

Relationships Between Art Education and the Workplace

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Abstract

This study undertakes the challenging and imperative task of making connections and finding trends between what art education teaches and how these skills, abilities and thinking patterns translate into the workplace. The arts, traditionally viewed as “special” or “extra” subjects in the school system, are not only teaching students important aesthetic skills, but also enabling students to learn and apply significant 21st century proficiencies needed and desired in the current and future workforce. Evidences of how art education enhances workplace readiness for a competitive global market are necessary to justify the arts in school and bring awareness to the community, school board members, leaders and policy makers.

Many studies have been conducted exploring what art education teaches, the importance of art on student learning and development and skills needed for attaining jobs in a variety of enterprises. After reviewing these studies to gain insight on past and current research findings, relationships between art education, learned skills and abilities, student achievement, the workforce and the development of a thriving community were noted. A voluntary survey was distributed to the most successful businesses in Wake County, identified by the Wake County Chamber of Commerce, to reveal connections between individuals’ art experiences and career choices and needs. Data collected was then organized, analyzed, and interpreted by the researcher.

This study goes beyond the traditional research focus and attempts to weave all of these elements together and create a comprehensive overview eliciting how individuals' art education influenced their selection and preparation for their chosen profession and what relationships can be made between art education and the workplace.

The outcomes of the study revealed several significant conclusions. According to the results of the survey, art education experiences teach a variety of skills and abilities that are used often in many creative and non-creative industries. The majority of participants were involved in industries considered non-creative such as accounting/finance, administration, construction, and real estate and indicated that creative aptitudes and 21st century skills were needed for their work. Visual imagery proved to be a major component of the workforce regardless of level or position within a company, however participants had to rely on their pre-employment art experiences as only two respondents received art or design training within their company. In conclusion, this study found immense data proving the need for high quality art experiences in order to prepare students for the workplace.

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CHAPTER 1: INTRODUCTION

The arts have a uniquely definitive way of teaching students' skills and abilities they will need to be successful in their future. The arts prepare students to be productive citizens of their communities who actively contribute to the economic and social contexts locally and globally (National Governor's Association, 2002, p. 2). However as culture, business enterprise, and financial agendas shift it is now more essential than ever for students to have the competitive edge on the professional platform and be able to adapt with ease to the ever-advancing 21st century global workforce.

Creative thinking and the application of creative skills are emerging as some of the most coveted abilities by current and future employers and industries. These assets are no longer limited to those enterprises dealing with an aesthetic product or idea, but have transcended business barriers and are now strongly desired among a wide scope of industries.

By exploring relationships between an individual's art education experience and his or her workplace, important connections and patterns can be established. But what specific skills and learning from art experiences influence adults in making career and professional choices? Does art education help prepare these individuals for their chosen profession? What comparisons can be made between the influences of art education on individuals in creative occupations verses individuals in occupations considered noncreative? Do employers perceive art education of the potential employee an important factor when hiring?

This research addresses the above issues by exploring connections and influences of art education on individuals in regards to their current job and position within the workplace. Through external examinations of past and present literature coupled with the results of a research survey component, the need for high quality art education programs becomes evident. By reviewing literature from significant resources including the National Art Education Association, the National Governors Association, the President's Committee on the Arts and

Humanities, the North Carolina Business Committee for Education, the North Carolina Commission on Workforce Development and many others, the importance of art on learning and life experiences emerges. The survey results show patterns of what employees and employers are needing and desiring in order to be successful within their occupations.

CHAPTER 2: REVIEW OF RELATED LITERATURE

Defining Arts Education - North Carolina Public School System

The North Carolina Department of Public Instruction (DPI) establishes the standards and curriculum for all subjects in North Carolina including art. Visual art is an individual sector of the “arts” and is often viewed as a special or extra discipline. However under the controversial federal *No Child Left Behind Act*, established in 2002, art is scripted as a core subject. Ironically, with the hyper-focus on standardized tests as a result of the act, and in conjunction with budget strains, many schools have chosen to cut special or extra courses, namely the arts. For years Wake County has dealt with reduced budgets and having to trim spending in order to meet financial goals. For example, in 2009, WRAL documented that “Cuts in local and state funding are starting to hit classrooms in Wake and Durham counties, where teachers' jobs are in jeopardy and some electives are being eliminated” (para. 1). This irony of being a “core subject” yet being one of the first items on the school system’s chopping block could be due to the fact that the arts teach intangible assets and skills that cannot be quantifiably proven by a standardized test.

The DPI defines art to encompass the broad category of different types of art including, but not limited to, drawing, painting, communications, design, graphics, fibers, etc. The purposes of art in the schools are summarized by DPI (2011) as:

- gaining technical competence with a variety of media,
- employing the elements of art and principles of design effectively in art works,
- encouraging disciplines creativity by using higher level thinking skills to identify and solve problems, utilizing reading, writing and math to explore art concepts,
- developing and promoting self-expression,

- making enriching connections between art and other curricular areas,
 - expanding aesthetic awareness through reading, writing, listening, researching, discussing, critiquing and reflective writing,
 - teaching how to incorporate new technology to create art,
 - building knowledge and understanding of ideas, values and beliefs of people in different times and places, and,
 - challenging students to recognize their own voice and communicate through art
- (para. 1)

There are six integrated strands that run through the K-12 curriculum as framed by DPI: perceiving, producing, knowing, communicating, evaluating, and connecting. In order for students to receive a quality art education, a highly qualified art teacher needs to be in the classroom engaging and working with the students to push them to their highest potential. A highly qualified teacher can be defined as an individual who has been effectively trained within education and their selected discipline; these educators are central components of quality art programs.

In these difficult economic times the school system has to creatively problem solve the budget issues with continuing to ensure a balanced education for all students. Last year's budget discussion included "Teacher layoffs, larger class sizes, fewer courses and less help for struggling students are some of the consequences if North Carolina's public school funding is cut by 5 or 10 percent" (Public Schools of North Carolina, 2010, para. 1). This reduction is equivalent to eliminating state funding to more than 165 schools. Although North Carolina is the 6th fastest growing state in the country, it continues to see a decrease in funding for its school systems. For example, since the 2008-2009 school year NC has cut more than 8%, or 16,677.9 positions in the public school system (NC Public School System, 2011). Additionally, 6,096.7 people were laid off during this time as well.

Unfortunately budget cuts extend into the arts sectors as well. According to the *News and Observer* (2011), Raleigh's City Manager has proposed "cutting money for the arts in a budget he says reflects the lean economy. If the cuts are approved, the city's arts commission would lose about 11 percent of the cash it makes available as grants to local arts groups" (Garfield, 2011, para. 6). Although Russell Allen claims to be a supporter of the arts, he states "They're an important part of the economy. But when you're having to cut everything, I think it's fair to cut arts, human services and general government at least a modest percentage" (Garfield, 2011, para. 10). It is frightening views like this one that put the arts, and support for the arts, at risk for declining each year. This is a dangerous slope and it becomes imperative to revisit the significance of the arts and the numerous benefits the arts have on cognitive development, student learning, preparing students for their future occupations, and the importance of creative thinking and creative applications in the workplace.

The Arts and Cognitive Development – The Arts and the Creation of the Mind

Nonetheless, the arts teach learners skills and abilities that are not, and many cannot even be, easily measured on standardized tests. Although research supports students' academic enhancement as a result of participation in the arts, it is significant to note that the arts play a vital role in developing cognitive abilities that are typically not measured on tests. Dr. Elliot W. Eisner (2002) of Stanford University has established key competencies that art develops and enforces within young learners that are essential for the 21st century workplace: "perception of relationships; skills in finding multiple solutions to problems; attention to nuance; adaptability; decision-making skills; and visualization of goals and outcomes" (p. 70). He argues that although the arts teach abilities that transfer to other disciplines, they also develop complex and subtle forms of thinking that are valuable within their own respect.

Eisner believes that it is through the creation and reflection of images that the most intricate and multifaceted forms of thinking occur, distinct thinking and mind formation unique only to the arts (2002). The arts transform the consciousness in a variety of ways that enable humans to experience the environment, which constitutes our entire formulation of life. The process is a combination of culture and individuality that is influenced by an array of factors including language, beliefs, and values. Our senses are the avenues to our consciousness and it is through sight, taste, touch, sound and smell that we acquire information from our environment. Then, through complex processes our minds describe, categorize, compare and contrast and make sense of the multiple stimuli it takes in on a daily basis – this is where the arts come into play (Eisner, 2002).

The arts refine the senses and enlarge the imagination. A unique feature of the arts is how they “provide a type of permission to pursue qualitative experience in a particularly focused way and to engage in the constructive exploration of what the imaginative process may engender” (Eisner, 2002, p. 4). Imagination and sensibility are constructed within the arts. This realization of possibility and the perception of things, not just recognition, contribute to a better understanding of concepts, culture, and a better appreciation of elements that constitute life.

Representation, another important cognitive function, relates to transforming a conscious idea into a physical state through a material (Eisner, 2002). The process through which this occurs involves steps that in turn develop cognition. By preserving an idea in a durable form, editing or reflecting upon that form, igniting symbiotic communication and finally discovering the end of the process generating surprise craft representation is a distinctive feature of the arts (Eisner, 2002). Another considerable function, according to Eisner (2002), is helping us notice the world and providing a new way of seeing; the arts provide conditions for awakening the world around us. In this respect, the arts establish a new way of knowing. Employing the imagination as a way to discover new possibilities open doors to creative engagements is a capacity that secures our future. The concepts of risk-taking, exploring the uncertain, seeking

ambiguity are what bring to light important discoveries and progressive ideas that strengthen sovereignty, community and culture (Eisner, 2002).

It is through the arts that our world becomes present. Art stabilizes “what would otherwise be evanescent” (Eisner, 2002, p. 11). What cannot be seen is difficult to understand, and by inscribing the conceptual within a material it becomes real and available to critique and can be interacted with. Lastly, the arts provide a means to inspect our own mind. They draw contours within our “interior landscapes” and move us to “discover what we are capable of experiencing” (Eisner, 2002, p. 11). In this sense they develop our thinking and responsive abilities.

As a result of all these cognitive functions the arts facilitate, personal transformation occurs. Eisner (2002) states “artistic form is congruent with the dynamic forms of our direct sensuous, mental, and emotional life” (p. 12). It is through designing, creating, revising and reflecting that we learn to see what we had not previously noticed and feel what we would have otherwise bypassed and not considered. This multi-faceted process involves strategic thinking and complex problem solving. Unlike other disciplines, there is no “right” or “wrong” answer. Solutions to art problems are divergent and intelligence involved “requires the ability to deal effectively with multiple demands simultaneously. And it is learning to engage in that process that perception is refined, imagination stimulated, judgment fostered, and technical skills developed” (Eisner, 2002, p. 15).

Eisner discusses an additional substantial cognitive accomplishment that is cultivated through; namely, the employment of three distinct modes of thinking: mimesis, expressiveness and conventional signs. The creation of a single work of art utilizes all of these components. These thinking fractions represent the ability to depict an event, story or idea effectively and therefore control the experience of the viewer. Through technique, form and expressed content the artist creates illusions and formulates perceptions for the viewer. Eisner (2002) summarizes

this path of communication through his statement “By manipulating form, artists manipulate experience” (p. 17).

Ten distinctive occurrences happen through the arts. These occurrences generate cognitive development and an acute understanding of one’s place in culture, an important element in the formation of self-identity and discoveries in one’s interrelatedness to others.

Eisner (2002, p. 20) lists these cognitive functional developments as follows:

1. Humans are sentient creatures born into a qualitative environment in and through which they live.
2. The sensory system is the primary resource through which the qualitative environment is experienced.
3. As children mature, their ability to experience qualities in the environment becomes increasingly differentiated.
4. Differentiation enables children to form concepts. Concepts are images formed in one or more sensory modalities that serve as proxies for a class of associated qualities.
5. Concepts and meanings they acquire can be best represented in any material or symbolic system that can be used as a proxy for it.
6. The child’s developing ability to differentiate, to form concepts, and to represent those concepts reflects the use and growth of mind.
7. Which aspects of the environment will be attended to, the purposes for which such attention is used, and the material the child employs to represent it, influence the kind of cognitive abilities the child is likely to develop.
8. The decision to use a particular form of representation influences not only what can be represented, but also what will be experienced.

9. The arts invite children to pay attention to the environment's expressive features and to the products of their imagination and to craft a material so that it expresses or evokes an emotional or feelingful response to it.
10. A major aim of arts education is to promote the child's ability to develop his or her mind through the experience that the creation or perception of expressive form makes possible

The arts teach unique features and provide an array of valuable outcomes to student learning. Of course there are variables that influence what students gain in an art class. According to Eisner (2002), factors that affect student learning in the classroom include the curriculum and activities students will engage in, the "scaffolding" or assistance and prompts used by the teachers to direct students as they work, classroom norms and guidelines and the overall classroom atmosphere that differs so much from other academic classroom settings. Collectively these factors help to steer student experience and direct them toward desired learning results. Eisner lists the essential outcomes of art teaching as attention to relationships, flexible purposing, using materials as a medium, shaping form to create expressive content, the exercise of imagination, learning to frame the world from an aesthetic perspective and lastly, the ability to transform qualities of experience into speech and text (2002).

The Critical Importance of Art Education – The National Art Education Association, National Governors Association, the President's Committee on the Arts and the Humanities and Why Our Schools Need the Arts

Many refer to our current era as the "visual age" for good reason (NAEA, 2009). According to the *New York Times Magazine*, the average individual sees roughly 5,000 images and advertisements a day and that does not include the numerous hours spent playing video games, watching television, or using the computer (Story, 2007). It is important, now more than

ever, to help children decipher and make sense of the thousands of images saturating their minds each day.

“The predominance of visual images and demand for new abilities has also transformed the workplace” (NAEA, 2009, para. 3). No longer are businesses and occupational fields relying solely on knowledge based abilities, skills and degrees; rather, they are moving beyond the traditional assets to require intangible abilities such as flexibility, creativity, innovation and problem solving. According to Susan Sclafani, a former high ranking official in the Bush Administration’s Department of Education, “Corporate leaders in America believe that the success of America is going to depend on a flow of innovative ideas. And, they believe the innovative ideas will come because students have the opportunity to engage in the arts” (as cited in NAEA, 2009, para. 2).

But why the arts? Much more can be attained through art study than can be accomplished through other disciplines. The National Governors Association (NGA) states that “the arts can provide effective learning opportunities to the general student population, yielding increased academic performance, reduced absenteeism, and better skill building” (2002, p. 1). Another advantage is the arts’ ability to reach and enhance the educational experience of at-risk youth and students with disadvantages in our school systems. This population of students, including incarcerated youth, is most likely to continually struggle with civic engagement and living healthy, productive lives. Involvement in the arts helps to counteract this pattern and equips these young people with increased self-esteem, development of creative thinking, problem solving and crucial communication skills. Programs in the arts have proven to be educational, developmentally rich and cost effective ways to prepare all students for a successful future, enhance workforce readiness and prepare them to be contributors to a healthy economy (NGA, 2002).

According to the National Governors Association (2002), research reveals that young people who study the arts demonstrate higher academic achievement, the heightened capacity

for self assessment and a secure sense of their future and desire to plan and achieve their goals. In addition, multiple studies show that the arts connect learners' experiences to the world outside of school and positively impact youth across socioeconomic backgrounds in regards to academic as well as personal success. Research concludes the multiple benefits and effects of art instruction; it is cited that students who participate in the arts are more likely than their peers to be recognized for academic achievement, be elected to a class office, participate in a math or science fair, be recognized for excellent school attendance and/or win an award for writing a poem or essay (NGA, 2002). A study by Columbia University reveals that children receiving at least three years of art instruction in school "scored significantly higher on quantitative tests of creative thinking than their peers with less arts instruction. Students with more art instruction had index scores averaging 20 points higher than their peers on measures of creative thinking, fluency, originality, elaboration, and resistance to closure" (NGA, 2002, p. 3). Several art-based schools and programs in states such as Connecticut, Mississippi, New York, Ohio and South Carolina have been established to better reach the general student population. These schools have seen success of their programs in creating a more workforce ready individuals.

President Barack Obama recognizes the importance of art education and argues for reinvesting and rejuvenating this aspect of American education and economy. The President's Committee on the Arts and Humanities (PCAH) conducted an 18-month study to review the art educational system and emerged with convincing evidence and a wealth of data supporting the benefits of art education in preparing students for today's competitive workforce. The report "Reinvesting in Arts Education: Winning America's Future Through Creative Schools" emphasizes the skills needed in today's global economy and the value business leaders place on these skills. "In order to effectively compete in a global economy, business leaders are increasingly looking for employees who are creative, collaborative and innovative thinkers" (PCAH, 2011, p. 1). Art helps to develop these thinking skills and address challenging creative solutions. Today's business success stories, such as top consumer items created by Apple and

the most popular search engine, Google, triumph in the market due to the innovative thinking of their creative teams.

According to Dr. Jessica Hoffmann Davis (2008), the founding director of the arts in education in the graduate department at Harvard University, innovative thinking is a key concept taught by and within the arts discipline in a unique way that no other subject can do. Davis argues that the importance of art lies not in the way they incorporate and support other disciplines in the school curriculum, but how it provides equally satisfying, and frustrating, opportunities for students to learn about learning – “about what to do with mistakes, how to ask good questions that advance learning, and how to make sense of the world with the many skills acquired in school” (2008, p. 37). The arts need not be advocated for within the package of facilitating non-art subjects such as math and English, instead the arts should be front and center of education as the real world is not made strong by pieces of information and knowledge, but rather it is what is done with information and knowledge that makes us strong (Davis, 2008).

Davis (2008) reveals five compelling features, supported by learning outcomes, of the arts and what students gain only in and within art experiences.

1. Tangible product

- a. Imagination: students think beyond the given, to imagine, “What if?”
- b. Agency: students experience their significance as agents of effectiveness and change, to realize, “I matter.”

2. Focus on emotion

- a. Expression: students recognize and express their feeling, to acknowledge, “This is how I feel.”
- b. Empathy: students become aware of and attentive to emotions of others, to appreciate, “This is how you feel.”

3. Ambiguity

- a. Interpretation: students see that there are many equally viable ways in and out of the same subject, to know even if their views differ from others', "What I think matters."
 - b. Respect: students become aware of, interested in, and respectful of different ways of making sense of the world. They come to know that even if they disagree with peers, "What others think matters."
4. Process orientation
- a. Inquiry: students learn questions that make use of information but go beyond right and wrong answers to considerations of, "What do I want to know?"
 - b. Reflection: students develop skills of ongoing self-reflection and assessment, moving beyond judgments of good or bad to informed considerations of, "How am I doing and what will I do next?"
5. Connection
- a. Engagement: students are excited and engaged, awakening attitudes to learn that include passion and joy, and the discovery that, "I care."
 - b. Responsibility: students connect to others within and beyond school walls, helping to awaken a sense of social responsibility and action because "I care for others." (p. 50)

The skills above, although uniquely learned within the art context, easily transfer to other areas of school, work, and the community. Students with rich and sequential art practices will continue to apply these elements to their daily lives and therefore experience a better quality of life and have the ability to earn higher career achievements throughout their future. For these reasons, it is important to note that the place for the arts is in the school system. Although a plethora of art centers and extra-curricular events are offered, it is not convenient or realistically accessible for the majority of students and their families. "While arts education in the community is there for self-selection by aware individuals, those who know least of the arts and need most

be exposed to them will only encounter them if they are part of the school curriculum” (Davis, 2008, p. 42).

History of Outside Influences on the Development of Art Education Curriculum – A History of Art Education

Like other disciplines, the arts have undergone an array of changes and alterations as the curriculum developed into what we know it as today. Each region of the world has unique systems of education and it is important to note that the Western world’s system has been emerging for over 2,500 years now, and continues to undergo changes and improvements. When reflecting on the arts within a society, it is helpful to realize them within context and understand that “the arts themselves reflect the society in which they arise, but so does the educational system that teaches the arts” (Efland, 1990, p. 4). The educational system and what it teaches, or does not teach, mirrors the social structures, ideas of realities, cultural policies and institutional systems of society and reveals the something of the character of that society (Efland, 1990).

Western origins of art education can be traced back to ancient Greece where the philosophers Plato and Aristotle first wrote about education and the arts (Efland, 1990). During this Classical era the arts held an esteemed place in society; however they played a minor role in the formal education of aristocratic children. Painting and sculpture were viewed as inferior trades similar to common labor and if one were to pursue the study of the arts, they would learn the skills in a family workshop or take on an apprenticeship with a practicing artist (Efland, 1990).

According to Efland, during the Middle Ages, after the Fall of Rome in 476 A.D. “learning itself entered a period of decline” (1990, p. 19). With the rise of the feudal system and the focus on monastic communities within the church, Europe became a patchwork of individual estates.

Education, along with the arts, took place within monasteries, workshops and guilds within an extremely structured system. Here individuals were taught a craft within a group and participation was based on ability and level of knowledge, similar to a hierarchy with the master craftsman at the top (Efland, 1990). A number of workshop treatises were developed by craftsmen to aid in the production of objects and supplemented written knowledge like today's textbooks, although the majority of art instruction during this time was by oral instruction or copying (Efland, 1990).

The Renaissance marks a critical turning point in the arts: the separation of the fine arts from crafts influenced the teaching of art significantly (Efland, 1990). Humanists spread the ideal that education was valuable for everyone, not just the elite, and the first classical secondary schools were established in Italy. Humanist scholars led by philosopher Marsilio Ficino, "helped pave the way for the acceptance of the artist as a member of a cultural elite as opposed to the medieval idea that the artist was merely a skilled craftsman" (Efland, 1990, p. 27). Guilds continued to teach technical trades, but lacked the humanistic learning component that was believed by theorists such as Alberti and Leonardo, to be necessary to the education of the overall artist. Academies emerged and consisted of groups of artists of various ages who gathered to share knowledge of the theory and philosophy of art (Efland, 1990).

Another critical point in art education occurred with the formation of the Academy of Painting and Sculpture in France in 1648. Society turned to political absolutism, reason and science during the seventeenth century and continued to influence art teaching until the end of the 19th century (Efland, 1990). Philosophers such as John Locke and Roger Bacon advocated for the objectivity of science in their writings and reflected the reduction on the status of the arts. The ideology of absolutism nurtured doubt and indisputable laws of the universe. Therefore, the primary purpose of the arts during this time was to "assert power and prestige of the state" (Efland, 1990, p. 35). The establishment of the government-sponsored academy oversaw

patronage, censorship and education in the arts, which became an avenue for political propaganda and glorifying the king's image.

The nineteenth century brought numerous transformations to art education initiated by three major revolutions that concluded during this time period: the Industrial Revolution, the American and French Revolutions and romanticism, a cultural revolution (Efland, 1990). Industrialism brought new audiences of art consumers, private collectors and a mass market for factory-made artifacts. Art became a commodity in a new market system of patronage as the official state-controlled patronage deteriorated (Efland, 1990). Academy instruction continued throughout this time, alongside ateliers, artist workshop or studio and schools for the decorative arts. The United States first art academy was established in Philadelphia in 1794, followed by the Pennsylvania Academy of Fine Arts in 1807. These first institutions imitated their European counterparts and did not provide training for the application of art to the industry (Efland, 1990). Toward the end of the century schools such as the Cooper Union, the Pratt Institute and the Rhode Island School of Design were created to accommodate industrial development and offer training in the fine arts (Efland, 1990).

The common school movement was a trend to establish state-supported schooling in the early nineteenth century. The industrial era found the ability to read and write a necessity. The workforce of this time required employees that could "follow written instruction and maintain records, and this literacy also embraced aspects of the arts" (Efland, 1990, p. 73). Workers had to be able to read plans and follow written instructions, which lead to the need of designers in the factories for creating manuals. Many drawing movements followed with resistance from the public until the years following the Civil War. In 1870 Massachusetts mandated the subject of drawing by law (Efland, 1990). Harsh economic and low supply effects from the war, in conjunction with sobering effects from the 1867 Paris Exposition, it became clear that American goods lacked competition with other nations, Britain's in particular, and industrialists set out to change this (Efland, 1990).

Walter Smith, an English drawing master, was a key figure in the Industrial Drawing movement. In 1871 Smith immigrated to the United States to become the first art supervisor for Boston and he also served as the first art education supervisor for the state of Massachusetts (Efland, 1990). During this time Smith became a founder and first head of the Massachusetts Normal Art School, now the Massachusetts College of Art. Through these major accomplishments Smith greatly affected the teaching of drawing by devising a system of drawing instruction, as well as a system for training classroom teachers. In addition, Smith created the first training program for professional art teachers in the nation (Efland, 1990). Smith represents a prime example of the government influencing art curriculum in order to meet the needs of the current industry. Smith transformed the art curriculum and also elevated the public's art taste as he refined art in the schools. He broke new ground with his work and created a strong foundation for art education within the school system.

Reconstructionist attitudes in the early 1900s saw art as a means for transforming individual life and society while others viewed art as a resource and recognized its power to solve problems (Efland, 1990). The Great Depression of 1929 had profound effects on American life, including its school systems. Reports conducted at that time by the U.S. Office of Education concluded the decline in the number and quality of art programs. This research spurred an important undertaking, the Owatonna Art Education Project executed in Owatonna, Minnesota between 1933 and 1938 (Efland, 1990). The federally-funded project had three phases: surveying the community, developing a course of study in art for the schools and discussing the role of art in the daily life of the community. According to Efland (1990), the project was a huge success due to the evidence observed at the end of the project. The Owatonna public schools continued to support the initiated art program even after Carnegie funding ended. Efland (1990, p. 208) reports:

“The foundation provided funds to publish the final report and course syllabi, some of which were printed during WW II. Other indicators were the large number of requests

received by the project staff for speakers on art subjects and establishment of night classes. The head librarian for the town indicated that the circulation of art books increased. Direct appraisal from the residents of the town also indicated that the project was highly regarded.”

The curriculum developed by the project was also introduced to other schools and led to the creation of the first National Society for the Study of Education yearbook that was strictly devoted to art education (Efland, 1990).

The Bauhaus school founded in 1919 in Germany significantly affected art education and instruction as it “sought to combine the theoretical curriculum of an art academy with the practical curriculum of an arts-and-crafts school in its attempt to unify all training in art and design” (Efland, 1990, p. 215). This school was established to help prepare professionals for their industry and workforce needs in a systematic way through a two-phase curriculum and other teaching methods (Efland, 1990). The Bauhaus is credited with successfully integrating technology of the time into the artist’s work therefore further training the individual for the needs of society. Bauhaus faculty members immigrated to the United States and influenced art education with their ideas and resources on architecture, typography, furniture design, and color theory. According to Raizman, the “emigration of Bauhaus faculty and their students to the United States and Britain where the concept became institutionalized as a cornerstone of design education after World War II” (2004, p. 182). Their ideals were expressed in books written by American authors, such as Christine Frederick’s *Scientific Management in the Home* (1915) that discussed efficient layout of a home and kitchen that should derive from the rational study of food preparation and the motions of daily life (Raizman, 2004). After the war housing shortages and a sluggish economy prompted the increase in home improvements and new construction aimed at “efficiency and the fulfillment of minimum requirements for living, and that standards based upon such considerations should be adopted by manufacturers” (Raizman, 2004, p. 190).

New cultural programs introduced in the 1930s by the federal government, inspired by Roosevelt's New Deal policies, represent a final illustration of outside influences on art education. These cultural programs "supported activities not already subsidized by private sector patrons, rather than following private patrons' leads; and they emphasized the interrelatedness of culture with all aspects of life, not the separateness of a rarefied art world" (Adams & Goldbard, 1995, Introduction, para. 1). The programs evolved from numerous influences including unconventional public art in other countries, work done in settlement houses, progressive educational theories and new definitions of art itself that emerged from the Russian Revolution, among others. These influences along with the government's concern for the unstable labor market initiated programs to engage professional artists in cultural work (Adams & Goldbard, 1995).

Most well known, the Works Progress Administration (WPA), was the largest and most significant of the New Deal cultural programs. This effort was a massive employment relief plan aimed to "put the unemployed back to work in jobs which would serve the public good and conserve the skills and self-esteem of workers throughout the U.S." (Adams & Goldbard, 1995, The Works Progress Administration, para. 4). The WPA began work immediately with the creation of "Federal One," a five-sector project that included the Federal Art Project (FAP), the Federal Music Project, the Federal Theatre Project, the Federal Writers Project and the Historical Records Survey with each division headed by a national director (Adams & Goldbard, 1995). Adams and Goldbard (1995) discuss the director of the Federal Art Project, Holger Cahill, stating the following in an important 1939 speech:

"...[T]he project has discovered that such a simple matter as finding employment for the artist in his hometown has been of the greatest importance. It has, for one thing, helped to stem the cultural erosion which in the past two decades has drawn most of America's art talent to a few large cities. It has brought the artist closer to the interests of a public which needs him, and which is now learning to understand him. And it has made the

artist more responsive to the inspiration of the country, and through this the artist is bringing every aspect of American life into the currency of art.” (The Birth of “Federal One,” para. 5)

The FAP employed 5,300 visual artists and other professionals at its height in 1936 (Adams & Goldbard, 1995). Several major undertakings by the group included over 2,500 murals in hospitals, school and other public locations; 108,000 easel paintings; 18,000 sculptures; a workshop for graphic arts; a photography division; a scenic design sector for educational purposes; and a stained glass division in New York (Adams and Goldbard, 1995). The FAP further fulfilled its purpose by employing hundreds of art teachers who taught classes in settlement houses and community centers that tens of thousands of students were able to participate in. Adams and Goldbard (1995) state “The FAP also set up and staffed 100 art centers in 22 states; these included galleries, classrooms and community workshops and served an estimated eight million people. These local centers also received some \$825,000 in local support; some survive to this day” (Federal One’s Component Projects, para. 3). This federally planned, executed and funded program reflects an initiative to employ the talents and skills of unemployed artists in the community to bring social justice. Its strongest outreach program was art education centered, in the art classes for children at community centers. Numerous artworks were produced from these classes and the benefits of art in the communities and the education of children through art are evident in this government-sponsored agenda.

Skills Needed for Today’s Workforce – North Carolina Business Committee for Education and the North Carolina Commission on Workforce Development

Future-ready students must possess the traditional core basic skills taught in school such as reading, writing and math, oral communication, and higher order thinking skills in addition to other essential in-tangible abilities. Today, more than ever, affective traits are also necessary to be successful in the job market. Responsibility, a positive attitude, cooperation, adaptability, flexibility, self-discipline and motivation are a just a few examples of affective traits that employers look for in employees when hiring. In addition to these skills and abilities, North Carolina, along with other states across the nation, have joined with the Partnership for 21st Century Skills in emphasizing and highlighting 21st century skills as a major component to students' future success. The Center for 21st Century Skills was established under the North Carolina Business Committee for Education (NCBCE) in 2005 by Governor Mike Easley in an attempt to bring awareness to the issue by improving North Carolina's educational system to ensure that all students graduate from public school with the qualities and skills needed to be successful in today's global workforce. Within this program numerous initiatives were launched including Learn and Earn/Early College High Schools, the NC Graduation Project, a Teaching and Learning Conditions Study, School Literacy Coaches, and a 21st Century Skills Policy. The 21st Century Skills policy works to infuse 21st century skills into disciplines and classrooms across the state and is aligned with the goals and mission of the State Board of Education in that "every public school student will graduate from high school globally competitive for work and postsecondary education and prepared for life in the 21st century" (NCBCE, 2007, para. 4).

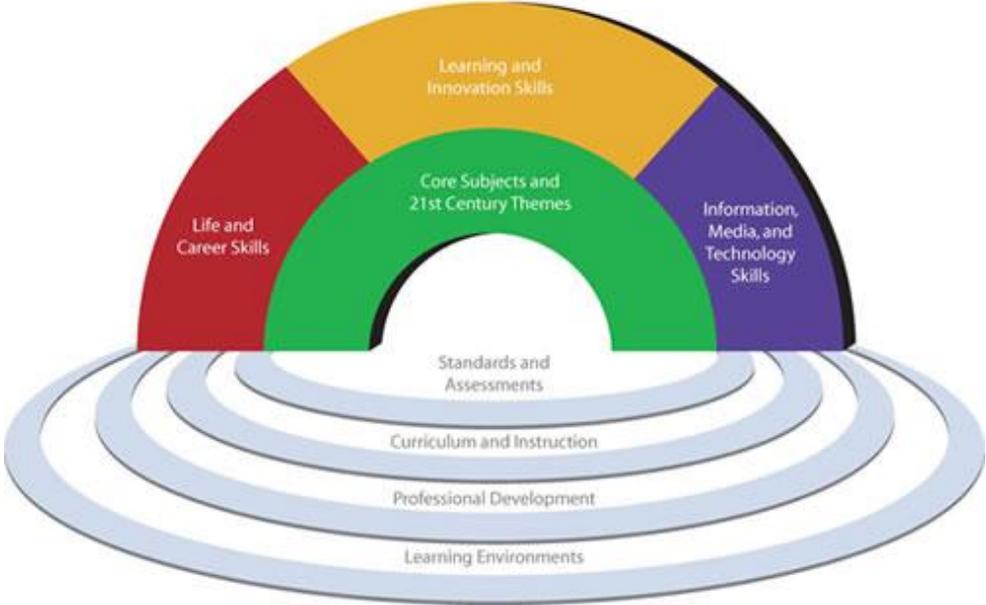
But what are 21st century skills exactly? According to the Partnership for 21st Century Skills, interdisciplinary themes should first be integrated into core subjects (English, math, science, history, art, economics, etc.). Global awareness, financial, economic, business, and entrepreneurial literacy, civic literacy, and health literacy need to be mastered with core subjects (NCBCE, 2007). What truly separates the prepared students for the complex work environment from the unprepared students are the 21st century standards:

- Learning and Innovation Skills
 - Creativity and Innovation
 - Critical Thinking and Problem Solving
 - Communication and Collaboration

- Information, Media and Technology Skills
 - Information Literacy
 - Media Literacy
 - ICT (Information, Communication and Technology) Literacy

- Life and Career Skills
 - Flexibility and Adaptability
 - Initiative and Self-Direction
 - Social and Cross-Cultural Skills
 - Productivity and Accountability
 - Leadership and Responsibility (p. 3)

Table 1: 21st Century Standard Module



According to the North Carolina Commission on Workforce Development (NCCWD) the state is experiencing rapid effects of change and North Carolina must be ready to meet the challenges the industries, workers, and communities are experiencing (2011). An in depth analysis conducted in 2011 by the NCCWD established common patterns occurring in the workforce such as the fact that “the most severely impacted industries are those traditionally competing for business based on relative cost advantage” (NCCWD, 2011, p. 1). These businesses largely employ workers with limited skills such as in manufacturing and construction and as demand for these workers plummets the companies and individuals are forced to make significant changes in order to survive. These companies once served as a backbone for many communities, typically in rural/metropolitan areas, but as prevalent companies struggle, the surrounding communities also suffer.

The impact of this transition is further advanced by industries relocating to North Carolina and replacing traditional employers. The result is a new economy that relies on “workers who can demonstrate innovation and unique capabilities. These characteristics often

derive from combining knowledge with creative instincts” (NCCWD, 2011, p. 1). Many low-skilled workers are unable to adapt to this change and are simply not prepared due to lack of knowledge, resources, education and training. These workers and their communities represent a large portion of North Carolina and therefore will not only their economy be affected, but the state’s economy as well.

The NCCWD (2011, p. 1) report outlines the most critical challenges faced by the state:

1. Worker dislocation accelerated during the recession due to long-term structural changes.
2. Workers employed in low-skill, middle-wage jobs are competing for fewer good-paying jobs while opportunities offering similar wages (i.e. “new middle” jobs) demand higher skills.
3. While metropolitan workers have more diverse set of career possibilities, they must continuously adapt to increasing demands in the workplace and a more competitive labor market.
4. Dislocated or young workers in economically hard-hit micropolitan and rural areas have very limited alternatives for employment.
5. Seeking good-paying jobs, more workers must increase their skills by accessing and completing education beyond high school or by earning industry-recognized credentials.
6. The recession slowed baby boomer retirements, but the impact is likely to be felt first and greatest in micropolitan and rural areas where more workers are near-retirement age.
7. High skill in-migrants recruited to help companies meet their talent requirements are seeking jobs in amenity-rich metropolitan areas.

8. Migration of new workers continued at near pre-recession levels, even among low-skilled workers, despite the limited availability of jobs.
9. Lower-skilled workers accounted for the most unemployed and required significantly greater social services during the recession.
10. Workers employed in certain industries – i.e. manufacturing, finance, distribution, or construction – were more likely to lose their jobs and to need retraining to find work.

There is a growing imbalance between the high demand of skilled workers and an overwhelming supply of low-skilled workers within this new extremely competitive market. The predicament becomes two-fold: a large number of workers will be left behind as many job opportunities will go unfilled due to the lack of skilled workers needed for the job. The state's economy feels the strain of this problem because "if companies can't find the workers they need, then they cannot compete for global opportunities and will be left to stand by while global companies with better prepared workers elsewhere take advantage" (NCCWD, 2011, p. 6). This leaves North Carolina in a difficult position and at risk for witnessing the decline of its competitive edge, jobs and communities.

Importance of Art Related Skills and Right Brain Thinking – A Whole New Mind

As previously mentioned, a shift is occurring in America's job market and can even be witnessed through changing pop culture. Decades ago knowledge based skills and abilities were sufficient for maintaining and excelling in the workforce. Today and tomorrow require a new type of worker who utilizes the right brain mode of thinking and problem solving. According to renowned author Daniel Pink (2006), Western society has been dominated over the last decade by the "information age," the age of the "knowledge worker," or one who uses narrowly deductive and analytical thinking modes typically associated with the left hemisphere of the

brain (p. 2). Due to a variety of forces, including abundance, globalization and increasing technologies, this type of worker is no longer as valued, or even needed in many cases. Instead, we are entering a “conceptual age” that requires workers to think and approach problems in a new way that are high concept and high touch, typically associated with the right hemisphere of the brain (Pink, 2006).

Two pioneers in right-brain left-brain studies are Professor Roger W. Sperry and instructor Betty Edwards (Pink, 2006). Sperry is most well-known for his work in the 1950s when through a series of brain studies, he discovered that the brain is physically and mentally divided into two halves and each side controls certain functions and thought processes. Edwards furthered his findings beginning in 1979, when she published her first book titled *Drawing on the Right Side of the Brain*. Pink’s (2006) findings on the brain hemispheres is outlined in the chart below:

Table 2: Right Brain and Left Brain Functions

Left Brain (L-Mode)	Right Brain (R-Mode)
Verbal Analytic Sequential Linear Rational Digital Logical	Nonverbal Synthetic Non-temporal Non-rational Spatial Intuitive Holistic

There are three specific happenings changing society and the workforce according to Pink: Abundance, Asia and Automation. Abundance refers to the growth of stores and shopping centers steadily being built, and the effects these consumer driven businesses have on the local community and beyond. Stores are everywhere and the public is shopping more than ever. Self-storage businesses have become a \$17 billion annual industry (Pink, 2006). When Americans are done with their many things, they simply throw them away which creates massive amounts

of waste. Pink (2006) quotes business writer Polly LaBarre in her observation, “The United States spends more on trash bags than ninety other countries spend on *everything*. In other words, the receptacles of our *waste* cost more than all the goods consumed by nearly half of the world’s nations” (p. 33). Ironically this consumer driven society was build on left brain thinking, and in turn has lessened its significance. Rational, logical, and functional needs for products have been surpassed. Consumers now want beyond the minimal, and desire the maximum products that embody not only function, but also aesthetic, unique, and meaningful qualities. These elements require R-mode directed sensibilities to create, therefore putting a higher premium on right brain thinkers and workers (Pink, 2006, p. 33).

The term Asia, the second force progressing right brain thinking, encompasses traditional American labor moving overseas and the outsourcing jobs and products. Tasks are being performed faster and products are being created cheaper than ever before in other countries such as India, the Philippines and China. Much L-directed work such as within the computer, software and information technology industries is migrating as well (Pink, 2006). For example, Motorola, Nortel and Intel have operations in Russia. Hewlett-Packard and Siemens employ thousands of engineers and programmers overseas.

Lastly, Pink (2006) defines automation as computers and machines replacing human tasks. Any job that depends on repetition or a set of sequential steps, or left-brain thinking abilities, is in danger. Computers have taken over jobs that once required a human, even if the human had limited skill sets. For example, a British company has created software that creates software, therefore taken out the need for a human (Pink, 2006). Legal and healthcare professions are feeling the effects as well. Clients and patients can complete numerous self-help tasks on the Internet, sometimes completely bypassing the need for a professional.

The conceptual age is upon us requiring distinctive right-brain abilities that were once considered frivolous. High concept abilities (those involving artistic creation and emotional beauty) and high touch abilities (those involving empathy and the understanding of human

interaction) are essential to compete in the current and future job market (Pink, 2006).

According to Pink (2006, p. 65), there are six right-brain aptitudes that are important to master:

1. Not just function, but also DESIGN.
2. Not just argument, but also STORY.
3. Not just focus, but also SYMPHONY.
4. Not just logic, but also EMPATHY.
5. Not just seriousness, but also PLAY.
6. Not just accumulation, but also MEANING.

These abilities are essential for success in today's emerging conceptual age.

Creative Ethos Dominating Society – The Rise of the Creative Class

Professor and researcher Richard Florida chronicles the shift in our nation's workplaces, leisure activities, communities and everyday lives. His insightful book *The Rise of the Creative Class* (2002) brings to light a new class of workers he calls the "creative class" and the effect this group is having on the workplace and society. The creative class is defined as "people who are paid principally to do creative work for a living" (Florida, 2002, xiii). This class' primary function is to create meaningful new forms and consists of 38 million Americans, or 30% of all employed people, including scientists and engineers, educators and those working in music and entertainment (Florida, 2002). One major difference between the creative class and the working and service classes is the fact that the creative workers have much more autonomy and flexibility than the other two classes. The working class and service class are paid to predominately execute according to a prescribed plan. However, the creative class engages in "complex problem solving that involves a great deal of independent judgment and requires high levels of education or human capital" (Florida, 2002, p. 8). Although this class represents less than the majority numerically, it is dominate in terms of wealth and income. According to Florida

(2002), the creative class earns nearly twice as much on average as members of the service and working class.

Florida (2002) believes that “human creativity is the ultimate economic resource” (xiii). The ability to generate new ideas and approaches is what will give industries, communities and nations the competitive edge. With society transforming on so many levels and complexities the need for changing workers and thinkers becomes apparent. Another factor playing an important role is that today’s key resource, creative people, are highly mobile. And no longer are job opportunities sufficient for luring creative people, and others, to settle within its region. Florida has found that location and the ability for individuals to be themselves and construct their own identity is a major draw of some of the most successful regions.

“Creativity has come to be valued – and systems have evolved to encourage and harness it – because new technologies, new industries, new wealth and all other good economic things flow from it. And as a result, our lives and society have begun to resonate with a creative ethos” (Florida, 2002, p. 21). This ethos is the underlying spirit of our age and what will separate the progressive markets from the stagnant industries. Florida (2002) believes that creativity – the ability to create meaningful new forms – has helped to form an entirely new economic infrastructure, one that has evolved to support creativity and mobilize creative people around significant ideas and products. Largely due to shifts in society, people today desire more meaning and individualization in their lives. This powerful shift in attitudes and values has been documented intensively by political science professor Ronald Inglehart over two decades. He refers to this transfer from ‘survival’ to ‘self-expression’ values (Florida, 2002). No longer do we have to devote our energies just to stay alive as humans have had to do in the past, instead we have the “wealth, time, and ability to enjoy other aspects of life” (p. 81).

The creative class emerged as a result of this happening. This evolution is extremely noteworthy due to the fact that the tremendous shift in society will continue to change individuals’ needs and wants; the consumer will desire special commodities to help construct

meaning and identity in their lives (Florida, 2002). The working mother no longer *needs* the \$5 measuring cups to cook with, but *wants* and purchases the \$18 designer cups from Williams and Sonoma that match her kitchen and help to express who she is. This is where creative people and creative products play such a crucial role and will continue dominating the market throughout the future.

Arts and Economic Development – The National Governors Association and the North Carolina Arts Council

Creative skills not only prepare students for a successful future, but are important community building blocks that help to construct thriving social and economically strong foundation for local, state and national regions. The arts take a vital role in developing and supporting a healthy economy and quality of life for communities and states. Creative sectors help to draw businesses and tourists to regions while generating revenue for the area. Cultural life created by art experiences helps to establish a region's identity and visibility in attracting and retaining residents, industries and tourists as a desirable destination. According to the National Governors Association (NGA), the community quality of life has been shown to be the second most important factor regarding the attractiveness of a new job based on a survey of more than 1,200 workers (2001).

The direct impact of the arts includes revenue and jobs. For example, “nationally, the nonprofit arts industry is a \$36.8 billion business that supports 1.3 million full-time jobs” (NGA, 2001, p. 2). North Carolina's statistics are very convincing. According to the North Carolina Arts Council (NCAC) creative industries account for roughly 300,000 jobs and contribute products and services through nearly 50,000 establishments (2011). When it comes to tourism and tourist spending, the NCAC cites “the presence of creative professionals in a given county is the single

most important factor associated with the amount that visitors will spend” (NCAC, 2011, Creativity Builds Community, para. 1).

Indirect impact of the arts include encouraging economic trends with commercial sectors, establishing an identity of a region and enhancing the overall quality of life. It is common for individuals to partake in additional community ventures when engaging in art experiences. For example, before or after visiting an art museum many families might dine out at a local restaurant. Businesses often cluster around art establishments due to this effect; restaurants and shops are often developed near galleries and museums and art outings become multi-sensory activities that include several venues as opposed to the single art establishment.

Art industries expand well beyond what is first perceived as a simple entity and can be broken down into three primary sub-clusters: the arts, entertainment and new media and design. Art includes artists, artisans, craftsmen, museums and art schools. Entertainment can be defined as theater, movies, video, film, music industry, software and internet publishers and archives. Design encompasses architects, designers, fashion apparel, and advertising (NCAC, 2009). There are many infrastructures involved with creative products and initiatives from creating the actual product (need, research and design) to the distribution of the product (administrative needs, organization and dissemination) that it becomes a collaboration and symbiotic relationship between numerous sources (NCAC, 2009). The art industry in its entirety can be visualized as a pyramid; underlying tiers support the preceding layers of the pyramid. The peak of the pyramid is the actual creative product or an aesthetic artifact such as artwork or advertisements. The next tier down represents the creation or upkeep of that creative product or focus, such as the artist within the studio or the graphic designer within the advertising agency. Manufacturing is also included in this area. The subsequent tier is the dissemination or delivery of that product or focus such as a gallery showcasing the artwork or the magazine displaying the ad. The next tier is the input that helps create the product such as materials, supplies, part

and equipment used. Not only are creative products and workers contributing to the success of their business, but also to the success of other businesses that help create, support, maintain, and distribute these creative items.

Studies on Creative Industries – Americans for the Arts, the North Carolina Arts Council and the North Carolina Department of Cultural Resources

Research based studies conducted by reputable national and state sources confirm that the arts and creative individuals build healthy communities by strengthening many dimensions of the region. “Arts and Economic Prosperity III” conducted by the Americans for the Arts (AFA) is the most comprehensive study of nonprofit art and culture organizations of its kind and discusses in detail how these industries “provide inspiration and enjoyment to residents, beautify shared public places, and strengthen the social fabric” (AFA, 2007, p. 3). The economic impact is outstanding. Nationally these industries generate \$166.2 billion of financial activity a year and support 5.7 million full-time jobs, more than accountants and auditors, police officers, lawyers, and those in the fishing, farming and forestry industry (AFA, 2007). Arts and culture businesses attract more tourists and tourist spending and are directly related to cultural events. According to AFA, travelers who include art and culture events spend more and stay longer compared to those who do not include art and culture events; art and culture travelers spend \$623 verses \$457 and travel longer, 5.2 nights verses 3.4 nights. Social fabric and community relations are strengthened by volunteerism that stems from cultural activities. “The average city and county in the study had 5,174 arts volunteers who donated 191,499 hours to nonprofit arts and culture organizations” (AFA, 2007, p. 13). Although this is not a direct economic benefit to the community, it represents the significance of individuals’ pride where they live and work and the investment they are willing to make to support local cultural industries.

A creative study specific to North Carolina completed by the North Carolina Department of Cultural Resources (NCDCCR), *Creative Economy* discusses how creativity and creative industries contribute to the state’s economy and overall well-being. Overall the creative market accounts for 5.54% of all employment in North Carolina, 5.31% of the gross domestic product, 4.93% of employee compensation, and 5.86% of the market value of goods and services (NCDCCR, 2009). If it were not for the arts, an additional 293,000 workers would be unemployed in North Carolina. The arts industry not only provides direct economic benefits, but “help create jobs, attract investment, generate tax revenues, and stimulate local economies through tourism and consumer purchases” (NCDCCR, 2009, p. 7). It is noted in the same report that every 100 jobs in the arts support an additional 29 jobs in other industries. It is obvious that the benefits of the arts are interwoven throughout the multi-layered fabric of a community, state and nation.

Another creative study conducted by the North Carolina Arts Council (NCAC) further validates the importance of the arts in our schools, communities and workforce. The *Creative Economy: the Arts Industry in North Carolina* study of 2007 notes that the creative sector is the core of our state. Tradition and rich cultural heritage help to define North Carolina’s history, people and places. Creativity is giving our state a competitive advantage over others as creative enterprises represent a direct source of jobs and wealth, contribute to better products and services that are globally competitive, provide induced economic benefits and act as a catalyst for high-skilled employment in industries such as technology (NCAC, 2007). Although the creative industry is based on aesthetic content, the segment extends beyond the visual and can be organized as seen in the chart below.

Table 3: Breakdown of the Creative Industry

ACTIVITY	PRINCIPLE
ORIGINATES unique creative intellectual property	CREATION

PRODUCES creative products	PRODUCTION
DELIVERS creative products to the public	DISSEMINATION
PROVIDES MATERIALS, PARTS, OR EQUIPMENT to enable the origination, production or delivery of creative a	INPUTS
FACILITATES AND/OR PROVIDES SERVICES that support creative activity	SUPPORT

Educating the future workforce in the public school system is vital to continue this thriving creative trend. This begins in the art classroom to provide students with knowledge and skills needed for their success in the academic contexts and future careers.

In summary, “skills developed through exposure to the arts in education include ability to understand complex issues and emotions, leadership, higher order thinking skills, originality, elaboration, and flexibility. Many attributes of creative thinkers are fundamental to successful participation in a rapidly evolving global economy. The competitive advantage of the future, whether for individuals, companies, or countries, will be the ability to engage in ‘right-brain thinking’ – to bring creativity to the task at hand whether one is working in manufacturing, services, or the arts” (NCAC, 2007, p. 28).

Statement of the Problem

The purpose of this study is to determine how individuals were influenced by their art education experiences and to what extent their art education influenced and prepared them for their selected profession. Skills and abilities learned in the art classroom will be identified and patterns will be made based on how adults view their art education experiences. Occupations considered creative and occupations considered non-creative will be compared and contrasted and employers will have the opportunity to comment on the value put on creative abilities and skills in the workplace. The results will highlight strengths, and potential weaknesses, of the art education curriculum and give educators, policy makers and others evidence of the value of art education in the school system. How have individuals' art education influenced their selection and preparation for their chosen profession and what relationships can be made between art education and the workplace?

CHAPTER 3: METHOD

Participants

Thirty-nine individuals participated in this survey. The participants worked in Wake County, North Carolina in a variety of industries. Potential businesses were selected from the Wake County Chamber of Commerce's annual "2011 Book of Lists" as being the most successful companies in the county. The researcher contacted the top business within approximately thirty-five categories noted including architects, commercial real estate, software developers and restaurants. The participants self-selected to respond to a survey conducted online. The questions focused on obtaining information related to their art experiences, skills and abilities learned in their art endeavors, application of art knowledge in their career and views on related skills within a career. The cover letter discussed the purposes of this study, confidentiality of participants and their responses and the respondent's rights while taking the survey. Data was collected over a period of three weeks for participants' convenience then the information was reviewed and organized for further analysis.

Instrument

The cover letter that preceded the survey invited the selected individuals to respond to a survey for the purpose of an art education study titled "Relations of Art Education and the Workplace." The researcher's intentions, objectives of the research, the process of the study, the importance of the topic, participants' confidentiality and rights and gratitude for participation were all expressed in the letter. The researcher's contact information was also included should the recipients have any questions or concerns. The survey consisted of 24 multiple-choice and ranking questions. The majority of the queries focused on art experiences; however, a few requested demographic information such as age, gender and ethnicity. The cover letter can be found in Appendix B and the survey in Appendix C

Research Design

This study used a cross-sectional survey in order to collect data from a selected group during a single point in time. This method provides a snap-shot of current opinions and beliefs regarding the topic (Gay, Mills & Airasian, 2009). A digital questionnaire distributed via email provided an effective means to disseminate the survey to a large group of persons and allowed for confidentiality and convenience for the participants. This study is categorized as a QUAN-Qual study due to the two-phase research process involving the quantitative data occurring first followed by the qualitative data collection, analysis interpretation (Gay, Mills & Airasian, 2009). The questionnaire was distributed to obtain information regarding relationships between art educational experiences and current occupational experiences. The data was collected, analyzed and reported based on percentages and numerations of feedback within each question or category. Although the sample size was small, the study still provides a significant compilation of descriptive information involving attitudes and patterns within the most successful business persons in Wake County. The results lend insight into the effect of art education and creative experiences and its influence on some of the most productive citizens within their industry.

Existing research was examined prior to carrying out the survey component through the review of related literature. This helped to form a framework of information around the topic and establish important definitions, trends and other factors related to art and the workplace. The review of related literature provides a thorough discussion of the definition of art education, the importance of art education, skills needed for today's workforce, the relationships between arts and the economy and important creative studies within the contextual agenda. Survey questions were directed toward art education experiences and translations of these experiences into the workplace.

Procedure

Individuals for the study were selected from the Wake County Chamber of Commerce's "2011 Book of Lists" for being an employee of one of the top performing businesses in Wake County for the 2011 fiscal year. The book classifies top-ranking businesses within a variety of categories. The researcher contacted owners and employees of the top companies within each category via email and requested participation in this study. The participants read the responded to the 24-question survey online over a three-week period. A reminder email was made prior to the survey closing. The responses were collected, organized, analyzed and interpreted.

CHAPTER 4: RESULTS

Background Information

Questions relating to demographic information were placed at the end of the survey as to not initially distract participants from the topic when beginning the questionnaire. Question 22 asked for participants to select their age category. The majority of respondents (31.6%) were between the ages of 45 and 54, 28.9% were between 25 and 34, 26.3% were between 35 and 44. Two respondents were between 55 and 64, two were 65 and older and one was between 18 and 24. The majority of participants were female (56.8%) and most respondents were Caucasian (86.8%), with three others marking African American and the remaining elected not to respond.

The first question of the survey asked “What is your primary occupation area?” All participants responded to the questions and the results have been compiled into the chart below and organized by “creative occupations” and those considered “non-creative occupations.”

Table 4: Occupations of Participants

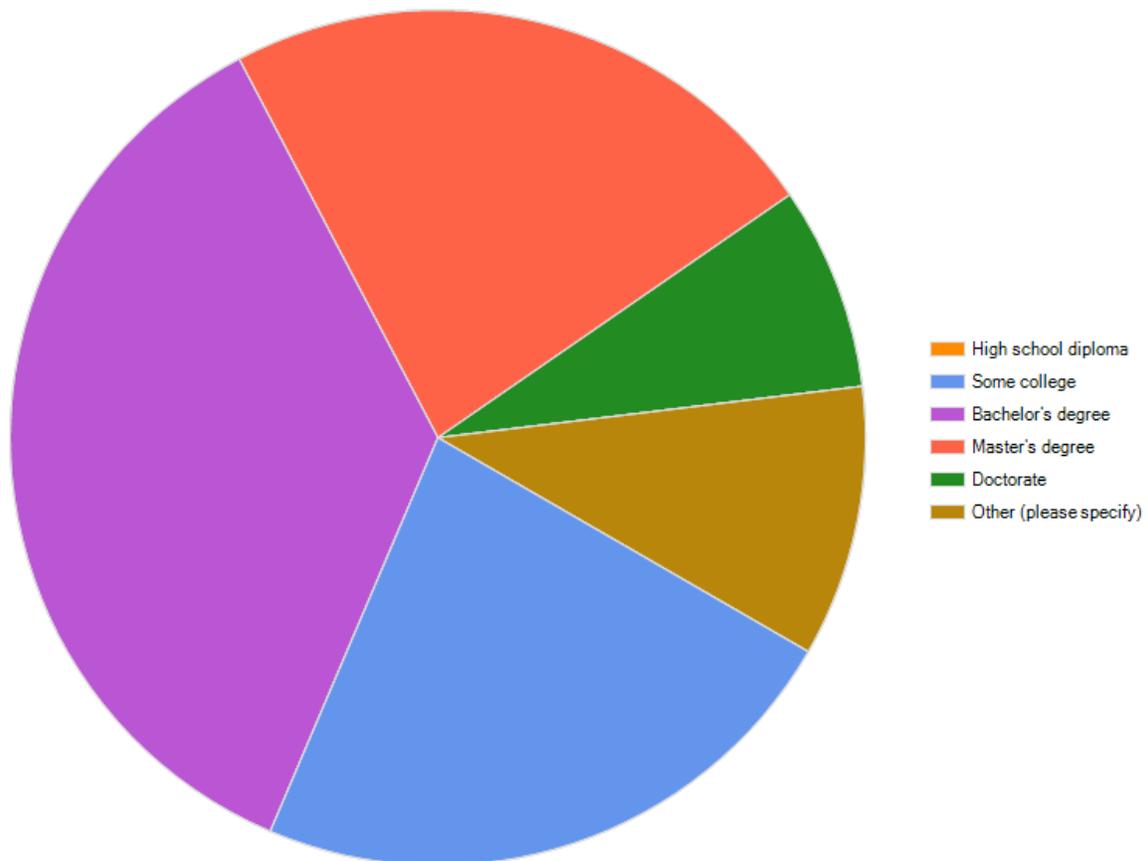
Creative Occupations	Number	Non-Creative Occupations	Number
Advertising/marketing	5	Accounting/finance	8
Fine art	1	Administration	6
Museum	1	Construction	2
		Healthcare	1
		Computer/internet	1
		Real estate	3
		Law/legal practices	7
		Sales	1
		Insurance	1
		Property management	1
		Public safety	1

Question two asked “What formal art education have you participated in within the school system? Please mark all that apply.” Two respondents skipped the question. Of the remaining participants, 26 were involved in elementary art classes, 19 took part in middle school

art classes, 10 took high school art classes, 15 were involved in undergraduate art classes and 1 took graduate art classes. Three individuals also participated in extracurricular school sponsored art activities. Based on these numbers, 70.3% of the respondents were involved in art classes in elementary school, when art is typically a required special class during the school week; 51.4% elected to take art in middle school when the course is optional and students choose to register for it or not. Only 27% chose to take art in high school, however 40.5% took undergraduate art classes.

The third question focused on the highest level of education earned by the participants. All participants responded and results have been compiled in the graph below.

Table 5: Highest Level of Education Received by Participants



“Other” levels of education responses included Juris Doctorate, associate’s degree and “law degrees.” Question 4 asked participants to elaborate on their education by listing the college or university he/she attended; all but one person answered. Responses can be seen in the table below.

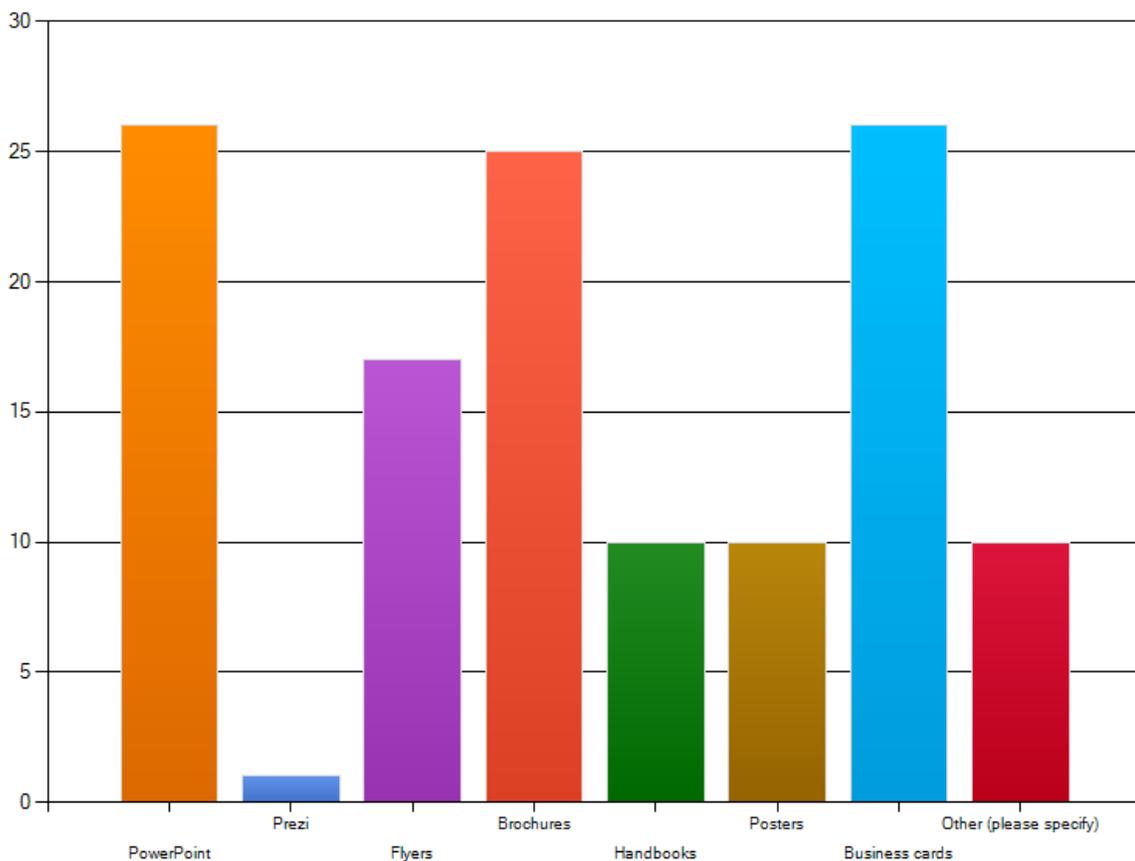
Table 6: Colleges and Universities Attended by Participants

College or University located in North Carolina	Number	College or University outside of NC	Number
North Carolina State University	6	University of Massachusetts	1
University of North Carolina Chapel Hill	5	Occidental College	1
East Carolina University	3	Dupage College	1
Appalachian State University	3	University of Virginia	1
Duke University	3	Harvard Law School	1
University of North Carolina Wilmington	2	John Hopkins University	1
Wake technical Community College	2	State University of New York	1
Salem College	1	John Robert Powers	1
Elon College	1	Bentley University	1
North Carolina Central University	1	New York University	1
Campbell University	1	Massachusetts Institute of Technology	1
Meredith College	1	George Mason University	1
University of North Carolina Greensboro	1		
NC Wesleyan	1		

Question five asked “What additional art experiences have you engaged in? Please mark all that apply.” The majority (81.6%) of respondents have visited art museums, followed by 71.1% who have visited art galleries and 55.3% who have attended art festivals. 14 people indicated they are involved in an art related hobby, and two persons have taken private art lessons. Individual responses in the “other” category included being a curator at an art gallery, being a former art gallery owner, advising artists and authors on legal protection for works and working at the North Carolina Museum of Art restaurant.

The sixth question elicited if participants used creative imagery in their current occupation such as PowerPoint presentations, business cards, brochures or displays. Thirty-one respondents answered “yes,” while the remaining eight answered “no.” Question seven asked for elaboration on the previous query if applicable, stating “what visual imagery do you use? Please mark all that apply.” The results are shown below.

Table 7: Visual Imagery Used by Participants

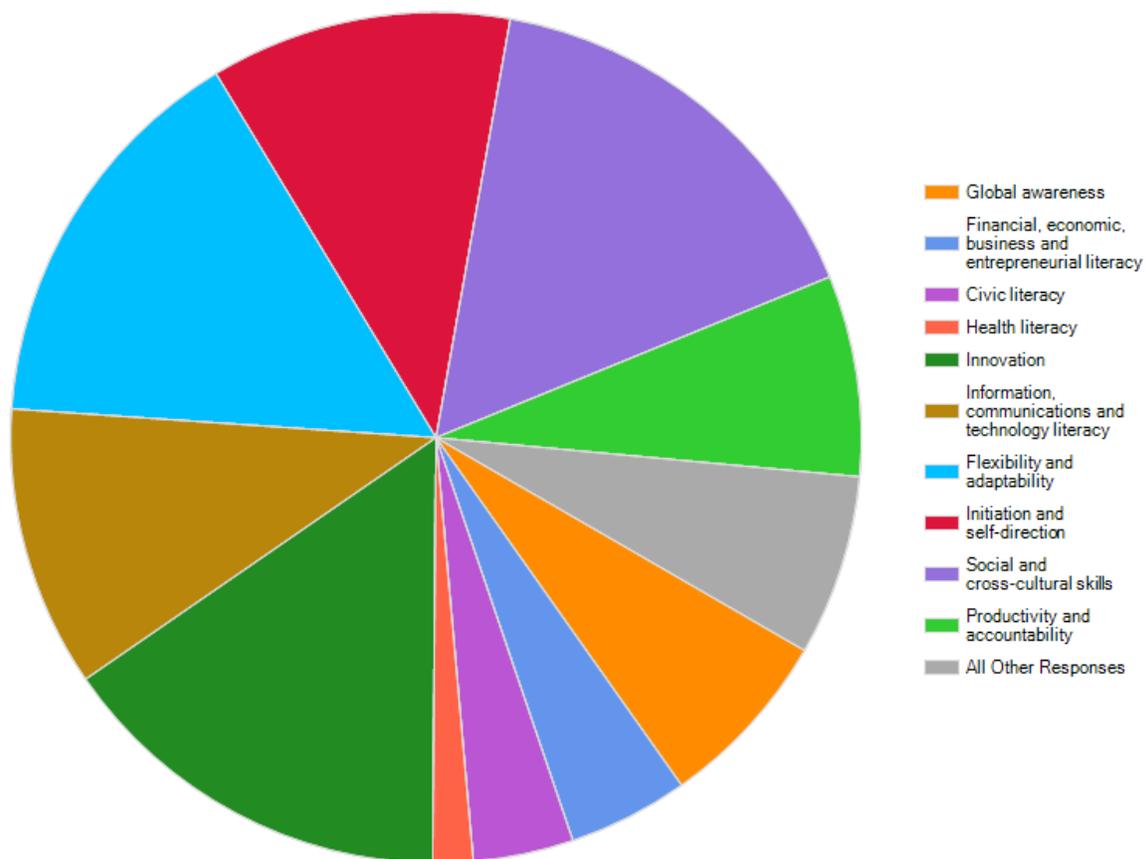


Answers from the “other” category included website/web graphics, Photoshop, advertisements, signage, building information modeling, presentation reels, corporate letterheads and using graphs and charts in written reports. Although six persons skipped this question, the visual imagery required for business is overwhelming. Out of all of the 39 total respondents, 37

indicated that they have not received any art or design training within their current occupation in question eight, while only 2 indicated they have received training.

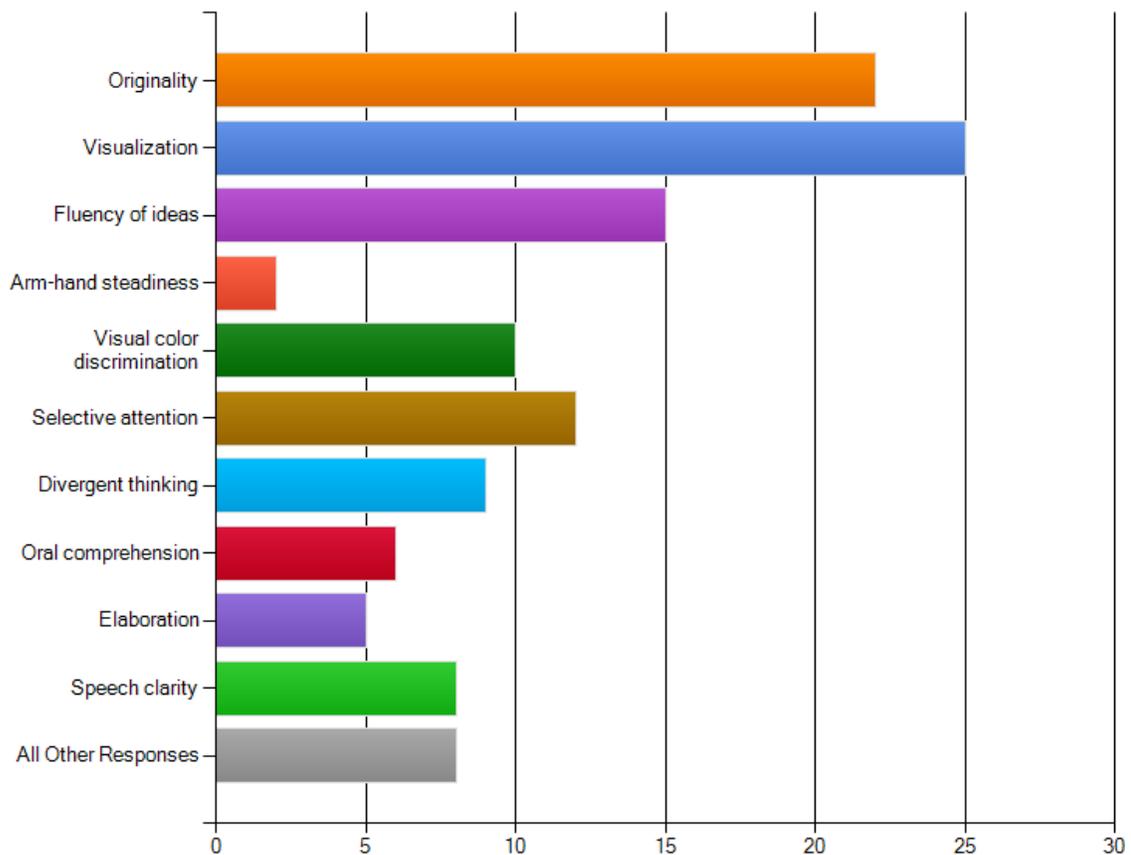
Question nine focused on 21st century skills and asked participants “Reflecting on your art education experiences, what 21st century skills do you think the art classes/lessons helped you learn? Please mark all that apply.” Over half of the respondents checked social and cross-cultural skills (53.8%), innovation (51.3%) and flexibility and adaptability (51.3%). “All other responses” was labeled “None of the above” on the survey expressing that respondents did not think art classes helped them learn any of these skills. All results can be seen in the table below.

Table 8: 21st Century Skills Participants Learned Through Art Education



Question ten and eleven related to art skills and abilities. Question ten asked “Reflecting on your visual art education experiences, what creative skills do you feel the arts have taught you in preparation for your chosen profession? Please mark all that apply.” Results were 89.2% creativity, 62.2% attention to detail, 40.5% critical thinking, 35.1% coordination, 27% judgment and decision making, 27% problem solving, 24.3% cooperation, 21.6% active listening, 21.6% time management and 18.9% self-discipline. Individual responses were “working with a team” and “making complex ideas simple, pleasant, and easy to understand.” The next question asked participants to note abilities associated with the arts that are useful in his/her current position and profession. Thirty-six persons responded and the results are demonstrated below.

Table 9: Abilities Associated with the Arts that are Useful in Participants’ Current Position and Profession



Questions 12, 13, and 14 focused on those in a position to hire employees and how creativity affects employee potential. Question 12 asked “If you are in a position to hire employees, do you consider creative skills, abilities, and dispositions (perseverance, follow through on ideas, creative problem solver) important traits for an employee?” Fifteen respondents were not in a position to hire employees. Out of the 24 who could hire employees, 22 responded that they do consider creative skills, abilities, and dispositions to be important traits for an employee. Two respondents answered “no” and were asked to explain why not in question 13; only one responded and stated “it never occurred to me.” In question 14 the group that was in a position to hire was further asked “how do you determine the potential of an employee to be a creative problem solver?” in an open-ended format. Many answers were given, such as: “through responses to interview questions,” “originality in communication during interviews,” “demonstrated experience,” “evaluating the challenges interviewee’s job presents and the solutions he/she comes up with,” “responses to role playing and hypothetical questions and situations,” “resume content,” “sample project to be reviewed during a final interview” and “hiring the candidate as a freelancer to gauge abilities in the real-life situations.” Two individuals also noted that it is difficult to determine creative problem-solving in an interview, but one respondent wrote that most “permanent hires come through our summer associate program, which gives the prospective employees as chance to tackle real projects.”

Question 15 asked “At what levels within your company/institution would you say creativity is more expected and valued? Please check all that apply.” The majority of the 36 respondents that chose to answer the question replied “across all units” (55.6%). “Mid-management” followed with 44.4%, then “upper management” with 38.9% and finally “within some units” with 22.2%. One participant marked “other” and wrote that creativity is expected and valued “everywhere.” In addition, it appears from the next question “How does management motivate and reward creativity in your company/organization?” that most receive recognition at meetings and in publications (59%). Bonuses, salary adjustments/increases and awards were

tied at 25.6% and a thoughtful individual response was given by one person: “Creativity is an underlying skill that leads to success in more measurable endeavors.” Lastly, 23.1% of participants noted that creativity is not formally motivated or rewarded.

Question 17 asked individuals to rank qualities of employees that are believed to be valued within their institution by level of importance. Ten qualities were listed and participants ranked them 1-10 based on importance. Rating averages, high and low responses are shown in the table below.

Table 10: Ranking of Qualities of Employees Based on Importance

Quality	Rating Average	Number of respondents who selected quality as most important (1)	Number of respondents who selected quality as least important (10)	Majority of rank/level of importance with quality category	Majority percentage (number of respondents)
Collaboration	5.1	8	5	1 st	20.5% (8)
Having fresh ideas	4.59	5	0	5 th	18.9% (7)
Problem Solving	4.55	8	3	5 th	21.1% (8)
Having an open mind	5.03	9	4	1 st	23.7% (9)
Following directions	4.79	7	4	Tie-1 st and 2 nd	18.4% (7)
Staying on task	5	7	1	Tie – 1 st and 9 th	18.4% (7)
Delaying personal rewards	6.08	1	7	5 th	30.6% (11)
Thinking analytically	4.65	9	3	1 st	24.3% (9)
Taking initiative	4.57	8	4	1 st	21.6% (8)
Judgment and decision making	4.05	10	3	1 st	27% (10)

It is interesting to observe that the quality ratings fall within 2.03 point of one another demonstrating that all of these qualities are deemed significant by the participants

Question 18 asked “How important is demonstrated creativity in an employee evaluation process within your organization?” The results were: 18.9% participants responded not important, 48.6% responded somewhat important, 24.3% responded important and 8.1% responded very important. Only 7 (18.4%) participants in the study had observed creativity having a negative outcome in their company, as was asked about in the next question. Thirty-one participants (81.6%) had not ever observed a negative outcome. When requested to elaborate on the situation when a negative outcome was witnessed due to creativity, a range of responses were given. One participant wrote “Creative thinking only works when you have a receptive audience. When dealing with conservative environments, the traditional path (and not necessarily a new or better way of attacking the problem) are often the best path for success.” Others noted that it had lead to the loss of a deal, closing or some type of business agreement due to the client or boss not understanding the approach or lack of clarity in the idea. And one opinion stated “Rule 1 – Boss is always right. Even when he is wrong.”

Weaknesses of the Study

The data collected provides specific information regarding the sample population. Based on participant responses it can be noted that the arts teach definitive skills that are used in a variety of industries. However all industries were not represented in the study as some potential respondents elected not to participate. This is a common disadvantage to the survey method of researching; the response rate may be small. There are many advantages to this method as well including the ease and quickness of responses and the ability for anonymity among the participants which often entices many persons to respond verses other methods. With a larger sample size more significant patterns could be established had more individuals chosen to

respond. The response rate was lower than expected; 256 surveys were distributed and only 39 surveys were completed.

Using a triangulation method and not only utilizing existing research and quantitative data, but also including a qualitative approach such as a case study or narrative component would further strengthen the results. By exploring personal and individualized experiences beyond numerical data would give insights and probe deeper into the topic for a more astute understanding of how and why the participants perceive the topics in this way.

CHAPTER 5: DISCUSSION

Response Rate

The low response rate may also be due to individual's lack of personal interest in the topic. 37 out of the 39 participants responded that they have participated in the arts through art classes or extracurricular activities. The high number of arts participants suggests that art could be important to them and therefore these individual's would be more willing to take time to complete the survey. Those who chose not to respond may feel the topic is of diminutive significance or they have had little to no experience in the arts and do not have an appreciation or personal connection with the subject.

Comparison of Data

Many connections can be made when analyzing the data provided by the research gathered. There were a variety of respondents in regards to occupations, age and colleges attended. It is interesting to note that although the majority of participants have been involved in art experiences, only seven persons work in creative job fields. This is noteworthy when discussing the data and how art experiences have benefited and impacted the participants as a whole.

Reflecting on question two highlights a vital discrepancy: there is a large disjuncture in individuals' sequence of courses in art study. 26 respondents participated in elementary art lessons, and the numbers dwindle and continue to become staggered for middle school, high school, undergraduate and graduate art classes. This discrepancy reveals an inconsistency in art study therefore affecting participants' insights and perspectives on art. Had participants and others invited to take the survey been involved with the arts regularly and followed a sequential study path in school, they may have been more passionate and aware of the value of the arts. Having limited and sporadic involvement with a subject will result in a less enriching experience and a lack of understanding of its lessons and effects.

It is apparent that regardless of the occupation, visual imagery is an essential component of the workplace. With well over half of participants using PowerPoint (26 persons), brochures (25 persons), and business cards (26 persons) in their job responsibilities, it can be established that aesthetic awareness is a much needed skill in the workplace. Only two participants received art or design training within their occupation. Visual imagery is often how businesses capture the attention of potential clients and customers, earn trust of their clients, disseminate information regarding their company's services or merchandise and communicate with a greater audience. If visual imagery is poorly prepared it could easily negatively affect the company it is representing. However strong visuals spark interest and create comfort and confidence for the client or consumer. It's significant to note that visualization was highest marked ability (69%) associated with the arts that was most useful to participants in their current position and profession as seen in question 11. There is a definite link between this skill learned through the arts and its consistent utilization in the workplace.

Question nine validates features that were discussed in the literature review: art experiences teach crucial 21st century skills. Over half of the participants marked innovation, flexibility and adaptively, and social and cross-cultural skills as skills art helped them to learn. These are also some of the most desired skills of potential employers in the current workforce. Global awareness, information, communications and technology literacy, initiation and self-direction and productivity and accountability were also indicated by numerous respondents as being taught through art. The 21st century skills that had lower percentage rates include financial, economic, business and entrepreneurial literacy, civic literacy, health literacy and leadership and responsibility. It could be suggested that art programs need to incorporate more of these skills into their curriculum to better prepare students for the workplace.

Creative skills were explored in question ten and reveal a connection between art education experiences and preparing individuals for their profession in numerous ways. Creativity was the highest marked skill (89%) that art helped to teach and that also served

participants in their daily work life. Attention to detail (62%), critical thinking (40%), coordination (35%), complex problem solving (27%), judgment and decision making (27%), cooperation (24%) and time management (22%) were also often marked. Self-discipline and active listening had the lowest marks. When compared to question 17, which asked participants to rank qualities of employees that are believed to be valued mostly by their institution, delaying personal rewards, which could be linked to self-discipline also came in last. Judgment and decision making was marked by the most respondents as the most important trait, however all of the traits appear significant, as the averages of the most important trait according to participants varied only slightly. This shows that across occupations, businesses expect well rounded employers that encompass diverse qualities.

Question 11 not only established visualization as the most frequent ability associated with the arts that is used in participants' current positions and professions, but also highlights other essential right-brain abilities used in the workplace. 61% of respondents marked originality as an art ability that is used within their job. Originality was noted as a leading necessity for future employees as seen in the literature review.

Employers in a position to hire employees established creative skills, abilities and dispositions important traits for employees. 22 out of 24 employers marked "yes" to the question, showing an overwhelming desire and need for creative skills in the workplace. Although these traits, along with creative problem-solving, are difficult to measure, employers gauge this most often through potential employers' resumes, interviews and mock projects. Therefore creative skills, associated with right brain function, are valued proficiencies in the current job market.

Through question 15 it is evident that creativity is mostly expected and valued across all units within companies, as the majority of participants observed that this is the case within their institution. By rewarding creativity companies can encourage and motivate workers to actively display these qualities. For example, 59% of respondents marked that management rewards

creativity through recognition at meetings and in publications. Bonuses, salary adjustments/increases and awards were all indicated equally by ten persons each. By recognizing creativity within the job arena, management is reinforcing the importance and contributions of creative thinking and working. With creativity being celebrated among workplaces, it has the potential to help advance individuals within their institution and lead to better occupational benefits such as job security.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

Through this research, relationships can be identified between art education and the workplace. The participant responses and connections between the collective data verify that art education does teach and reinforce 21st century skills and other creative abilities that are used in the workplace, across industries and enterprises within creative occupations and non-creative occupations. Social and cross-cultural skills, innovation, and flexibility and adaptability were among the top skills that art teaches according to over half of the participants. Initiation, self-direction, and information, communications and technology literacy were also selected by a high percentage of participants. Originality, visualization, and fluency of ideas emerged as the highest rated abilities associated with the arts that are useful in respondents' current position and profession. This is significant when noting that 32 of the 39 total participants were not in occupations that are considered creative. Those in the healthcare industry, administration, and even public safety have found art skills useful in their daily work lives. One respondent from the legal industry noted this his art experience from elementary school through undergraduate art classes have taught him skills he uses when practicing law: creativity, attention to detail, critical thinking, judgment and decision making and complex problem solving.

When reflecting on the use of visual imagery, 80% of respondents used visual elements in their line of work, however only 5% noted that they have received training within their profession. This gap in percentages suggests that art classes and visual guidance are much needed in order to prepare future professions, as they will be unlikely to receive any formal aid within their job. And since information, communications and technology literacy were rated as the top required skill set for today's workforce, and an essential 21st skill that art teaches, it is imperative that students are engaged in quality art programs that will reinforce these capabilities.

From the results of the research study it is also further evident that employers are seeking innovative and creative workers. The survey further confirms the information relayed in the review of related literature: creative skills, abilities and dispositions are essential traits for an employee. An astounding 92% of participants that were in a position to hire employees stated that this is case for them. Over half of respondents also noted that creativity is valued throughout their workplace, across all units.

Although art teaches aesthetic content and knowledge, it additionally instills skills and abilities that cannot easily be measured, but are vital to today's competitive workforce. In order for students to be productive members of the community and lead healthy, successful lives it is imperative that the school system equip them with the tools they will need for academic and future achievement. These tools begin in the art classroom, by educating students on how to problem solve effectively, understand other cultures, be flexible, be original, be innovative and most of all better understand and communicate with the world around them.

Beneficial future research may include further observations into how these creative skills and abilities are applied within individuals' jobs. Findings from further research would lead to insights into how to tailor the art education agenda to better meet the needs of all industries, not just those considered creative. Qualities listed in question 17, for example, prove to all be important for employees to exemplify and it would be helpful to apprehend how they are applied and to what degree. The more that is understood about problems and projects students will have to tackle within their future careers the more can be done to prepare them completely. For example, knowing how employers gauge creative problem solving during an interview as seen in survey question 14, gives students the edge they will need to be outstanding in the interview, earn that job and be successful in their career and life.

In order to raise the response rate for future studies, an incentive for participation would be helpful. Monetary inducements, compensation or reimbursement for involvement would directly benefit respondents and more individuals would choose to participate.

As much as this study demonstrates the advantages of art experiences it seems the majority of the public and policy makers do not understand the connection between art skills and the workplace. It is essential to spread the results and have others realize the positive effects of art learning and how they translate into the job market. Teachers also need to be assisted and better educated on skills and habits desired in the current and future workforce. This information should be distributed and discussed at art and education conferences and through professional development opportunities locally and at the state level. The results could also be highlighted in established art related websites and publications, such as the North Carolina Art Education Association, the National Art Education Association, the United Arts Council and the North Carolina Department of Cultural Resources. A “grass-roots” effect beginning with well-informed teachers is the first step in realizing the results of this study and initiating future action.

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APPENDIX A: UMCIRB 11-0553



EAST CAROLINA UNIVERSITY

University & Medical Center Institutional Review Board
Office for Human Research Integrity
IL-09 Brody Medical Sciences Building • 600 Moye Boulevard • Greenville, NC 27834
Office 252-744-2914 • Fax 252-744-2284 • www.ecu.edu/irb

Date: October 4, 2011

Principal Investigator: Jamie Lynn Moore, Graduate Student
Dept./Ctr./Institute: School of Art and Design
Mailstop or Address: 4613 Landover Crest Drive, Raleigh, NC 27616

RE: Exempt Certification
UMCIRB# 11-0553
Funding Source: Unfunded

Title: How have individuals' art education influenced their selection and preparation for their chosen profession and what relationships can be made between art education and the workplace?

Dear Jamie:

On 9/28/2011, the University & Medical Center Institutional Review Board (UMCIRB) determined that your research meets ECU requirements and federal exemption criterion #2 which includes research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects and any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

It is your responsibility to ensure that this research is conducted in the manner reported in your Internal Processing Form and Protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB Office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification Request at least 30 days before the end of the five year period.

Sincerely,

Chairperson, University & Medical Center Institutional Review Board *GH*

Attachments

Cc: Cynthia Bickley-Green

APPENDIX B: PARTICIPANT COVER LETTER

Dear Valued Wake County Professional,

I am an art teacher in Wake County and am currently working on my Masters degree in Art Education at East Carolina University. I am working on my thesis that explores how art education may influence the selection and preparation for professionals chosen career and relationships that can be made between art education and the workplace.

Several questions will be explored and analyzed in this study: 1) what skills and abilities are taught in art education; 2) what skills and abilities are needed and desired in occupations; 3) how well does art education prepare future professionals; 4) does art education help prepare students with 21st century skills.

As a professional in Wake County, your participation in this study will be greatly appreciated and significant in this study. However, your participation is completely voluntary and anonymous. All information will be kept completely confidential and will be used for the sole purposes of this study only. The study will be conducted via online survey through Survey Monkey and you may choose to not finish the survey at any time. If you have any questions or concerns, please feel free to contact me at mooreja10@students.ecu.edu.

There are 25 multiple-choice and ranking questions in this survey. Please click on the link to access the survey:

<https://www.surveymonkey.com/s/arteducationandtheworkplace>

Thank you so much for your time!

Sincerely,

Jamie Lynn Moore

MAEd in Art Education Student

East Carolina University

Visual Arts Educator

APPENDIX C: PARTICIPANT SURVEY

1. What is your primary occupation area?
 - Accounting/finance
 - Administration/clerical
 - Advertising/marketing
 - Agriculture
 - Construction
 - Consulting
 - Engineering
 - Fine Art
 - Healthcare
 - Education
 - Manufacturing
 - Other_____

2. What formal art education have you participated in within the school system? Please mark all that apply.
 - Elementary school art classes
 - Middle school art classes
 - High school art classes
 - Undergraduate art classes
 - Graduate art classes
 - Extracurricular school sponsored art activities (such as art club, National Art Honor Society, etc.)

3. What is the highest level of education you have received?
 - High school diploma
 - Some college
 - Bachelor's degree
 - Master's degree
 - Doctorate
 - Other _____

4. If applicable, what college or university did you attend?

5. What additional art experiences have you engaged in? Please mark all that apply.
 - Private art lessons
 - Visiting art galleries
 - Visiting art museums
 - Art related hobby
 - Attending art festival
 - Other_____

6. In your current occupation, do you use creative visual imagery? This includes but is not limited to PowerPoint presentations, business cards, brochures or displays.
 - Yes

No

7. If applicable what visual imagery do you use? Please mark all that apply.

PowerPoint
Prezi
Flyers
Brochures
Handbooks
Posters
Business cards
Other _____

8. Have you received any art or design training within your occupation? An example of this is a design workshop offered through your place of business.

Yes
No

9. If applicable, please describe the design training and elaborate on what you learned.

9. Reflecting on your art education experiences, what 21st century skills do you think the art classes/lessons helped you learn? Please mark all that apply.

Global awareness
Financial, economic, business and entrepreneurial literacy
Civic literacy
Health literacy
Innovation
Information, communications and technology literacy
Flexibility and adaptability
Initiation and self-direction
Social and cross-cultural skills
Productivity and accountability
Leadership and responsibility
None of the above

10. Reflecting on your visual art education experiences, what creative skills do you feel the arts have taught you in preparation for your profession? Please mark all that apply.

Creativity (the effective use of the imagination or original ideas)
Self-discipline
Cooperation
Attention to detail
Active listening
Critical thinking
Coordination
Judgment and decision making
Complex problem solving

Time management
Other_____

11. Reflecting on your visual art education, what abilities associated with the arts are useful to you in your current position and profession? Please mark all that apply.

Originality
Visualization
Fluency of ideas
Arm-hand steadiness
Visual Color Discrimination
Selective attention
Divergent thinking
Oral comprehension
Elaboration
Speech clarity
Inductive reasoning
Other_____

12. If you are in a position to hire employees, do you consider creative skills, abilities and dispositions (perseverance, follow through on ideas, creative problem solver) are important traits for an employee?

Yes
No
I am not in a position to hire employees

13. If no to #12, explain briefly why not.

14. If applicable, how do you determine the potential of an employee to be a creative problem solver?

15. At what levels within your company/institution would you say creativity is more expected and valued? Please check all that apply.

Upper management
Mid management
Across units
Within some units
Other_____

16. How does management motivate and reward creativity in your company/organization? Please mark all that apply

Recognition at meetings, in publications, etc.
Bonuses
Salary adjustments/increases
Awards

Other _____
Creativity is not motivated or rewarded

17. Please rank the following qualities of employees that you believe your institution values in order of importance (1-10/1 is the highest).

Collaboration
Having fresh ideas
Problem solving
Having an open mind
Following directions
Staying on task
Delaying personal rewards
Thinking analytically
Taking initiative
Judgment and decision making

18. How important is demonstrated creativity in an employee evaluation process?

Not important
Somewhat important
Important
Very Important

19. Have you ever observed creativity to have a negative outcome in your company/organization?

Yes
No

20. If yes, please briefly describe.

21. Please provide any additional comments related to the topic of interest as described in the questions above.

22. Please select your age category.

18-24
25-34
35-44
45-54
55-64
65 or older

23. Please select your gender.

Male
Female

24. Please check all that identify your ethnic background.

Caucasian
Native American
African American
Asian
Other _____
I choose not to respond