the art to the gallery, not any higher administration. Disappointingly, it sometimes appears that no one appreciates the art in the gallery besides Lora and Rodney. “The gallery here, we have receptions for the artists and very few students or faculty come.” While one might conclude that there is simply not an interest for art on campus, Lora says, “We have done surveys on library space and people always say that the gallery is important to them”. If this information is accurate, the only logical conclusions are either that the 2nd floor of the library is not an appropriate enough place for some of the only meaningful “non elevator” art on campus, or somehow you can appreciate art without actually looking at it. As indicated by interviewees’ responses for their favorite art on campus, people often love the art that they see everyday in their localized work area. Lora loves a work on the first floor of the library, and Rodney loves the gallery. Jim loves the work in the campus center. Rodney and Jim said it specifically, but almost everyone on campus has not likely even seen all the art on campus. This is important because it supports the fact that the allegedly best art on campus should not be in a seldom visited area.

In conclusion, the interviews revealed that WPI’s administration has a generally traditional view of art. According to the interviews, there is no official policy regarding art on the WPI campus and primarily, beautifying the campus is the main role of art at WPI.

Survey Analysis:

Since the survey was meant as a method for obtaining a broad sense of what the entire society of WPI thinks about art on campus, we will begin by describing the general trends we were looking for and then what we actually found. The preliminary analysis consisted of reading all of the 80 surveys obtained, and making sure that the textual responses matched the multiple choice responses for each survey. For those that did not match, we decided, and made note of, whether or not the respondent agreed or disagreed with the concept, or if it was too confusing to tell. All results to our survey are included as appendix G. Our basic approach was to first determine whether or not the respondent agreed or disagreed with our main research questions: is meaning fundamental to determining whether or not something is art? Is it aesthetics? Is it context? Many unexpected trends appeared while examining the responses to pinpointing a definition of art. Then we went on to analyze the opinions of the respondents in terms of the art on a college campus, and finally the art on this campus. We will begin by presenting the data that was obtained by the surveys.

Analysis of Individual Survey Questions

Question number one is extremely straightforward, and as Chart 1 shows, we obtained a fair distribution of the groups of members of the WPI society: some faculty and graduates, and mostly undergraduate students. The results for question two were akin to the expected, with a large portion of the responses saying the fountain is the most prominent piece on campus, because of its central location on campus.

The third question, asking what makes this piece stand out on campus, was answered using checkboxes where a respondent could choose as many answers as they wanted. Therefore it becomes impossible to represent the data with a pie chart, so a bar graph was used. As can be seen in chart 3, the greatest response was given to the contextual significance of the placement of the piece, with 41 responses. The second greatest response was given to

Chart 1. What is your relation to WPI?

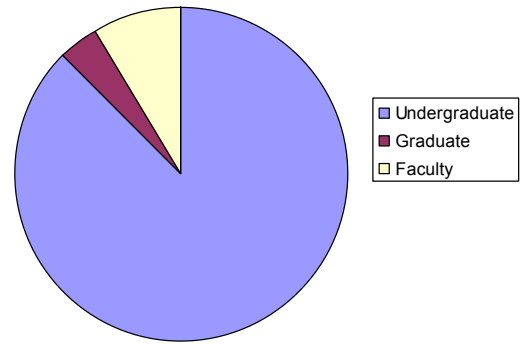


Chart 2. What is the most prominent piece of art on the WPI campus?

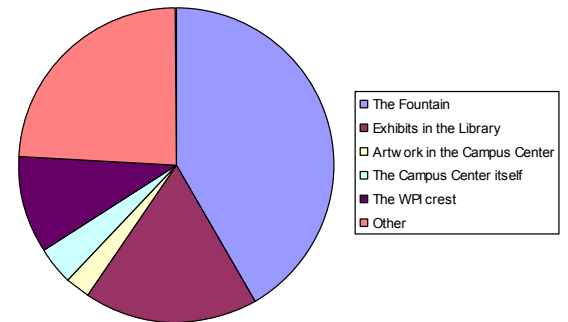


Chart 3. What makes this piece stand out on the WPI campus?

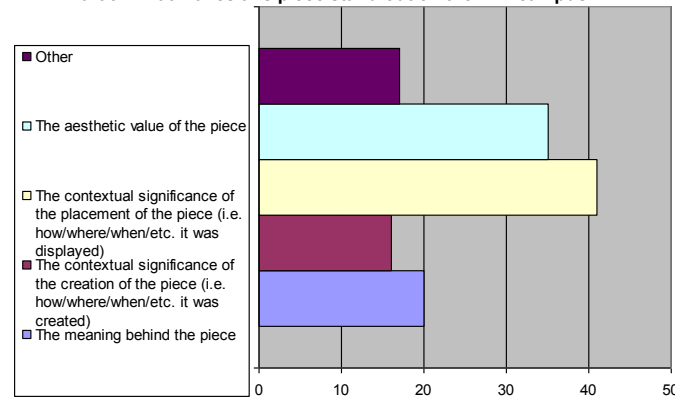
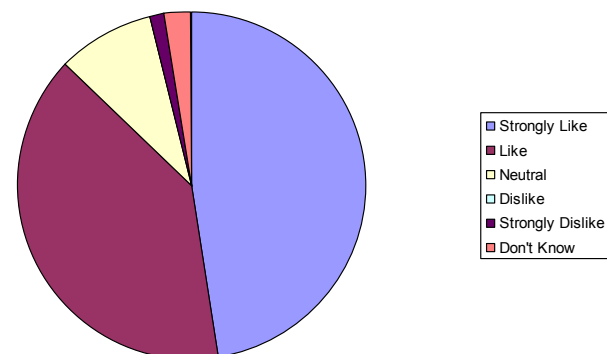


Chart 4. How much do you enjoy this piece of art?



the aesthetic value of the piece, with 35 responses. Question number three was probably influenced by the fact that so many respondents chose the fountain. Since the fountain's location is what makes it so prominent and therefore why they chose it in question two, it follows that a greater number of people would choose the fountain's context of placement as why it stands out. The fact that a large number of people also chose the aesthetic value of the piece reinforces the trend of art based on aesthetics.

Chart 5, graphically depicting the responses to question ten, shows that the majority does believe art has a positive effect on education. Only slightly more than a quarter of respondents believe that art has no effect on education.

The responses to question twelve, shown in chart 6, also reinforce the classical definition of art, since most people only chose to identify the portrait as a piece of art. Most

Chart 5. How much effect does the art on WPI campus have on your education?

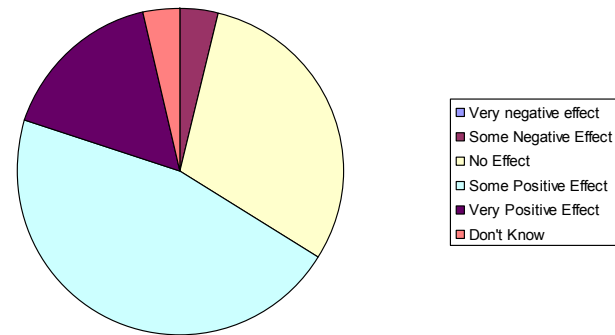


Chart 6. You see the following items laid out in the middle of the quad. Which ones would you label with the word "art"?

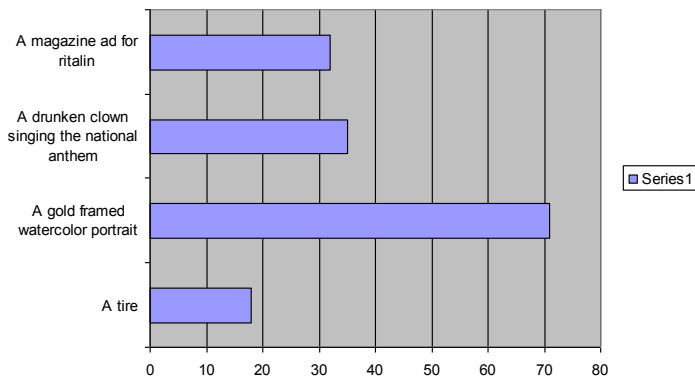


Chart 7. Would you change your opinion if all 4 were behind velvet ropes in the Campus Center Odeum and a luncheon was presented beforehand?

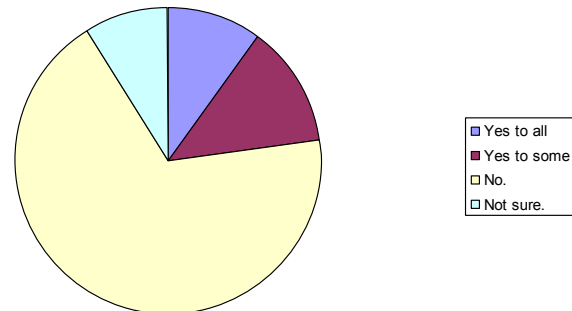
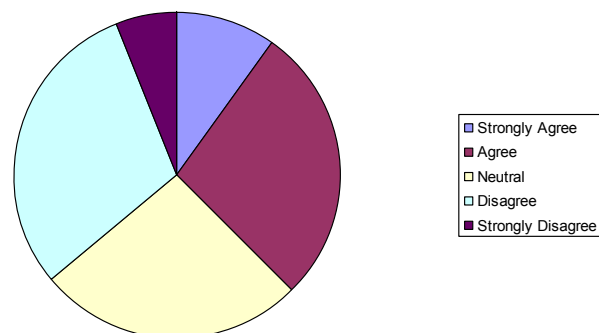


Chart 8. The functionality of art to a society or culture is what makes something a piece of art



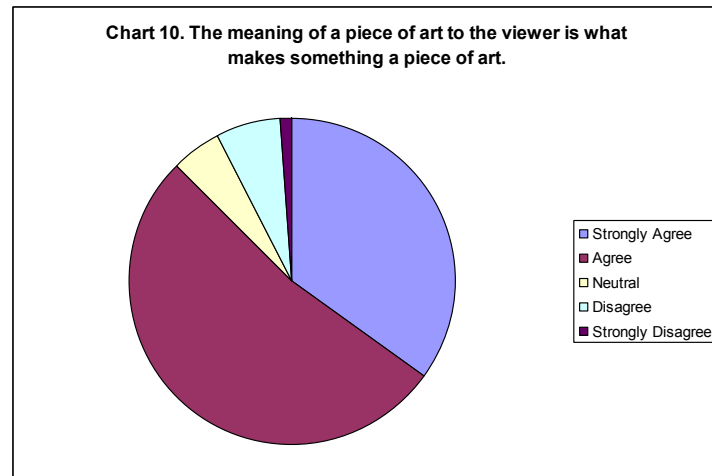
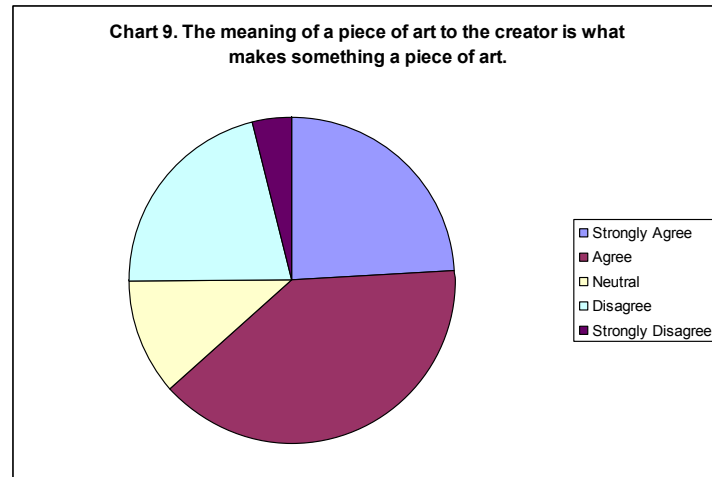
people tended to regard the tire as trash. The responses to question thirteen seems to argue against the significance of context of placement, since a majority of respondents said that no, they would not change their responses if the objects were put specifically on display, as shown in chart 7.

Chart 8 shows that the population is essentially split on whether or not an object's functionality to the society is something makes it art, with a slight majority in the negative. However, five eighths of those

surveyed either agreed or strongly agreed that the meaning of a piece to the creator is something that makes the piece art, as shown in chart 9. The last chart, chart ten, shows that an overwhelming majority of respondents either agree or strongly agree that the meaning of a piece of art to the viewer is what makes something a piece of art.

Major Survey Trends:

Although 62.5% of the respondents agreed with the multiple choice question that asked if the meaning of the creator makes something art, and also 75% agreed that the meaning of the viewer makes something art, many respondents chose one but not the other. While many seemed to agree with the



concept that some sort of meaning or message is fundamental to something being art, many also were reluctant to simply say that meaning makes something art. They tended to define art in a more abstract way, such as “I know it when I see it,” and couldn’t find a way to actually define what is and isn’t art.

Two major and opposing trends in the survey respondents are those who think of art based on aesthetics and those who think of art based on expression. There was about an equal number of respondents in both groups. Also, those who think art is based on aesthetics seems to agree that art is based more on the opinion of the viewer, while those who think art is based on expression of an idea or emotion tended to agree that art is based more on the opinions of the creator.

Another major trend, generally found as a response to question 8 which asks how art augments education, was that art “expands the mind,” as put in survey number 57. A number of respondents seemed to agree that art is beneficial to the educational process, or that it stimulates the mind to think in more creative ways. However, only slightly fewer respondents seemed to disagree, saying they believed art was inconsequential to the educational process. Although these respondents wrote that art does not effect their education, this seemed to imply that this is because there is very little opportunity for members of the WPI society to actively participate in art on campus. This is illustrated in survey 11 in the response given to question 8, which asks how art augments the educational experience: “On this campus I would say little to none.”

A recurring idea that came up in the surveys was that art is a distraction from everyday life. This is not to say that art impedes on work, but rather that it is a much needed break from the monotony of routine. Art is seen as an opportunity for one to suspend the concerns of the day and ponder whatever piece of art one finds before them. As survey number 64 puts it: "seeing art before reaching getting to my destiny, relaxes and brings some happiness/distraction to the mind before going back to the study/education." Also, survey number 13 states that "Art is a release from the stresses of work and constant study."

While most respondents identified a lack of art on campus, some didn't seem to think that this is necessarily a bad thing, but that it simply reflected the fact that we are at a technical school. However, these respondents were definitely outnumbered by those who expressed the opinion that they would like to see more art on the WPI campus. Ten or so respondents seemed very adamant about the fact that the WPI campus needs not only more art on display or artistic thought in the design of the campus, but also the opportunity and invitation for members of the WPI society to create and display their own art. As survey 7 says about art: "We don't have nearly enough, nor is what we have sufficiently appreciated or prominent."

A minor trend was one of mixed opinions and blank surveys. Since the text questions and the multiple choice questions tended to overlap, it was extremely easy for a respondents answers to completely contradict one another. This could be a symptom of both a complex subject matter that is hard to understand and somewhat unclear survey questions. A few survey responses

were rather cryptic, hard to gather conclusions from, or didn't quite answer the question that was asked. However, this is to be expected with a large-scale survey that asks extremely open-ended questions.

Survey Lessons Learned:

During the analysis procedure, it very quickly became apparent that multiple choice questions using a Likert scale are much easier to obtain useful results from than text answers. One does not have to strain to interpret responses which can be very cryptic and then try to recompile these results in order to analyze major trends, since direct numbers are easy to obtain with multiple choice questions. However, it should still be noted that even multiple choice questions can become meaningless or provide extremely biased data if questions are not worded carefully. Therefore, it becomes advisable to maybe ask similar questions in somewhat different contexts or methods such that the survey gives a more accurate depiction of the whole story.

Another lesson that was apparent is to expect some survey respondents to misinterpret questions or make assumptions about a subject or question that does not seem apparent to the survey designer. Even with specific definitions for keywords where they were used, and what were thought to be clear and direct questions, some respondents contradicted themselves or gave responses that didn't seem to make sense or answer the question given. These surveys need to be read extremely thoroughly for any conclusions to be drawn from them.

Chapter 5: Discussion and Conclusions

Conclusion

Our project began with the task of researching and defining what art is. From our research we concluded that art could not be grouped into a single category, and thus we created our three views of art. We applied these definitions to the create questions about the usage and effectiveness of art on the WPI campus. After analyzing the results of the interviews and surveys, we now have a better perception of the role of art on the WPI campus.

In terms of definition, people seem to be of the mind that all of our aspects can serve to make something art, and that people seem to think that there is no singular definition of what is and is not art. However, our respondents seem to agree that the most important qualifier of whether or not something is art is the opinion of the viewer. While the creator of the piece should be trying to convey a message, it is up to the viewer to interpret and experience this meaning. This is what gives rise to the extremes of opinion in art, where many people disagree about not only what is in “good taste” and not, but moreover what is and isn’t able to be classified as art. In the end, it is always left to the individual to decide for themselves what they do and do not consider to be art.

WPI’s Interactive Qualifying Project is to “challenge students to address a problem that lies at the intersection of science or technology and societal structures or human needs.” After analyzing the data from our interviews and surveys, respondents frequently noted the deficiency of art on the WPI campus.

If the usage of art is seen as a human need, this deficiency is a problem that WPI should seek a solution.

From our interviews we learned that art was rarely, if ever, discussed during WPI administrative meetings. After interviewing WPI administrative figures, the process of selecting art to be on the WPI campus seemed to be an ad-hoc process. Small informal committees would be placed in charge of finding art primarily used for decorative purposes around campus. WPI administration does not seem to have any formal opinion regarding the usage of art on campus to enhance the education of its members and does not seem to have any plans to approach this issue in the near future. Although no one explicitly stated the lack of art on the WPI campus endangers the survival of the institution, it seems apparent that some attention is necessary to remedy this deficiency.

The small attempts at jumpstarting interest in the art on campus have often involved a focus on meaning. Ironically, even though virtually everyone noted the steel modern sculptures around campus as their least favorite work, the sculptures were actually an attempt at bringing some meaning to the art (in addition to being another alumni gift, unsurprisingly). By being forged in steel back in the 1970's, the sculptures were intended to remind people of the long history of Worcester's steelworkers. Since they are now generally seen as very unpleasant and incongruent with the rest of campus, this attempt ultimately failed. Other examples are the gallery in the library which often emphasizes important themes like diversity by including various cultures like the latest Japanese prints. This attempt is also failing since the prints are seen by so few

members of WPI. Even the campus center has made its try at infusing some meaning in the art. For example, the campus center told the SGA to open up an opportunity for student artists to hang their own work in the campus center. In the end, only one student responded, and she was already a member of the SGA. That could have been the perfect opportunity to bring the interest in the art on campus directly back to the students by offering them a chance to actually change their environment themselves, but somehow, the project essentially failed.

The role eventually returns to a practical utilitarian approach to art everywhere on campus. In the campus center, the blank walls needed to be filled and there wasn't an abundance of money, so prints were selected to match the wall color of each room. Even the campus center itself was not primarily designed architecturally first. A function was determined by WPI, and a form was later designed by architects. It was designed as needing to meet certain functions and purposes, as determined by peer groups of students and faculty several years ago. As Mr. Miller stated, "When we designed the campus center, Vice President, the Dean of Students and myself, our mantra was the same over and over and over to the architects. That form would follow function so once we decided what the function of the building was going to be, then the form had to follow that." A list of needs was then handed to an architect who used his own creative process to fill those needs while maintaining his own creativity. The mantra of the design process was apparently "function, then form". Similarly, even the fountain followed this formula. West Street was closed down, but

emergency vehicles still needed to get by. While the fountain may look like a minimalist masterpiece, the reality is that the only fountain design possible had to be small enough for a fire truck to drive over. So much of the more recent art is created for practical purposes, which oddly enough is the opposite of aesthetic value.

According to the interviews, it is the probably the unconventional art that will survive at WPI despite the current focus on traditional mediums. Rodney mentioned how the lack of a fine arts program in the curriculum at WPI makes it difficult to sustain any interest in the arts. However, a traditional fine arts program at WPI would not likely thrive or even survive long at a technology school. While this may not seem obvious, Dr. Schachterle himself said that “One has to remember that the fine arts in the sense, what picture do you get in your head. Somebody male or female in 19th century gown sketching some Greek statue. That I don’t think would ever fly at WPI. That’s as dead as that picture is.” However, there is a happy medium. As Dr. Schachterle mentioned, art and technology are always intrinsically linked. It is his belief the fine arts program that Rodney mentioned will come in the form of programs like the new game development at WPI. “What is of interest to people is visualization using as one of the most important medium, computers.” The new major will allegedly involve as much aesthetic graphic design as it will programming. New humanities teachers will be brought in specifically for the major to teach things like graphic design. While the creation of art will not be even close to the typical paintbrush

and canvas, it will only be the medium that has changed to a computer. The same levels of creativity and meaning will still be present.

WPI's mission statement affirms the commitment WPI has to delivering a well-rounded education to its students, and having more art integrated into the curriculum would surely produce students with a more well-rounded education. If WPI were to approach the task of integrating more art into the campus, we would suggest the following steps be taken to enhance the educational process at WPI.

A good first step would be to survey the WPI population much like the survey in this project. An extensive member survey would gather a better opinion about what the role of art should be on campus. Establishing groups to oversee such information gathering and to bring arts on the WPI campus would stimulate the integration of arts into the WPI campus.

Opening the curriculum to more classes, and even requiring a few art classes as a graduation requirement would promote another channel of creativity for WPI students. The Game-Development program can be seen as a large step towards integrating more art into the educational opportunities at WPI. The Game-Development program would utilize transfer, a concept we introduced before which is the concept of using skills learned in one field to another field could certainly come into play on our technical campus. The program would combine the skills learned as a software engineer with artistic design. If more artistic majors such as these were established, WPI would attract a more diverse student population in which students would bring different skill sets and abilities to the campus that would compliment the abilities of the engineering students.

By opening the WPI curriculum up to more arts, another step would be to encourage students to contribute art to the campus and allow the students to influence their educational environment. One survey respondent could be quoted as saying “WPI art isn’t that imaginative”, pointing out the somewhat dull nature of art on the WPI campus.

When comparing the interviews and the surveys to determine if WPI is meeting its goals for art, indifference is the only attribute that is agreed upon between the administration, students, and faculty. The administration clearly does not make art a priority, even though there is serious interest in all branches of traditional art. By relying on donations, art contractors, and focus groups to determine what art should become part of the campus, the administration is making it clear that they prefer to let art come as it may, if it does at all. While this may please or upset different members of administration, it should be noted that money is always an issue, and the current economy makes changing the status quo difficult.

The rest of the WPI population, on the other hand, is also split between mediocrity and passionately demanding more and better art. The people who would like more art on campus are very eloquent about their reasoning, obviously have a great appreciation for art, and have a wider range of art definitions than simply “traditional”. This will conflict with administration’s focus on aesthetically pleasing art on campus, and end up satisfying no one. However, the large fraction of indifference amongst the WPI population will be the largest roadblock for those who want to change the role of art, whether those people are

administration or from the general population. It is this indifference in the population that causes WPI to actually be fulfilling their goals for art on campus: art is placed on the back burner by administration, and many faculty and students have art in the back of their mind. In the end, the minimal/lack of a goal is fulfilled.

Reflections

During our IQP we experienced a learning process unique to WPI in which we established a team, defined a goal, and completed our goal. Along the way we developed better teamwork abilities, time management, information gathering skills, and the vision necessary to accurately scope and complete a project.

One of our initial struggles with our IQP was finding resources that would be helpful to help us define art. We quickly learned that there were infinite opinions about what art is and how it should be used, but we needed to sort out the ones that would be useful to us. Sifting through art resources ended up being a very time consuming endeavor which delayed the completion of our Literature Review section. Each group member had a different opinion of what art is and we decided instead of creating a single definition of what art is, it would be necessary to create multiple definitions to suit the infinite uses of art.

After we established what art was and thinking about what it meant to a college campus, it became time to apply these concepts in our exploration of the WPI campus. Each group member had a different opinion of what exactly we were trying to accomplish with this project. Were we evaluating pieces of art on

the WPI campus? Evaluating what members of the WPI campus thought about art? Conducting research about what effect art has in certain regions of the campus? Does art make certain areas of campus more desirable than others? Does art have a place on a technical campus? We discussed and evaluated all of these questions and many more, and finally decided to use the ones discussed in our methodologies.

We moved on to figuring out how we would get these answers from the WPI community. Using interviews to gather information from the WPI administrative figures was highly effective, but using an online survey may not have been the best approach for gathering information from the general WPI community. The topics discussed in our project were fairly abstract considering the daily work of WPI members. After analyzing our results we noticed some survey results seemed unclear, and may have been due to the abstract nature of the project. We came to the conclusion that respondents may have been confused, or unclear about exactly what we were asking them. Using a focus group may have given us the opportunity to better explain ourselves and the meaning of the questions we were asking.

Group work in and of itself contains many complications in completing a project. While one may think, "The more people, the more work can be done." While this is true, one must also consider the overhead of managing the group. Tasks must be appointed, schedules worked around, and a system of accountability needs to be agreed upon and enforced. This project definitely demonstrated to us, and gave us direct experience in, this process of group

management that can easily be overlooked in classes where group dynamics are assigned or unnecessary for the completion of the task. This project definitely taught us to work with each member's relative strengths and weaknesses in mind, and that mutual support within the group is essential for producing a project of quality. The importance of concise and complete planning was most definitely impressed upon us.

Appendices

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Appendix B Survey Pretest

Art On Campus Survey Pretest.

Thank you for completing the survey. Please take a few minutes to give us some feedback on how it was. Again, feel free to use the back of this paper.

- 1) Was the survey too long? If so, how could we shorten it without losing information?
- 2) Were any questions confusing or ambiguous? If so, which ones and how so?
- 3) Do you have any suggestions as to how to reword any of those confusing questions?
- 4) Did you feel more explanation as to our goals in giving this survey was needed?
- 5) Do you have any other comments or suggestions, and if so, what are they?

Appendix C - Interview 1

See attached file: Appendix_C-F.doc

Appendix D - Interview 2

See attached file: Appendix_C-F.doc

Appendix E - Interview 3

See attached file: Appendix_C-F.doc

Appendix F - Interview 4

See attached file: Appendix_C-F.doc

Appendix G Survey Results

See attached file: all_surveys.pdf.

Appendix H Survey Code

See attached file: all_IQP_code.txt.