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By

Susan E. Jackson

December, 2010

THE CREATIVE VISUAL ARTS EXPERIENCE: A PHENOMENOLOGY OF ARTISTIC ADOLESCENTS AND THEIR TEACHERS

A Dissertation Presented to the Faculty of the College of Education University of Houston

In Partial Fulfillment
Of the Requirements for the Degree

Doctor of Philosophy

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Abstract

It is necessary to understand creativity in order to support it in educational settings. This is complicated by the fact that there are many theories and definitions of creativity. Even when the support of creativity in schools is overt, it is often not defined or the definition is not unitary. In this study, a program in the visual arts was examined where creativity is valued, but is not explicitly defined. The goals of this study were to explore students' and teachers' creative experiences in order to identify themes that together define creativity in this context and to provide evidence supporting the choice of instruments that would be valid for measuring creativity and evaluating the program and students' artwork.

Through individual interviews, freshman and senior students and their teachers shared their life experiences that led to their participation in the visual arts program, as well as their experiences during the program. They also explored their understanding of the elements of creativity that are supported by creativity theory.

Qualitative analyses of the responses, by coding responses into categories and comparing them by using matrices, indicated that all of the teachers considered themselves to be creative, but fewer than half of the students did. Many students were not sure if they were creative and four said they were not. Their descriptions of creativity showed an emphasis on creative thinking and idea development, so there was some support of the appropriateness of measures of creative thinking with this group.

However, there was some confusion and disagreement about the difference between creativity and artistic ability. There was also disagreement about the definition of originality. This made finding a common understanding of creativity for the group problematic. The results suggest that further discussion among the teachers and students is necessary in order to broaden their understanding of creativity and clarify its relation to originality and artistic ability. It may then be possible for the students and teachers to develop an explicit definition of creativity for this program that will support the choice of appropriate measures of creativity.

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CHAPTER I

Introduction

Each year, students across the country compete for coveted places in specialized public schools, often referred to as "magnet" schools, because they draw students from across school zones. These programs represent what seem to be the optimal environments to develop their particular talents. These magnet schools are looking for the students who will be the most likely to succeed at a professional level in a variety of talent domains. Competition is tough and rigorous and admission is restricted to a limited number of the lucky few. For many of the magnet schools with an emphasis on performing and visual arts, there is the formal recognition that creativity is an essential part of the production of art. This is also a common perception of the American society within which these schools exist, perhaps more so than the recognition of the importance of creativity and creative thinking in other academic pursuits. Assuming that these schools are successful at supporting the development of creative and productive professionals, one might wonder what factors are most important in this development and whether or not these factors can be used to enhance the performance and/or visual arts programs at high schools that are not magnet schools. This leads to the question of whether these factors might be important in the development of creativity in other talent domains.

Researchers have long recognized the importance of supporting creativity in education. Melby (1952) made an early plea for creative freedom in all domains, not only the arts. He felt that if freedom (particularly freedom of decision) were not found in the core classes, then it would not be found in music class. He believed that teachers and

students needed to be free to be themselves, which meant that they were allowed to be creative and dynamic. He felt that it was imperative for schools to give students freedom, especially if freedom in other parts of society was being attacked. About the same time, Guilford (1958) pondered the possible transfer of training practices in the arts to the development of creativity in other domains. Creative techniques were starting to be used at that time by corporations and government agencies, specifically a new technique called brainstorming, designed by Alex Osborn (Osborn, 1963). The atmosphere created by these sessions showed promising results in terms of productivity. Guilford hoped that the field of art education could contribute to the study of creative performance. He believed that teachers' responsibilities went beyond their art classes to supporting schoolwide environments that fostered the expectation of creativity from all students and allowed them the freedom to be genuinely creative.

Another area that has placed particular emphasis on creativity is business and industry. Creativity in the workplace continues to be emphasized in corporations around the world and is a topic of many research studies (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Puccio, Talbot, & Joniak, 2000; McCoy, 2005). There are also possible applications of creativity to the reduction of violence and conflict resolution, as well as in dealing with people experiencing grief or trauma or struggling with alcoholism (Plucker, Beghetto, & Dow, 2004). This expectation of creative productivity, along with the understanding and application of creativity in multiple professions, requires support by the educators who are preparing students for those workplaces.

Aims of Study

The purpose of this study was to examine how creativity is understood and can be supported in schools. In order to determine how creativity is being operationalized in schools, it is important to find schools that specifically support their students' creativity. While the nature of creative experiences could be examined at any school, school districts do not necessarily address creativity explicitly, except perhaps in defining goals for their gifted programs. Fine arts magnet schools are particularly relevant to the study of creativity, because they often include the support and development of creativity of their students in their written philosophies. Attention to creativity and to creative development tends to be explicit in such educational settings, and faculty and students alike recognize creativity as an important feature of their schools' curriculum and instruction.

Even when the support of creativity is overt, creativity itself is usually not defined in educational settings (Treffinger, 1986), or, if it is, the definition is not unitary (Hunsaker & Callahan, 1995). It is important, therefore, to study successful programs in the arts, where creativity is valued and may be more likely to be defined. When the definition of creativity is determined for a particular set of people (teachers and students), this understanding of creativity logically leads to a more substantive evaluation of students' creativity and the effectiveness of the program in supporting it. In particular, program refers to the curriculum, opportunities for authentic experiences relevant to the domain, and physical attributes of a school setting that actually support creativity and creative productivity as it has been defined by that set of people.

The initial proposal for this study was to examine creativity at a fine arts magnet school by using quantitative methods and existing creativity instruments to measure

students' creative thinking and the creativity of students' products. Qualitative methods of observation and interviews were to be used to develop an understanding of the environmental aspects of the program that supported the students' creativity and the students' and teachers' ideas regarding the definition of creativity. However, it was not clear whether or not the instruments that were chosen to measure creativity were valid for this program or the people involved in it. It was, therefore, much more important for the investigator to start with the ideas and words of the students and teachers in the program within their natural setting (the school).

The underlying purpose of the original proposal and the current study was to provide information that would lead to a better understanding of the creative experiences of the students and the teachers, both those that led them to the program and those occurring in the program, so that the policy makers of an already superior program could gain insight into how well it serves not only the creative needs of the students as a group, but the individual students. The experiences of students at different stages of the program, as well as those of their teachers, all contributed to the "social reality" (Lincoln & Guba, 1985, p. 236) of the program. Before quantitative measures could be used, more information regarding the histories and nature of this group of people was required. While the students and teachers shared a common interest in a particular field, it was important to gain insight into the commonalities and differences in their interests and values within and outside of that field. An understanding of what the respondents valued in their creative experiences was believed by the investigator to be essential in developing an operational definition of creativity for this group and, potentially, to the

success of the program in supporting it. Hence, the change was made to a focus on the qualitative aspect of the original study.

According to Lincoln and Guba (1985), research takes place in a natural setting and the people in that setting and the investigator are the instruments. Theory is supposed to emerge from the data, as existing theory may not fit the particular context that is being examined (Lincoln & Guba, 1985). The investigator seeks a more global view of a situation, with the words of the people involved in the situation. It is important to understand actions within many contexts, including physical, historical, cultural, and individual (Stake, 2010). Analysis is also primarily accomplished with words, using them to find patterns and themes by which to compare experiences (Miles & Huberman, 1994). The interpretation of the patterns and themes by the investigator are then verified by the respondents, who have a better understanding of their influence (Lincoln & Guba, 1985). While many interpretations are possible, existing theory does provide a way to assist in determining which interpretation(s) is most "compelling" (Miles & Huberman, 1994, p. 7). While setting social policy is not necessarily a goal of qualitative researchers, providing information and insights that will assist those who make policies, and therefore assist those with whom the researcher has been working, is often desired (Stake, 2010).

Personal Context

According to Seidman (2006), it is important for qualitative investigators to share how they became interested in their particular topics. In doing so, the investigator acknowledges that her own experiences and interests have an impact on the way she performs the interview process. She also reveals the biases she may have in interpreting

what she observes (Lincoln & Guba, 1985). My interest in creativity specifically with students of the arts comes from many years of personal participation in the arts. My earliest involvement was with music. I took piano lessons for eleven years and was accomplished enough to contemplate pursuing music as a minor in college. However, theatre arts was my true area of interest and, though I was involved in classroom productions in elementary school, I made a commitment to it in eighth grade, when I began almost 15 years in theatre. I acted and directed through summer programs and courses in high school, leading to a double major in Dramatic Arts and Psychology as an undergraduate. That is where the interest in the connection between the arts and psychology began for me. I acted, directed, stage-managed, wrote plays, and designed lighting and costumes while in college. This led to brief professional positions running a spotlight for an amusement park and stage-managing for a small acting company.

My connection with the visual arts was not quite so obvious, but, upon reflection, still important in my path to this study. As a child, I wrote stories and poems, often crafting them for hours in my room. For a long time, I thought that everyone did that. Sometimes, I would illustrate my stories, but my talent did not seem to lie in that direction and while I shared some of my stories with others, I was reluctant to share those illustrations. Still, I could copy things competently and often used well-known comic strip characters to brighten up activity posters for school clubs. Both of my brothers had some skill in visual arts, one with drawing, which he later channeled into drafting, and one with photography. I believe that another important influence was my mother's involvement as a volunteer with a Native American arts association. Through her, I became familiar with the many mediums of expression in both Southwestern and

Northwestern Native American art. I was fortunate to know some of the artists, as well as their work. In college, I loved doing set and costume design, but I gained a respect for those who do have talent in the visual arts as I struggled to render my own ideas.

My interest in this particular high school comes from two directions. My daughter, who is gifted academically as well as in dance, attended the ballet academy tied to our city's professional ballet company for eight years. It was there that I realized, through conversations with parents and dancers, that many of her peers, all accomplished dancers, were also exemplary students academically. Some of her peers, when they reached high school, had to either choose between the ballet academy and the fine arts high school that is the topic of this study, or they had to struggle with trying to be involved in both. These experiences planted the first seed of my interest in studying young people in the arts.

As a graduate student working on a master's and then a doctoral degree, I became involved with the Urban Talent Research Institute (UTRI) at the University of Houston, which conducted many research studies with the *Visual Arts* Department of the fine arts high school. For several years, UTRI also assisted with the administration and scoring of the *Torrance Test of Creativity Thinking*, which was, and continues to be, part of the *Visual Arts Program*'s audition process. It was in this way that I became more familiar with the program. It was with an inspiring course on creativity that I encountered the many theories of creativity, realized the problems with defining and understanding creativity, and developed the framework of the original proposal for this study.

CHAPTER II

Theoretical Framework

In order to apply and support creativity in education, one must first know what creativity is. Theorists and researchers in creativity commonly recognize that there are difficulties in finding a clear definition of creativity that can be used to develop educational practices. Plucker, Beghetto, and Dow (2004) performed a content analysis of thirty peer-reviewed articles from 1996 to 2002 in education, psychology, and business journals, in an attempt to determine how the word "creativity" was used. They also looked at sixty articles from the two major creativity journals, Creativity Research Journal and Journal of Creative Behavior, from 1998 to 2002. While 38% of the ninety articles provided explicit definitions of creativity, 41% provided an implicit definition, and a surprising 21% did not provide any definition at all. For those that did, the types of definitions ranged from "unique," "artistic," "psychometric," "usefulness," and "stakeholder defined," to "accessible," "divergent thinking," and "problem solving." The most common of the explicit definitions were uniqueness and usefulness. The most common of the implicit definitions were uniqueness and divergent thinking. According to the authors, these findings indicate that it is most likely that educators and researchers are talking about very different things when using the word "creativity," or are talking about different perspectives of creativity. Therefore, the conclusions that they make regarding creativity may also be very different.

The theories of creativity that undergird these definitions are as varied; from psychoanalytic, where there is some disagreement about whether creativity occurs in the unconscious or preconscious mind, behavioral, where environment shapes all behavior and creative behavior is explained by stimulus-response, to humanist, where a person

who is creative is also self-actualized (Davis, 1999). Cognitive theories view creativity under the same lens as other cognitive processes and systems theories incorporate cognitive processes, personality traits, and interactions with specific domains and environments in describing creativity (Davis, 1999).

Feldman (1994), who took a more developmental view of creativity, suggested that a creative person transforms his or her thinking away from the stable knowledge states more commonly experienced by people and described in Piaget's developmental theory. This transformation would lead to both internal change of the person and external change in the domain of interest. Csikszentmihalyi (1996) discussed two types of creativity, small "c" creativity and capital "C" Creativity. A person with creativity has perceptions of the world that are original, unique, and insightful, but he or she does not have accomplishments that are recognized on an historical level. That person is "personally creative" (Csikszentmihalyi, 1996, p. 25). A person with Creativity has changed his or her culture in some way, so that his or her creativity is recognized by the members of society. While this person's accomplishments are renowned, he or she may not be considered to be brilliant. For Csikszentmihalyi, talent is an innate ability and people without evident talent can achieve creative results.

The idea of personal creativity was also considered by Runco (2003a). He felt that a person may not have produced something recognized as being creative, but could do so if given the opportunity and the understanding that original thinking is valuable. Runco suggested that, in studying and evaluating creativity, too much emphasis is put on the creative product when what he calls the "intrapersonal" aspects are more important. Without the characteristics of the person and his or her creative process, the creative

product would not exist. The differences between an eminent person and one who is not lie more in his or her decision-making and valuing of originality, than in cognitive skills (Runco, 2003a).

According to Gardner (1999), creativity is different from intelligence, even though both involve solving problems. It is generally agreed that a base level of intelligence is necessary for creativity, but there is a threshold above which there is no longer a relation between intelligence and creativity (Getzels & Jackson, 1962; Davis, 1999) and below which a person cannot be creative (Runco, 2007). Though the researchers in the later study had issues with the measures and procedures used in the earlier study, Getzels and Jackson (1962) and Wallach and Kogan (1965) documented results that supported the idea that creativity is an ability that is very different from general intelligence. Getzels and Jackson (1962) studied 449 students in 6th through 12th grades using IQ scores (from the Binet, Henmon-Nelson, or Wechsler Intelligence Scale for Children) that were provided by the schools and five creativity measures (word association, uses for things, hidden shapes, fables, and making up mathematical problems). There was little relation between the IQ and creativity scores, but the high creative and high IQ students had similar scores on the standardized achievement test used by the schools. The researchers felt that this supported the idea that a certain amount of intelligence is needed for creativity. The characteristics that distinguished the creative students from the students with high IQ were having playfulness with concepts, expressing things in a humorous way, and having an interest in self-expression over communicating with others.

Wallach and Kogan (1965) worked with 151 fifth grade students using several instruments that they developed based on reports by artists and scientists. They focused on producing associations and looking for the number of responses and whether or not a response was unique. The tasks included naming things that were the same class concept, describing uses for an object, and describing similarities between objects. Visual assessments included finding patterns of meaning in abstract designs and using a line to create meaning. The researchers did use scholastic achievement in their definition of intelligence, since scores on intelligence and achievement tests were often highly correlated. They chose the Wechsler Intelligence Scale for Children, School and College Ability Test, and Sequential Tests of Educational Progress. As stated previously, the results supported a distinction between creativity and intelligence. The researchers also developed a rating scale of potential behaviors that could be observed in schools. After observing students in four categories (highly creative and highly intelligent, highly creative and low intelligence, low creativity and highly intelligent, low creativity and low intelligence), it was evident that differences in creativity did not contribute to differences in behavior for boys in this group. However, for girls, differences in creativity and intelligence and their interaction were important in terms of behavior. Girls who were highly creative and highly intelligent were likely to have disruptive behavior, especially if the teacher preferred convergent modes of thinking.

Much of the research on creativity has focused on defining and measuring various aspects of creativity. There is general agreement on these elements, though the terminology may differ from study to study. These elements include person, process, product, and press ("the four P's") (Davis, 1999). Rogers (1999) used the term presage,

rather than person, and included personal dispositions, intellectual abilities, interests, personality traits, and even physical and perceptual inclinations in this element. She also used the term context, rather than press. Plucker et al., (2004) referred to aptitudes, rather than person, and environment, rather than press or context. Selby, Shaw, & Houtz (2005) examined creative "style," defining it as the different approaches that people take to problems as they encounter them in the environment.

Kozbelt, Beghetto, & Runco (2010) have recently suggested that Simonton and Runco have contributed ideas for adding two more P's to creativity – persuasion and potential. According to Simonton (1990), persuasion means that a creative person has to be very persuasive, in order to be recognized by his or her field or change the way others think. Runco (2003a, 2003b) assumes that everyone has creative potential, and that this should be considered in research on creativity in schools, especially when studying children as they are developing talents, knowledge, and skills and their creativity may not yet be recognized. For Runco, it follows that, since all children have creative potential, opportunities should be provided in education for children to express themselves creatively.

These and other scholars would concur that it is now important that researchers look at all of these elements and their interactions when studying creativity (Woodman & Schoenfeldt, 1990). Almost thirty years ago, Amabile (1983) emphasized the necessity of developing a social psychology of creativity and recognizing the importance of social and environmental factors as they interact with personality characteristics and cognitive abilities. In fact, Plucker et al. (2004) have proposed that a more unified definition may be that creativity is an interaction among aptitude, process, and environment "by which

an individual or group produces a perceptible product that is both novel and useful as defined within a social context" (p. 90).

The Elements of Creativity

In order to evaluate the effectiveness of an educational arts program in supporting the creative productivity of its students, the researcher originally sought out a model for research that would address the four elements of creativity and their interactions. The paradigm for creativity research advocated by Rogers (1999) was to be used as a guide for evaluating the characteristics and interactions of these elements. This paradigm emphasized the necessity of a research design that was interactive, meaning that it was neither quantitative nor qualitative but combined both. In accepting the elements of person, process, product, and press and their interactions as essential to defining creativity in context, it was also important to define how each of the four P's was understood across domains.

Person

The characteristics of a creative person include personality traits, such as motivation, cognitive abilities, such as information processing strategies, and biographical traits or experiences (Davis, 1999). Studies of creative people have most often used self-report or observational checklists (Rogers, 1999). The lists of personality traits of creative people are long and varied, but Davis (1999) recognized agreement among multiple studies that creative people are aware of their own creativeness, have a high degree of energy, are original in their thinking, have a good imagination, are very curious, have a good sense of humor, and are not afraid to take risks. In her study of eighty-nine men who graduated from the California Institute of

Technology in 1943, Rogers (1998) observed that many of the men took both physical and intellectual risks in different parts of their lives, not just in their careers. Feldman (1980) included perseverance and a mastery of the knowledge in a domain as essential to creativity.

In an interview with Shaughnessy (1998), E. Paul Torrance pointed out that creative people are willing to take on difficult projects and have a tolerance for mistakes. He would agree that inner motivation is also important to having a high level of creative thought (Elder & Paul, 2007). He had observed that, as creative people got older, being able to enjoy one's work and be comfortable with being different was more important than academic achievement or creative ability. Torrance did acknowledge that there are some personality characteristics that could stifle creativity. These included negativism, resistance, and fear. According to Selby et al. (2005), the way these characteristics might inhibit or promote creativity may depend on the environment.

Biographical experiences, including one's history of creative activities and particular life experiences, such as participation in theatre or having an imaginary friend, are important in the development of creative people (Davis, 1999). In the study previously mentioned by Rogers (1998), a majority of the men had what she called catalyzing experiences that might have helped them in becoming creatively productive. These events included having a stable family base, specific events in history, such as World War II or the Korean War, or unique events due to travel, such as visiting Russia with People to People or having the opportunity to visit with local chiefs on Fiji.

At some point, the abilities and potential of a creative young person need to be recognized by an adult in field of the domain of interest (Csikszentmihalyi, 1996). This

person becomes a mentor, providing knowledge, encouragement, guidance, resources, and validation of the young person's identity within the domain.

Process

A person's approach to solving problems is very much a central theme in the creative process. According to Torrance, some of the primary abilities of a creative person are the ability to find problems, look at them in a variety of ways, and come up with many possible solutions (Shaughnessy, 1998). Flexibility, the ability to elaborate, and the ability to produce original ideas are also important. A creative person is aware of his/her emotions and is able to use them beneficially.

Davis (1999) describes the most traditional model of the creative process developed by Wallas in 1926. This very useful model has four steps that are not locked into a particular order. The first step is preparation, or exploring the situation to clarify the problem, looking for what is required for a good solution, considering possible undesirable solutions, and gathering data and materials. The second step is incubation, which is a time of preconscious or unconscious activity, where the problem is not consciously focused on, but is being worked on, even while work is done on other problems. Illumination is the third step, which represents the "aha" moment when a change in perception or combination of ideas lead to a solution. Excitement and positive emotions accompany this step. The fourth step is verification, when the solution is verified as appropriate or not.

Treffinger (Treffinger, Isaksen, & Firestien, 1983) described creative learning in the Creative Learning model as having three levels, with several cognitive and affective factors at each level. The first level, divergent functions, represented developing techniques as the basic foundation of creative learning. These were similar to Torrance's ideas, with cognitive factors of fluency, flexibility, originality, elaboration, and cognition and memory. The affective factors included curiosity, risk taking, openness to experience and tolerance for ambiguity, among others. The second level, complex thinking and feeling processes, dealt cognitive skills such as analysis, synthesis, and research skills as well as development of awareness and values, fantasy and imagery. The third level, involvement in real challenges, involved independent inquiry, product development, and movement toward self-actualization. Treffinger, Isaksen, and Firestien (1983) recognized that educators usually focus narrowly on the first level of creative learning and sometimes the second level, with an emphasis on the cognitive factors.

Csikszentmihalyi (1996) has found that the presence or absence of other people in the environment can be important for creative people at different points in the creative process. Some people need lots of collaboration and activity with others in the initial stages of understanding a problem, with more alone time for working out the details. Other people may create in a completely different manner.

Product

The creative product is, of course, the most visible element of creativity.

According to Plucker et al. (2004), the most prevalent characteristics found in definitions of creativity are novelty and usefulness. Davis (1999, p. 46) found that many theorists agree, using words or phrases such as "original idea," "valuable," "innovation," "benefit," and "appropriate." A creative product is valid for the situation it was created for, but should also be fresh, unusual, or clever (Davis, 1999). According to Csikszentmihalyi (1996), novelty is the most important aspect of a product to be

recognized by the people in a particular field and admitted to that culture, though chance and perseverance play a big part as well.

For real products to be judged as creative, these characteristics must be defined according to the postulates and premises of the domain or discipline in which the product is being created. Amabile's (1983) definition of creativity included the provision that appropriate observers who are familiar with a particular domain determine the quality of a creative product or response. Creativity is something that people can recognize and can agree on, whether it is specifically defined or not. She also assumed that people can recognize degrees of creativity and whether one product is more creative than another.

Press

Environmental factors are also important to the development of creativity. They are not usually studied in isolation but are tied to each of the other elements (Davis, 1999). Amabile (1983) recognized the lack of a social psychological perspective in research on creativity, though the importance of social and environmental factors on the creativity of people who were eminent in their fields was evident in many phenomenological studies, both in terms of supporting and interrupting creativity. Broad factors that are important include education, cultural and social factors, family, and early background (Runco, Nemiro, & Walberg, 1998). Other factors include specific environmental ones that may seem insignificant, such as lighting, access to food or drink, or the presence of distractions (Amabile, 1983).

For creativity to develop, it is important that people have access to their field of interest. There are multiple ways that one can have access to one's field of interest, including family, where one lives, mentors, or peers in one's profession. It is also

important for creativity to be recognized by others, particularly one's peers in the domain of interest (Csikszentmihalyi, 1996). The domain is the knowledge, procedures, and rules of a society and is very important to capital "C" Creativity. The field refers to the people in a domain who decide what new idea or product should be admitted to a domain (Csikszentmihalyi, 1996). New ideas or products can be admitted to a domain or can transform a domain into a new one. The qualities of the field are very important concerning whether or not they support and promote new, unique ideas and products, and if they are very selective in what is considered to be new, or broader in their definition. Gardner (1999) agreed that people create novel products or ideas within a domain and have to be accepted by other people in one or more cultural settings. In order to be creative, a person's creative product or work should change the domain or the person could develop a new domain or field if the ideas are not accepted by the domain or field.

Interactions

While much of the existing research on creativity has focused on the individual elements of creativity, many of the studies examining creativity in the workplace considered the interactions between two or more of the elements. Some of these findings have application to education. Mathisen, Martinsen, and Einarsen (2008) studied twentynine teams working at a television production company. They measured personality with the Creative Person Profile, as well as team climate with the Team Climate Inventory, and collected reports on team innovation from supervisors. They recognized that there were few associations between creative personality variables and team innovation, but the associations that they found were mediated by team climate. For instance, team members who had the personality traits of high levels of playfulness, fantasy, and imagination were

more likely to foster a team climate that had a clearly defined and shared vision, which might have led to a higher level of innovation. In the workplace, creative individuals and teams must be able to produce novel ideas and also see them through to fruition. The researchers recognized that the relations that they found might differ, depending on the type of team, the nature of the tasks, elements of the organization, and individual differences other than personality.

Puccio et al. (2000) modified the Kirton Adaptation-Innovation Inventory for participants to rate their work environment and their style preferences (how one perceives himself or herself now and how one would like to be in an ideal job). The Survey of Creative and Innovative Performance (SCIP), which has fourteen criteria for creativity in a product, including novelty, usefulness, value, attractiveness, and complexity, was used to rate creative performance. The researchers found that workers perceived companies as requiring people to be more adaptive than creative, which is similar to many educational settings. When workers had the opportunity to play with original ideas, they reported higher levels of creative productivity. Many people who thought of themselves as innovators found it difficult to deal with companies that did not match their styles. Many creative children do not match their schools' overly structured and regimented styles.

Creativity and Art Education

The assumption in education is that in order for children's creativity to develop, it needs to be supported and nurtured by the environment (Guilford, 1958; Treffinger et al., 1983, Runco & Johnson, 2002). For schools to be able to support creativity and the arts, they still must follow the strictures of accountability, meaning that there has to be some way for them to state what their specific goals are and provide evidence of how they are

meeting them. This means that there has to be some concrete way, whether obtained through quantitative or qualitative methods, for schools to report on how the teacher and students understand creativity and, based on that understanding, how it is being measured. Once creativity is operationally defined, it is possible to evaluate what aspects of a program successfully support it.

Many studies provide specific insights into creativity within educational contexts, both general and art education. One particular study demonstrated an attempt to examine the four P's at a professional art school. Getzels and Csikszentmihalyi (1976) used cognitive, perceptual, and personality instruments, as well as a biographical questionnaire, teacher rating scale of originality and artistic potential, students' grades, and case studies to study the creativity of 179 second and third-year students at the School of the Art Institute of Chicago. The authors wanted to examine the development of artists, rather than established artists, and observe them at work during the actual creative process. They followed the students during their studies at SAI and five to six years after graduation. The students were either in fine arts (drawing, painting, sculpture, printmaking, and ceramics), industrial art (fashion design, interior design, industrial design, weaving), advertising art, or art education. The students themselves revealed that one of their main goals in the program was to discover and understand more about themselves.

The results provided evidence that this group of students differed from other college students in personality and values more than intellectual or perceptual skills.

According to the personality questionnaire, the artistic personality (independent, introspective, imaginative, unpredictable, unconventional) was common for this group.

In addition, the female students were more dominant than other women of the same age and the men were more sensitive than other men their age. To the authors, this indicated that the students needed to be provided access to a full range of experiences.

Differences were also discovered within the art specialities. The fine arts students had high aesthetic values and low economic values, while the advertising and industrial arts students had low aesthetic values and high economic values. The art education students had high social values with low aesthetic and economic values. The fine arts students were therefore determined to be the most "artistic" of the students and more willing to take risks in a field where success is difficult to obtain. There were some personality differences as well, with the fine arts students being less sociable, more imaginative, and less conforming than the students in the other arts areas.

Interestingly, the values and personality traits of the female students were not as important as intelligence and perceptual abilities, while the values and personality traits were more significant for the male students. Since the male fine arts students had values and personality traits that were very different from other college students and the other art students, the researchers chose to focus on them. The male fine arts students with higher grades generally had more college experience, stable families (parents were married), and higher economic status. They were not different from other students in terms of intelligence, but they were more questioning and subjective.

In studying these male students, the researchers believed that problem finding was more important in the indication of creativity than problem solving. The students were open and sensitive to identifying problems and creating problems throughout the creative process. They were willing to explore, even changing from the initial problem, which

often led to a more original solution. Getzels and Csikszentmihalyi also noticed a difference in the way the teachers evaluated their students' work and how that work was seen by the general public. The teachers valued originality over technical skill, though skill was very important. The general public, or those who would be purchasing the artists' work, valued skill over originality. The researchers interpreted this as meaning that the artistic domain valued originality and problem finding while the broader culture valued problem solving. This distinction is an interesting and potentially important one for art educators to consider as they support their students' creative process and evaluate their creative products.

Person

It is important to consider a visual art student's interests, values, beliefs, and contexts for learning (inside and outside of school) (Clark & Zimmerman, 1998).

Students should be in charge of their own learning in art, as well as in other content areas (Illeris, 2005). Teachers can encourage students to incorporate their interests into their work, including those from outside of school that might lead to different directions or independent study. In this way, students can develop their cultural and personal identity through their work (Freedman, 2010). A visual artist must have a high level of perseverance in order to deal with obstacles and problems along the way, implying also having a high level of motivation. An artist has a high level of affective intensity and emotions are tied to his or her motivation (Stalker, 1981). Family backgrounds, culture, educational interests, and services in the community that support or hinder artistic development are also important to consider (Clark & Zimmerman, 1998).

Parents can have an important effect on their children's creativity. In a study with highly talented children in math and science, Runco (2007) concluded that parental creativity predicts the creativity of the children when measured in terms of divergent thinking. The researcher stated that it was important for parents to value original or divergent thinking and show support and encouragement of their children's original or divergent thinking.

Both parents and teachers have implicit theories of creativity (Runco & Johnson, 2002), or ideas and expectations about their children's creativity and creative behavior. These implicit theories are the standards that they use to judge the children's creativity. These theories could support or inhibit the children's creativity. In studying these implicit theories, the researchers used socially valid methodology, which meant that the criteria were determined by the teachers and parents and not by the explicit creativity theories that have been mentioned in this narrative. They worked with teachers and parents from India and the United States.

Using adjectives to describe creative and uncreative traits, participants were asked to rank the adjectives in terms of characteristics of creative children and the desirability of the trait for children to have. For parents of both countries, most of the adjectives describing creative traits were desirable and most of the adjectives they found to be uncreative were also described as undesirable. A few adjectives were found to be creative and undesirable and a few were found to be uncreative and desirable, so the researchers thought that creativity and desirability were related, but were different constructs. The adjectives were also divided into three clusters – attitudinal, intellectual, and motivational. There were significant differences between countries regarding these

clusters, with parents and teachers from the U.S. having significantly higher ratings for attitudinal and intellectual adjectives than the ratings of the parents and teachers from India. The researchers concluded that it was important to recognize cultural differences in creativity and that the parents and teachers will support the behaviors that are approved by their culture.

Process

It is essential for educators to support the creative process as well as the development of creative products (Runco, 2003b). There must be nonconformity in thinking in order for original ideas to occur, so teachers should avoid emphasizing conformity and assist students in understanding when to be original and when to conform. Problem finding is as important as or more important than problem solving. Teachers can model and reinforce divergent thinking and problem finding and students should be provided with choices in activities for problem finding. Runco (2003b) suggested that brainstorming techniques might lead to conforming behavior, which does not support creativity.

According to Selby et al. (2005), research in creativity should attempt to include creative styles or problem-solving styles. In trying to identify creativity in students, these researchers suggested that creative traits and characteristics on traditional lists may not show up in the classroom; rather problem-solving styles or abilities are more likely to be evident. Teachers and researchers can examine the way people approach problems, rather than how much creativity a person has.

Corcoran and Sim (2009) worked with high school students in visual art classes and taught them explicit problem solving techniques as a framework during the

conceptual stage of the students' artwork. The researchers used the Creative Problem Solving model (Isaksen, Dorval, & Treffinger, 2000), which included fact finding, problem finding, idea finding, solution finding, and acceptance finding. The students also participated in collaborative groups as they developed their ideas. Many of the students said that using the CPS model helped them to overcome "artists' block" and that the structure assisted them in coming up with creative ideas. The students indicated that collaboration was most effective during solution finding, when they could bounce ideas off the other students.

For art education, Zimmerman (2009) recommended using multiple measures for assessing the creative process. These included looking at general creative abilities (completing incomplete figures, sorting images into categories), artistic creativity (knowledge of art concepts and art traditions, visual thinking skills), and creative visual arts ability (finding many solutions to a problem, having excellent drawing skills, having strong emotional responses).

In the visual arts, creativity is not just creative self-expression, but has to do with cognitive complexity, affective intensity, technical skills, and interest and motivation (Stalker, 1981). A person can have an original idea, but has to have the knowledge and skills to implement it. Students can be taught to find problems and solve them in original ways. They should also know what to do and how to do it, be able to deal with a lot of information in a complex environment, deal well with inconsistent information, and make good judgments based on the information.

In implementing their ideas, students should be able to express their ideas verbally as well, imagine and solve problems, engage and persist with tasks, and reflect

on what they are doing (Stalker, 1981; Freedman, 2010). They should be able to think critically and critique other students' work effectively (Freedman, 2007). They should understand what artistic creativity is and show evidence of creative work in their academic classes. Those creative skills and concepts are dependent on the creativity of the audience, as well as the students, so the students should have some knowledge of the social and cultural context, including the local art community, and fine art and popular culture (Stalker, 1981; Freedman, 2007). For Freedman (2010), it is also acceptable to use collaboration during the creative process, especially in incorporating knowledge and skills from other domains.

Product

As stated previously, for capital "C" Creativity, the field, or experts in a domain, is very important in deciding what new product or idea will be accepted. For visual arts, these are the art teachers, museum curators, art critics, and government agencies. A field needs to be financially ready to support new ideas, so the field is very important in the arts. A person has to know the rules of the domain of the arts, including what the critics in the arts are looking for, and internalize them (Csikszentmihalyi, 1996). An effective arts program assists its students in understanding what these rules are.

There is some disagreement in education research about judging creative products on a professional level. When dealing with children, there is a question of whether or not a child can be judged to be creative without a creative product (Piirto, 2004). Therefore, in general, it is important to know what behaviors in a particular domain may be predictors of creativity or evidence of creative potential. When products do exist, it may not be appropriate to compare students' early products to products of adults who are

masters in a field, but knowledge of the development of skills and abilities over time in a domain would allow comparisons of products with children who are much older (Piirto, 2004).

In order to understand the experiences of creative students in educational settings, researchers are less likely to depend solely on the experiences of eminent adults, but rather on the experiences of students as their abilities are developing. Runco, McCarthy, and Svenson (1994) stated that the purpose of the evaluation of a product is important for determining whose judgment to rely on. When the purpose of an evaluation is to predict whether or not a student will have success as a professional artist, then judgments of professional artists are appropriate. If the purpose is to evaluate current performance or current level of creative potential, then peer and self-ratings might be more appropriate.

Zimmerman (2009) suggested that teachers look at what is creative for an individual in a local situation, rather than determining whether or not that person changes society. Clark and Zimmerman (1998) recommended that visual art educators differentiate for students entering a program and develop levels (introductory, rudimentary, intermediate, advanced, and mastery) that will help students advance to more sophisticated levels. The content of each level should include a description of the skills and work of adult professionals, including artists, critics, historians, and aestheticians. Stalker (1981) acknowledged that with the world's technological advances, students are able to see how products and ideas are valued from not just a local, but a worldwide perspective.

Sullivan (2002) and Kindler (2008) agreed that educators need to acknowledge that definitions of creativity and art actually change over time. The artist, artwork,

viewer and context over time should be taken into consideration when evaluating artistic work. Kindler (2008) also cautioned against an emphasis on the artwork over the artist without boundaries, where asking for artwork that is new, unusual and unexpected could involve ethical and moral issues. A discussion of boundaries with students should encompass what is decent and respectful and what is a positive social outcome when an artist is seeking fame.

Freedman (2010) touched on the issues of providing specific boundaries regarding expectations for creative products. Students need to know the purposes of the process and outcomes of creativity in context. The goal of arts programs should be to have students demonstrate their learning beyond what was expected and show evidence of creative thinking. Some reproduction is acceptable, because it not only reinforces tradition, but can move things forward. There are differences in interpretation regarding originality. A student should produce art that is meaningful to the student according to his or her interests (Freedman, 2007). Art education is also about creating something that is functionally useful, but allows people to see something they have not seen before or to think in a different way. Students should be made aware that they can influence how people think, particularly if they incorporate social issues into their work, and can potentially encourage social action (Freedman, 2010).

Press

There are many ways to look at how schools can create environments that support creativity. Schools can provide challenging tasks, freedom to pursue one's interests and develop strengths, and recognize many different types of excellence (Shaughnessy, 1998). Teachers can differentiate instruction to meet their individual students needs

based on students' preferred ways to process information (Selby et al., 2005). McCoy (2005) recognized that the physical environment is important to creativity as well, particularly in the workplace. Spatial organization, access to tools of the discipline, and easy access to other members' and their spaces are essential.

In examining creativity and intelligence, Getzels and Jackson (1962) observed that teachers tended to prefer students with high IQ in their classrooms over students who were high creative. In response to the findings of their study, they made several suggestions for fostering creativity in the classroom. They recommended that teachers recognize that highly creative students have a desire for independence and values that are different from other students. Therefore, rewarding behavior that might not be typical for the classroom is necessary for this group of students. Inventiveness requires some alone time, so teachers should avoid an overemphasis on group work. They should allow time for playing with facts, scenarios, and problems, remaining open to inventive responses that might not be expected, but are still appropriate for the situation. Assessments for divergent thinking must be different from those for convergent thinking and tasks should be appropriately challenging. While some challenges can lead to frustration, they also can lead to inspiration and invention.

Similarly, a qualitative study of eighteen undergraduate students in a graphics communication course showed that some of the important characteristics of a supportive environment included a personal relationship with the teacher, de-emphasis of grades, and allowing students to analyze their own creative processes and find their own creative style (Cole, Sugioka, & Yamagata-Lynch, 1999). With the professor as facilitator, the

students were encouraged to take risks, provided flexibility and freedom of choice, and guided in different types of activities that utilized divergent and convergent methods.

Social factors were considered by Niu and Sternberg (2003) in a study of ninety-six high school students in a vocational school in Beijing. Self-expression is not encouraged in China and one does not put oneself forward. The results of the study showed that the students' creative performance improved just by suggesting that they be creative. This improvement was shown as well when they were instructed on how to be creative. Here in the U.S., where the cultural expectations are different, schools should still support self-expression and help students develop a sense of autonomy. The investigators recommended that schools build the development of creativity into their regular curriculum.

In describing the development of actors as creators at the Dell'Arte International School of Physical Theatre, Buckley (2005) emphasized the importance of allowing many creative options, particularly in the rehearsal stage of a production, allowing ideas to be followed through to completion. Echoing Torrance, he stated that the environment should provide a framework that allows flexibility and, as a collaborative community, the opportunity for group brainstorming.

Identification Process for Art Programs

Because the program involved in this study was very selective in its identification process, it was important to examine studies that identify artistically talented students in visual arts and how creativity was evaluated at the beginning of the program. Clark and Zimmerman (2001) recommended considering creative potential and works in progress in audition or application materials, as well as completed performances or products. They

also recommended the use of multiple assessments, including standardized instruments, portfolios, and biographical inventories that provide information on personalities and values. They reported that some school districts also use parent, student, teacher, peer, and professional artist nominations, as well as information about projects done outside of school, attitude surveys, and artwork demonstrating particular cultural influences.

Inner Spark was a summer school program for artistically gifted high school students that provided courses in visual art, animation, creative writing, music, dance, theatre, and film-making (Chin & Harrington, 2009). Many of the aspects of this residential program were similar to the program involved in the current study, though the audition process was different. Students applied by submitting three pieces of their artwork and two letters of recommendation. Students were chosen based on their potential for professional development. The teachers were all professionals in their art areas and some had taught at the college level.

The researchers interviewed the students regarding their experiences in the program. The students appreciated having the space and time to do artwork as their inspiration led them. They also were grateful for the feedback and energy they received from teachers and students and having access to high quality materials and other people's perspectives. Students enjoyed having access to the gallery and studios after class hours, eating with other students, attending performances together, and forming friendships with their peers. Some students were inspired by the other students' work and improved their own work by watching them. They appreciated the way that the teachers supported them emotionally, but it was just as important for them to see the teachers' artwork and observe them while they were working. The teachers were considered to be role-models

and mentors for many of the students. The teachers were able to get to know the students very well and give them lots of individual attention. It was clear to the students that the teachers cared about them. While this study did not address the meaning of creativity for the students and teachers, it did provide a nice, if brief, framework for comparison of the important aspects of a successful arts program seen through the eyes of its participants.

The Purpose of This Study

This study was designed as the first in a series of studies that examine the nature of creativity and how it is experienced and supported in the *Visual Arts Program* of a fine arts magnet school. Because of the existing aspects of the *Visual Arts Program* (i.e. students who went through a rigorous admissions process, products that are evaluated by professionals in the discipline, and a policy that states that the environment supports creativity), the school that was chosen for the study seemed to be an optimal site for asking students and teachers to share their creative experiences.

The review of creativity theories and studies provided information regarding the definition of creativity as it pertains to personality characteristics, the creative process, creative products, educational environments and practices that support creativity, along with some of their potential interactions. However, the lack of a universal definition of creativity and the lack of a specific definition of creativity for the program in this study led to the realization that, before creativity could be evaluated, a definition of creativity appropriate to the study population had to be determined. This is not an uncommon issue in educational settings, though it is not always recognized as a problem. Freedman (2010) acknowledged that while teachers can ask students to produce original work, they

have to define what this means so that the students are not frustrated or blocked. In addition, they must define creativity in terms of the local context.

The investigator realized that she could choose instruments that were well-known in the domain of creativity for each of the four P's, but would have no idea if some of them were valid for the visual arts or, most importantly, for this group of people. She felt that this would best be accomplished qualitatively, going to the students and teachers in the program and providing them with the opportunity to reflect on their experiences and to speak about creativity in the context of their lives and the program. It would then be possible to look for common themes and patterns of experiences that were important for this group specifically, as well as to compare them to the findings of existing creativity studies, particularly those in education.

Therefore, this study was designed to explore the respondents' perspectives regarding the creative experience in order to identify critical themes that together define creativity in this context. The secondary goal of this study was to gather information from the experiences of the respondents in order to provide evidence to support the choice of instruments that are valid for measuring creativity, evaluating students' products, evaluating the effectiveness of the program in supporting creativity, and examining any interactions among the elements.

In qualitative inquiry, researchers usually recognize and make explicit their biases (Krathwohl, 1998). The principal investigator acknowledged having an expectation that the understanding of creativity by the people involved in this particular program would contain elements that are similar to the person, process, product, and press traditionally found in creativity research. It was less likely that creative potential would be an issue

for the chosen population, as the students in the program had already been provided with opportunities to express their creativity, both in the audition process and in the classroom. It was unknown whether or not persuasion would have a contribution. This bias informed the rationale, statement of the problem, and approach to the data (Krathwohl, 1998). However, the investigator remained open to changes and new information that might revealed, including potential insights into the use of multiple assessments or the need for the development of new instruments or techniques for examining creativity for this population in this particular domain.

Research Questions

Because it was important to the investigator to develop a structure that would allow the respondents to "reconstruct and reflect on their experiences" in the context of their lives and of the program (Seidman, 2006, p. 21), the following research questions were developed:

- 1. How did the respondents come to be involved in the *Visual Arts Program*? What were their experiences with family, friends, neighborhoods, schools, and work?
- 2. What are the details of the respondents' present experiences in the *Visual Arts Program*? What are their experiences with other students, mentors, teachers, other faculty members, administrators, parents, and the wider community?
- 3. How did factors in the respondents' lives interact to bring them to where they are at present?
- 4. How do the respondents understand creativity in their lives? How do they understand being creative people?
- 5. Where do the respondents see themselves going in the future?

CHAPTER III

Methodology

Ethnographic Context

The investigator used existing online documents, texts, and observation to develop a comprehensive description of the school, curriculum, and physical setting. The school that was chosen for this series of studies has provided fine arts programming since 1971. In 1970, the school district approved the establishment of a "voluntarily desegregated arts high school" (Gore, 2007, p. 8). The emphasis for recruiting students was on the arts majors, but the goal for the district's Board of Education was to have a student body that was racially and ethnically mixed. There have been many changes in both the district and school administrations over almost forty years, and in the ways that their goals have been implemented. The population of the school has maintained a majority of White students (55-70%), with 15-30% African-American students, 6-20% Hispanic students, 1-6% Asian students, and a small percentage of Native American students (Gore, 2007). While the goals for racial and ethnic makeup of the school were not typically expressed in percentages, a significant amount of effort was placed on providing an equal opportunity for feeder schools to be given presentations and visits by representatives of the fine arts programs, in order to recruit students. Gore (2007) pointed out that, as important as a diverse student population was, most of the students shared the feeling that they had found a place where they fit in; that they felt that they were different in their home schools and had finally found others like them.

In 2010, the school is an urban high school whose school district is now the largest in the state and the seventh-largest in the country. It is a magnet school, which is

defined by the school district as one which provides a quality program with a special focus that is meant to attract students from all over the district to an integrated school. A small number of students from outside the school district are admitted each year. The school has approximately 650 students, which is similar to many of the high schools in the district with magnet programs, though some of the high schools have as many as 3000 students. The population of the school in 2008-2009 was 23% African American, 4% Asian, 18% Hispanic, 0% Native American, and 55% White. One hundred percent of the students were identified as Gifted and Talented by the school district.

The school's philosophy statement says that faculty members focus on each student's individual creativity, providing challenging opportunities for intellectual, artistic, and technical originality. At the same time, the school encourages students' sense of responsibility towards their community and society in general. The school is considered to be a college preparatory school, preparing students to seek advanced training in colleges, conservatories, and advanced art institutes. All of the students are viewed as academically capable. In fact, according to the school philosophy, the school purposefully correlates the arts and academics, rather than treating them as separate disciplines. The school provides specialized and in-depth study in *Visual Arts, Dance*, *Theatre Arts*, and *Instrumental and Vocal Music*, with students participating in their specific art areas for three hours every day. The goal of the high school is to produce graduates with the ability to work creatively and independently, regardless of the pathway their advanced education and careers may take.

The *Visual Arts* department was chosen as the focus in seeking respondents for this study. The Urban Talent Research Institute at the University of Houston has a long-

standing relationship with the department, involving research on identity, creativity, and psychosocial issues of gifted adolescents. According to its mission statement, the *Visual Arts* department focuses on providing "a solid foundation in the visual arts" and building "a broad-based fine arts experience with an emphasis on idea/concept development." Courses address fourteen art areas, including animation, architecture, art history, ceramics, drawing, graphic design, installations, mixed media, painting, performance, photography, printmaking, sculpture, and video.

Approximately forty-five students are admitted to the *Visual Arts Program* each year, with 300-600 students involved in the audition process annually. For the audition, students are asked to provide a portfolio which includes ten to twelve pieces of their strongest work, both two-dimensional and three-dimensional. They also participate in three hours of exercises at the school, where they complete the Torrance Test of Creative Thinking, Figural Form A (Torrance, 2008). Other exercises include drawing from imagination or observation, creating a composition in response to word images or narratives, and being given a frame of reference within which to create a composition or design by drawing or manipulating materials.

Starting with freshman year, each student is responsible for maintaining a journal (or most often, multiple journals) that is brought to every art class. Students are asked to come up with three to five ideas for every assignment before they develop a final art piece. It is up to the student as to whether or not they wish to use words and/or images to express their ideas. By senior year, the journal work is much more independent and the journals are not reviewed as often. The students are required to submit their journals in response to assignments and as part of their portfolios. Students are taught strategies for

explaining the development of their ideas and concepts in order to prepare them for similar expectations at the college and professional level. Critique is a very important part of the curriculum as well, both in terms of accepting and using constructive feedback in a student's own work and in being able to articulate criticism effectively in class regarding his or her peers' work.

Students' work through the first and second years leads to independent study based on each student's interests, ideas, and chosen medium. Students complete individualized portfolios, with an "intensive investigation of their own areas of interest." The portfolios are evaluated for their grades at the end of each semester. Portfolios are graded according to concept (originality of idea), content (quality of information conveyed), experimentation (risk-taking), overall quality (success of results, including demonstration of technical skills), and preparation (development of ideas, journal work).

Students at all levels have the opportunity through field trips to visit museums and art galleries in the local area and occasionally in other cities in the state. Every day, teachers announce opportunities to work or volunteer for local artists, art galleries and museums. There are several gallery shows, art competitions, and art festivals to which students can enter their artwork. Visiting or guest artists and lecturers are a regular feature of the program, with one artist in particular providing a week of special instruction and critique every year. Occasionally, teachers or consultants arrange for workshops after school on campus or in off-campus studios, depending on student and teacher interests. For instance, a life drawing class in an outside studio provided an opportunity for students to draw from a live, nude model and to observe the creative process and techniques of their teacher (T2), who drew alongside them.

Juniors and seniors have more choice in their courses and are able to select electives in their areas of interest. In the fall, there are opportunities for their portfolios to be reviewed by representatives of accredited Schools and Colleges of Art and Design, as well as to display their work in competition for grants and scholarships. In the fourth year, students prepare for a senior show, where they display between eight and fifteen pieces of their work in the school's gallery, which are evaluated by the department faculty. Their work is accompanied by artist statements, explaining their particular point of view (concept) and the inspiration for their work.

There are four full-time faculty members in the *Visual Arts* department. All of these faculty members are professional artists with varied art interests and experiences and three of them have Master's degrees. One faculty member is a former student of the *Visual Arts Program*. Each year, each of the full-time faculty members is responsible for the students in one grade, but they work to some extent with all of the students. This allows for the students to develop relationships with the teachers, three hours a day for four years. In addition, there are six to twelve part-time instructors or consultants who teach courses for at least one semester. These are artists of various ages with experience and talent in multiple areas, often complementary to those of the full-time faculty.

Several of the consultants have been former students of the *Visual Arts Program*.

The investigator presented the proposal of this study to the school principal and *Visual Arts* department head before securing approval for the study from the university and school district. They were both greatly supportive of the study and excited about any way that they might be able to better understand their students and improve what is already a program that is recognized around the country.

The investigator always felt welcome in the school and the department. The front office personnel recognized her after a few weeks of interviews and greeted her like a member of the staff. The students were also very open and enthusiastic. The department chair was instrumental in arranging for rooms for the interviews, providing advice on schedule changes, and making sure that the movement of students from and to their classrooms and routines went smoothly. The teachers and students went out of their way to accommodate the requirements of the study, as well as the unavoidable and often unexpected changes that occurred. Several students who were not in the study, but worked in the department office, were helpful in locating students for interviews and guiding the interviewer to the rooms with which she was not yet familiar. In hopes of returning their hospitality, the investigator made every effort to view the senior shows of the senior respondents in the study. These shows changed weekly in the gallery during the spring semester when the interviews took place. By reading the artist statements and viewing their work, she gained additional insights into these respondents, as well as their classmates.

Physical setting

The school is located in a residential neighborhood that is close to the museum district of the city. The two-story building opened in December, 1981 (Gore, 2007). The school's front office, where offices of the principal, counselors and other staff are located, is directly to the left of the entrance doors. A cafeteria on the first floor that is open to the second floor is in the center of the school near the two theatres. A wall of windows two stories high fills the west wall of the common space. It is in this area that

students often participate in casual dance and music performances during lunch time on Fridays. The library is on the second floor above the front office.

The *Visual Arts* department is primarily located along the hallway at the back of the school, as is the art gallery. The department has an office and several classrooms along the hall and one large one that is used for homeroom when all of the students gather for announcements can be turned into two classrooms as needed with a flexible divider. The hallway walls are replete with artwork of current and past students. Some of the classrooms have paint and writing on the white walls where students' art pieces were placed with push-pins while they were working on them. Many of the classroom tables are covered in paint splatters, with writing and carving on them. The floors of the classrooms are generally concrete and are relatively unmarked.

Because of changes in the availability of private spaces in which to hold the interviews, several rooms were used for the interviews. These rooms included two Art Department classrooms, a room in the Art Department gallery, a photography darkroom, a small office, a library conference room, and the library utility room.

Constructing Cases

Respondents - students

With a qualitative study, there should be a sufficient number of respondents to represent the experiences of the population they are drawn from, so it is more likely that people outside of this program can recognize themselves in the experiences of those in the program (Seidman, 2006). It is also important to reach a level of saturation, where the investigator can be as confident as possible that she is starting to hear information that has already been provided (Seidman, 2006). With approximately thirty-five students in

each grade in the *Visual Arts Program*, the investigator attempted to involve at least twenty students and five teachers in individual interviews, and twenty students in two focus groups.

The respondents in this study were nine freshmen, sixteen seniors, and five teachers (all of the teachers) in the *Visual Arts Program* for a total of thirty respondents. The principal investigator only asked freshman and senior students to participate, because she was primarily interested in the perspectives on creativity from students at the beginning and the end of the program. Because all nine of the freshmen who assented to participate were female, purposeful sampling was used by the investigator to select ten female seniors for individual interviews from among those seniors who assented or consented to participate. These students were representative of the seniors in race/ethnicity and the areas of interest in *Visual Arts*. According to Lincoln and Guba (1985), using purposeful or purposive sampling allows a greater range of data and enables the investigator to develop substantive theory that will be grounded in the data according to "local conditions, local mutual shapings, and local values (for possible transferability)" (p. 40).

The students categorized themselves according to eight racial/ethnic groups and could check all categories that applied. The race/ethnicity of the freshman respondents was reported as follows: one Asian, one White, two Hispanic, one Hispanic/White, one Black/Hispanic, two Asian/White, and one Other (Latin). They represented eight of the fourteen areas of interest available in the *Visual Arts Program*: animation, ceramics, drawing, graphic design, mixed media, painting, photography, and video.

The race/ethnicity of the senior respondents was: one Black, six White, one Black/White, one Asian/White, and one Asian/White/Hispanic/Middle Eastern. They represented nine out of the fourteen areas of interest: animation, ceramics, drawing, graphic design, installations, mixed media, painting, printmaking, and sculpture. All of the students were asked to rank the top three areas of interest. Some students did not rank them, but checked them off. The investigator attempted to choose senior respondents who would be the most representative of the different areas of interest.

Since only nine freshman students returned consent forms, they all participated in individual interviews. There was no opportunity to recruit additional freshman students for a focus group. Seven additional seniors had consented and were offered the opportunity to participate in a senior focus group. The purpose of the focus group was to validate the interpretations of the responses in the individual interviews. It also provided the opportunity for interactions among the students and the potential for responses that might have been different from those of the individuals. Six of the seniors participated and one student withdrew from the study because of a conflict with a class commitment and the time of the scheduled group interview. There were three males (one White, one Hispanic, and one Other-Latino) that represented three different areas of interest (video, mixed media, and photography) in the *Visual Arts Program*. The three females (two White, one Hispanic) represented three different areas of interest (drawing, painting, and ceramics). As a group, they represented six different areas of interest out of the fourteen available.

Demographic form

All student respondents completed and returned parent permission forms and student assent/consent forms. Students who were 18 also provided proof of their age. All students completed a demographic form that was designed for this study and provided information about the respondents' class level, gender, race/ethnicity, and areas of interest in the visual arts (Appendix A). Because of the school's history of attempts at student diversity over the years, the investigator wanted to allow for data that could possibly address any related variances in responses regarding students' experiences. In light of potential differences in the understanding and support of creativity in the other arts areas of the school, a subject for later studies in the series, the investigator asked for information regarding areas of interest in order to have the option of examining responses from students in different interest areas within visual arts. In addition, respondents were asked to provide e-mail contact information, which was necessary for contacting the students for scheduling interviews and conducting member checks. In an attempt to assist with confidentiality, the investigator used an e-mail account for communication through the University of Houston that was designated for this study.

Respondents - teachers

The five teachers, one female and four male, completed and returned consent forms, but did not complete a demographic form. Their school e-mail addresses were available publicly on the school's website and obtained for communication.

While highly unlikely, there was the possibility that respondents might experience psychological distress when discussing life experiences in the process of the interviews.

The investigator provided copies of all of the interview questions to the school counselors and informed the respondents that the counselors would be available to them, if needed.

Interview Design and Question Development

The interview structure for the students and teachers was based on the three-interview structure designed by Dolbeare and Schuman (Schuman, 1982) and described and used by Seidman (2006) and his students. With this structure, the interviewer looks for details of a respondent's experiences while providing context for those experiences. The first interview concentrates on the past and allows the respondent to reconstruct early experiences in context of the topic of the study. The second interview focuses on the present experiences of the respondent in the context of the topic, while with the third interview, the respondent reflects on the meaning of his or her experiences, including what they mean for the future (Seidman, 2006).

For the purposes of this study, due to time restrictions and limited availability of the students, the three interviews were telescoped into two semi-structured interviews. The questions were meant to guide the interviews, with additional questions emerging based on the respondents' responses and potentially providing information that the investigator did not anticipate. In doing so, the investigator acknowledged that she and the respondents interacted and shaped each other's responses (Lincoln & Guba, 1985). The first interview (Appendices B, C, and D) allowed the respondent to talk about his or her past life in the context of creativity and the visual arts and how he or she came to participate in the *Visual Arts Program*. He or she examined the contribution of experiences with people and events from the core of the family outward into the neighborhood, schools, work, community, media, and the world. The respondent was

also asked to share present experiences, starting with a typical day in the *Visual Arts Program*. He or she examined experiences with people and events as they related to the visual arts and the *Visual Arts Program*. This led to a question regarding experiences with mentors.

Primarily due to time restraints, the investigator did not provide the respondents with a copy of the interview questions before the interviews. She was also interested in their initial, perhaps more intuitive, responses. She did, however, want to provide them with an opportunity to share additional responses or elaborate on existing responses after having time for reflection between the interviews. At the beginning of the second interview (Appendices B, C, and D), the respondent was given the opportunity to discuss any connections that had been made between events or people in his or her life that contributed to participation in the *Visual Arts Program* that may have become evident since the first interview. The remaining questions in the second interview explored experiences related to characteristics of a creative person, creative thinking processes, creative environments, and aspects of the *Visual Arts Program* that contributed to and supported creativity.

Most of the interview questions for the second interview were taken directly from a questionnaire on creativity developed by the principal investigator and used for an individual interview for a doctoral course on creativity. These questions were based on research undergirding the "four P's" of creativity, with questions about creative personality characteristics, creative thinking processes, creative products, and creative press (Davis, 1999).

The first ten questions represented the first "P" of creativity – personality. They were based on Davis' (1999) list of sixteen categories of personality characteristics of creative people that he compiled from the works of fifteen creativity researchers and theorists, including Walberg, Torrance, Simonton, Sternberg, Rimm, Runco, Gardner, and Csikszentmihalyi. The complete list consisted of 188 personality traits.

- 1. Do you consider yourself to be a creative person?
- 2. How do you understand creativity in your life? What sense does it make to you? What does creativity mean to you?

Number one on the list of categories of characteristics was an awareness of one's own creativity.

3. What characteristics do you have that you would consider important for a creative person?

This question was meant to elicit a description of characteristics without prompting from the interviewer. After the question was answered, the interviewer could amend the following questions as needed, if the characteristic(s) was already described. If the person being interviewed had difficulty in coming up with specific characteristics, the following questions could provide examples supported by research and theory.

4. How much do you think having a genetic predisposition for creativity contributes to being a creative person, if at all?

In his Co-Incidence Theory, Feldman (Morelock & Feldman, 1997) describes individual, environmental, and historical factors that lead to the accomplishments of prodigies. The individual factor includes a "biological propensity toward the talent"

(Davis, 1999, p. 102). Csikszentmihalyi (1996) refers to creative people having a genetic predisposition towards a particular domain that supports creativity.

- 5. Tell me what you think the connection is, if any, between interest and curiosity and creativity.
- 6. How important is it for a creative person to have a good sense of humor?
- 7. How important is it for a creative person to have lots of energy?
- 8. How important is it for a creative person to have perseverance?
- 9. How important is it for a creative person to have optimism?
- 10. How important is it for a creative person to have the willingness to take risks?

For Questions 5 through 10, both Davis (1999) and Csikszentmihalyi (1996) discuss these as traits of creative persons. These represent additional traits from the top eight in Davis' (1999) list of categories. In an interview with Shaughnessy (Shaughnessy, 1998), Torrance stated that a person's personality can either support or prevent creativity. The characteristics in Questions 4 through 10 are revealed in important behaviors that can be encouraged to help people be more creative.

Questions 11 through 21 are meant to gain insight into the second "P" of creativity – process.

11. What qualities do you think describe someone who is a creative thinker?

For Question 11, the investigator was looking for answers from the respondent without prompting for particular qualities supported by theory or used in creativity tests.

12. How important is it for a creative thinker to have the ability to come up with many ideas to solve a problem? Why or why not?

- 13. What is the relationship between a person's ability to be flexible in his or her thinking and creativity? Why or why not?
- 14. What is the relationship between a person's ability for originality and creativity? Why or why not?

This set of questions (Questions 12-14) was based on divergent thinking as related to creativity. The Torrance Tests of Creative Thinking (Torrance, 2008) are popular creativity tests used in educational settings. The investigator was familiar with the Figural Form A and its use in evaluating creative thinking, having both administered and scored the tests. The use of these questions for this study seems to be appropriate, as the test was used during the audition process for the *Visual Arts Program* and the teacher respondents were familiar with it. The questions represent three of the four creative abilities that are scored on the test (fluency, flexibility, and originality), the fourth ability being elaboration. In Shaughnessy's interview (Shaughnessy, 1998), Torrance expressed the need for an environment that is supportive of creativity, as well as training for creative problem solving. He also recognized the need to creative people to be motivated for fluency, flexibility, originality, and elaboration.

- 15. What part do you think emotion plays in creativity?
- 16. What part does emotion play in your creative process?

Questions 15 and 16 were included because emotional responses are an important part of an aesthetic experience. Pieces of art or music can elicit emotional responses that can be transferred to other stimuli (Damasio, 2001). According to Adolphe (2001, p. 88), "The emotional truth of a great piece of music is inextricably linked to the musician's inner world of imagination and discovery – or to what I call the mind's ear."

17. Have you ever had an experience where you were doing something that you enjoy in which you were only aware of the here and now, you did not worry about failing, and you were not really aware of yourself, time, or your surroundings? If yes, what were the circumstances? Tell me more about your experience.

This question describes some of the elements of what Csikszentmihalyi (1996) calls the flow experience, which is experienced by artists, scientists, and working people of all cultures, genders, and ages. Creativity can produce this enjoyable state and the experience can be supported in the classroom (Rea, 2000).

18. Describe what you do as a creative person. Tell me a story about the process or processes that you go through when you come up with an idea and see it through.

Respondents' answers to this question would be compared to models and theories regarding the creative process.

19. How do others respond to what you create?

The investigator was interested in prompting descriptive words and phrases that might help to identify the respondent or the respondent's product as being creative.

- 20. How often do you need "alone time" in your creative process, if at all?
- 21. Describe times when you need lots of activity and colleagues around you, if any.

 Are these different times in the process? How so/how not?

Csikszentmihalyi (1996) included the presence or absence of people when describing the surroundings that may be important for creative people at different points in the creative process. Some people need lots of collaboration and activity with others in the initial stages of understanding a problem, with more alone time needed for working out the details. Other people may create in a completely different manner.

Questions 22 through 25 relate to the fourth "P" of creativity – press or environment. According to Csikszentmihalyi (1996), a person's surroundings can be very supportive of creativity. Some people seek out a beautiful, quiet place in the mountains. Others like a more stimulating, active environment. Many people like to personalize whatever space they are in to provide comfort or inspiration.

- 22. Describe the setting that is most inspirational to you in developing creative ideas.
- 23. Are there different settings for different parts of your creative process? If so, describe them to me.
- 24. What are the characteristics of these settings that you feel are most important for your creative process?
- 25. What are some things that you do to your surroundings to enhance creativity?

The remaining questions were added for this study and refer specifically to the physical, curricular, psychological, and emotional aspects of the *Visual Arts Program* that have or have not supported the respondents' creativity. The questions for the teachers related to both their students' creativity and their own creativity (Appendix C). The students were also asked about where they saw themselves going in the future, addressing a specific research question. An opportunity was provided at the end of the second interview to add comments or suggestions.

Procedure

Interviews

The nine freshmen and ten seniors participated in two semi-structured individual interviews with questions regarding their experiences of creativity in their lives and with the *Visual Arts Program* (Appendix B). Each interview lasted for a maximum of one

hour and took place in an open classroom or other room at the school that allowed for privacy. All of the rooms had doors that could be closed for privacy. For most respondents, the second interview was conducted in a room that was different from the one used for the first interview, due to the availability of the rooms.

The investigator attempted to schedule the interviews one week apart, in order to allow the respondents to have time to reflect on their first interview. She was asked by the department head to schedule students so that they would not be removed from the same class for both interviews. She also had to adjust the schedules because of respondents' illnesses and field trips, as well as her own absence for a conference. The interval ranged from three days to two weeks, with three weeks for one teacher due to his illness and scheduling conflicts. Nine respondents were scheduled for interviews seven to eight days apart, seven respondents had less than a week, and seven respondents had between ten and thirteen days between the interviews.

The five students in the focus group participated in a semi-structured group interview in the library conference room, with questions that came directly from the questions used in the individual interviews. The discussion lasted for one hour. The investigator chose questions specifically for the group (Appendix D), but because of time constraints, was limited to one question from the first interview questions and twelve questions from the second interview questions (Appendix D).

The five teachers participated in two semi-structured individual interviews using the same questions that were used for the students, with the addition of questions about their students' creativity (Appendix C). Each of these interviews lasted for no more than

one hour and took place in the gallery or the library conference room. All of the interviews were digitally recorded and transcribed.

Member checks

Member checks empower the stakeholders and provide credibility, dependability, and confirmability of the data (Lincoln & Guba, 1985). In qualitative inquiry, the respondents are viewed as co-researchers, so facilitating communication with the principal investigator and opportunities for input and feedback is essential. Reflecting on one's own creative thinking and experience is also a creative thinking strategy that can stimulate new ideas or perspectives (Davis, 1999). Therefore, creativity strategies were used in collecting data.

Member checks were made available to the respondents, where they had the opportunity to review a hard copy of their own transcripts, as well as the summary of results completed by the principal investigator. For the first member check, the investigator supplied hardcopies of the transcripts in manila envelopes to the Art Department office for the respondents to pick up. The respondents had two weeks to make corrections or additional comments on the transcripts. The transcripts were returned to the Art Department office in manila envelopes supplied by the investigator.

The respondents were asked to complete a second member check by reviewing the summary of results that are described in the Results section and are found in Appendix E. The investigator received approval for a revision to her application with the institutional review board so that she could send the summary report to the respondents as an attachment to an e-mail message. The respondents were asked to make comments on

the document and return the document electronically, or provide comments in an e-mail message.

Data Analyses

This study used qualitative methods for collecting data, because the purpose of the study was phenomenological, or providing an understanding of the perception of creativity from the point of view of the students and teachers. How the students and teachers construct the meaning of their world may very likely depend on the context of the *Visual Arts Program* (Krathwohl, 1998).

Through the data analyses, the investigator attempted to view the *Visual Arts Program* from the students' and teachers' perspectives (Bogdan & Biklen, 1992). Using coding, she disassembled the interview and focus group data and searched for unifying patterns, themes, and categories of responses that emerged for individuals and among respondents (Lincoln & Guba, 1985).

The investigator created sources, cases with attributes, and nodes for coding with the computer program NVivo 8, which is software designed for qualitative research and data analysis. The respondents' transcripts (corrected and with added member check comments) were copied into a template with headings that the investigator created, by which the questions and their respective responses were autocoded into separate nodes. The transcripts provided the primary sources of information for this study, along with information from the demographic forms that was entered as status or attributes for each respondent. The attribute categories were grade, race/ethnic group, and first area of interest in visual arts.

Secondary sources were limited to field notes regarding the physical setting and interviews and memos recorded during data analysis. The investigator did not have assistance from a research assistant for this study and had very few notes during the interviews. The reasons for not taking consistent notes were twofold: the room that was used for a large number of the interviews, the room in the art gallery, did not have a table or other surface on which to take notes. The digital recorder was resting on the notebook that the investigator carried, which contained the interview questions and rested on her lap, making it very difficult to take notes. The investigator also realized that, even with a surface to work on, when she broke eye contact and did make note of a respondent's gesture or similar note, the respondent hesitated and was distracted. This occurred several times at the beginning of the interview process. The investigator felt that, for this group of respondents, it was more important to maintain eye contact with the respondents, give supportive responses that revealed her interest, and keep the digital recorder in position. This also made her more efficient in producing follow-up probes to responses during the interviews. She acknowledged the loss of potentially useful nonverbal information and would have arranged to have a research assistant to observe the interviews, if it had been possible.

Data reduction – categories

Since the interview questions closely paralleled the research questions, the investigator used coding to develop categories of answers for each question. The categories were not created before the data reduction, but evolved as the investigator read through the responses, using the words of the respondents. In fact, when she attempted to create categories from theory for one question ("Describe what you do as a creative

person. Tell me a story about the process or processes that you go through when you come up with an idea and see it through."), she had to abandon that process when the theories overlapped with descriptors. It was hoped that using the steps of the creative process according to Wallas, Torrance and Treffinger (Davis, 1999) would assist in parsing out the processes in the responses. This was not the case. Instead, the investigator retained one category from Treffinger ("generating ideas") and used the words of the respondents for the remaining categories.

The categories that were developed were recorded in NVivo 8 under their respective nodes. Because of the nature of some of the responses, as the categories for all of the questions were developed, the investigator was often able to code the responses given under one node to other categories under different nodes. For example, if a respondent described an experience with a friend in answer to "What were some of the experiences with your friends that you remember that contributed to where you are today?" that would be coded to a category under that node. However, if in the same response period before moving on to the next question, the respondent recalled an experience with a family member, that response would be coded to the relevant category under another node or question, for instance, "What were some of the experiences with your family that you remember that contributed to where you are today?" A response could be coded to more than one category within a node and/or to more than one category in other nodes.

Since the focus group interview was meant to corroborate and add to the experiences of the respondents in the individual interviews, the focus group responses were coded separately under each question with "FG" in front of the category. If a focus

group respondent's answer fit into an existing category, the same phrase was used after "FG" (FG-early childhood interest). This way, their responses could be examined separately in the results.

As the investigator read through the responses to the question, she recognized potential themes and patterns outside of the interview questions and so she developed several nodes that could also be examined. Responses corresponding to these nodes were coded as well as to the established question nodes. The new nodes included Music, Writing, Finding Identity, (Name of School) Legacy, High School, College (experiences of the teachers), and Creativity versus Artistic Ability. Some of the respondents also shared experiences regarding the development of the school and *Visual Arts Program*. These responses were coded to a node entitled Description of (Name of School).

Conclusion Drawing

The research questions allowed for answers that take into account common responses as well as individual differences. One of the implicit goals of the study that comes from the research questions was for the investigator to use the responses to inform the teachers, students, and administrators of what factors are important to this group in providing a program that best supports the creativity of its students. The investigator made the assumption that group responses would be seen as the most likely to influence change or support current practices, while individual experiences would be more likely to reveal issues that program leaders were not aware of, but should be. In order to do that, it was necessary for the investigator to examine patterns in common to the whole group, to different groups, and unique patterns in individual experiences. NVivo 8 provided the

capacity to examine responses in this way, using matrix coding, by category, group (attribute), and individual (case).

Grade as interpretive framework

Since the investigator was primarily interested in the students' experiences at the beginning and end of the program, it made sense to focus first on the responses according to the respondents' grade level. Experiences for first year students in high school in general can be very different from students in their last year of high school, and it seemed likely that there would be differences in experiences for students in this specialized program. The teachers' experiences and the support of their own creativity were important as well, and the investigator sought to gain insight into what patterns there might be revealed regarding their creative experiences and those of their students.

Answers to questions

Matrices were created in NVivo 8 for each question, using Category x Grade.

Under Grade, respondents were given the attribute Freshman, Senior, or Teacher. Total

Grade represented the total number of students and teachers responding in a particular
category. For each question, the investigator looked for the most common answers
overall (up to third most common), as well as the most common for students, the most
common for teachers, and the most common for freshman students or senior students, as
applicable. All categories with at least two respondents were reported in the summary of
results for the second member check. Outliers were occasionally reported as well. Focus
group results were reported as corroborating or not corroborating the existing categories.

Individual cases

Matrices were created in NVivo 8 for five areas that addressed the research questions. These areas were Experiences before Visual Arts Program, Experiences with People in the Fine Arts School, Perspectives on Creativity, Perception of Creativity in the Visual Arts Program, and Students' Plans for the Future. The Matrices used Category X Cases in each Grade, which revealed the responses and non-responses for each individual respondent in each of the areas. The tables included the total number of responses in each category for each Grade. Matrices based on Category x Overall represented the total number of responses for each category for all respondents. The matrices were exported to Excel spreadsheets, where the investigator highlighted the responses of each individual. This was in the hope that the visual patterns would assist in interpreting the patterns of experiences and perceptions of individual respondents. She also examined some of the patterns of non-responses, with the understanding that a non-response did not necessarily indicate a negative response. Rather, it simply may not have occurred to the respondent at the time of the interview. The investigator easily accessed the primary sources (actual responses in context) through the matrices and nodes in NVivo 8, when needed.

Matrices were also created in NVivo 8 and Excel using Category x Cases for Music Experiences, High School Experiences Outside of the Fine Arts School, and Artistic Ability and Genetic Predisposition. These are discussed in Chapter IV. These were primarily for easy access to the identification codes of respondents and their responses in these topics.

Verification

Member checks

Half of the transcriptions (the interviews of the senior students, three of the teachers, and the focus group) were completed by the investigator using a digital voice editor program. The transcriptions included notations of pauses, laughter, sighs, and interruptions. Half of the transcriptions (the interviews of the freshman students and two teachers) were completed by an online transcription service. After discovering some errors in the transcripts done by the service, the investigator listened to all of those interviews, making corrections and additions to the transcripts.

These transcripts were not ready to be provided to the respondents before the end of the school year. This delay was one of several circumstances that led the investigator to decide not to give the transcripts to the freshman respondents. While the investigator had permission from the university institutional review board to communicate with respondents by e-mail, she did not have permission to provide transcripts in any other format than hardcopies. Therefore, there was no way to get the transcripts to the freshman students or to recover them during the summer, since it was unlikely that they would be able to return to the campus. Transcripts were given to the senior students and the focus group respondents before the end of the school year. Transcripts were also provided to the teachers during the summer, as it was expected that they would have access to the campus.

The second member check consisted of a descriptive summary of the results of the Categories x Grade matrices and the Categories x Total Grade matrices for each question (Appendix E). It was sent to all of the respondents by e-mail. Respondents

were asked to make any comments or corrections they wished and to contact the investigator if they had any questions. Because of the investigator's time constraints and the fact that this report alone was twenty-four pages long, this was the only report provided to the respondents.

Peer checks

Peer checking was also used for confirmability of the data (Lincoln & Guba, 1985). Two objective professionals trained in qualitative methodology, and who were in no way connected to the study, were recruited to compare the interpretation of the data. The investigator randomly selected six questions (10%) from the individual interviews and sent them to the professionals, along with the interview questions and research questions as a framework. Hardcopies of these documents were given to one professional and they were sent electronically to the second. They were asked to code the responses by creating common categories for each question. These categories were then to be compared to the categories created for those questions by the principal investigator for inter-rater reliability.

CHAPTER IV

Results

Verification

Member checks

For the first member check, five transcripts of the individual interviews were returned by the seniors (50%) and two transcripts were returned by the teachers (40%). Three transcripts of the group interview were returned by the focus group (50%). When the returned transcripts were examined, the investigator copied the original transcripts to another document and added any comments that respondents provided before any categories were coded. While the comments clarified and elaborated on responses, only one respondent changed the fundamental meaning of his response. This led the investigator to believe that it was possible that member checks by the freshman respondents would have yielded similar comments. She also knew that the freshman students would be returning to the school in the fall, while the senior students would not. It was therefore possible that the freshman students would be more likely to participate in the second member check than the senior students.

The second member check asked for comments to be sent by e-mail. Two senior students (20%) and two freshman students (22%) made comments about the summary of results. No e-mails were sent by respondents in the focus group. Three of the students who responded stated that they had no comments or corrections. One senior student (S3AM) was reminded when reading the results of the first question that she had also attended a magnet school for art in middle school. She was not one of the original respondents who indicated this, so the number of students was increased to five instead of

four. One of the senior students (S5PM) made additional comments that addressed limitations and future applications, which are provided in Chapter V. Three of the teachers (60%) communicated that they read the summary and did not have any comments or corrections to report.

Peer checks

The categories developed by the two independent professionals are displayed in Appendix F. For the first peer check, eighteen of the thirty-four categories (53%) developed by the first professional were the same or similar to the categories coded by the investigator. The greatest discrepancy was with the question about the relationship between originality and creativity. Twenty percent of the categories were the same or similar to the categories coded by the investigator. This led her to reevaluate the categories that she had developed. She realized that she had developed categories with the respondents' definitions of originality using different adjectives, while the peer check only referred to "originality," making it difficult to state that the categories were the same. This did not diminish the potential contribution of the peer check to the analysis of that question.

With the second peer check, twenty-seven of the forty-seven categories (57%) developed by the second professional were the same or similar to the categories coded by the investigator. Some of the observations provided by the additional categories created during the peer checks are included in the descriptions of the results and the discussion and are noted as such.

Focus group

The results regarding the responses of the focus group interview were intended to corroborate and add to the results regarding the responses of the individual interviews.

Of the thirty categories of responses by the focus group members, twenty-one of the categories (70%) corroborated the existing categories coded from the individual interviews. Their unique responses are included in Appendix E and the discussion of the research questions.

Experiences before the Visual Arts Program

Detailed descriptions of the results of the Category x Grade matrices for each interview question can be found in the second member check document in Appendix E. Summaries of the descriptions were included here according to the research questions.

Family

The most common experiences for this group of people that contributed to where they found themselves today had to do with family, friends, and school. Most of the students, including four of the focus group members, remembered beginning to draw very early on in their lives, before elementary school and in kindergarten and first grade. They said that they "always made art" and "grew up drawing." F4AM recalled that she liked to draw "whenever I could get my hands on a pencil." Parental support of their interest area was reported to be an important experience for most of the students and teachers, with their interests generally being supported by both of their parents. None of the students reported that a parent was not supportive, while one of the teachers had a father who was not supportive. One teacher considered parental support to be important, though neither of his parents was supportive. Four students did not have any specific family experiences

to relate, but still considered their parents to be supportive. Interestingly, most of the freshman students had at least one parent who was an artist, as did four of the senior students and one teacher. Students told of drawing with their parents or observing their parents at work and wanting to emulate them. One student was inspired by her father when he created an art piece in honor of his mother upon her death. Three students and one teacher had parents who they described as creative, but were not visual artists.

For three of the freshman students (30%), their early interests in art and having a parent who was an artist may have had a connection with the fact that they also attended art magnet schools in elementary or middle school or at a private art school. The early interest in art seemed to have a connection with attending art classes for 60% of the seniors, but only one of them had a parent who was an artist. Eighty percent of the senior students had private lessons, attended an elementary or middle school art magnet school, attended classes abroad, or attended another arts magnet high school. A similar connection was not suggested by the teachers' responses, one of whom had private lessons.

The respondents reported experiences with other family members as well, many of them acting as potential mentors which are discussed later in this chapter. Three of the senior students felt that family trips contributed to where they are today, while only two seniors recalled family visits to art venues as being important. Six of the students had siblings who influenced them artistically, particularly the freshman students. Two students had sisters who were also artists, one who attended the same fine arts magnet school. One of the students felt that her sister really understood her art work and effectively critiqued it. The other student was inspired by her sister's example of

carrying a sketchbook wherever she went, though they did not talk with each other about their art. Another student's brother taught her various art techniques and inspired her in the use of unusual materials. One student was inspired to draw things for her younger brother, who expressed an interest in being an artist. Two students had a brother or sister who had interests and talent in a different art area (vocals, musical theatre), so they felt that they were influenced to be artistic in a general way.

Seven of the respondents, especially the senior students, had other relatives who contributed to where they were. Grandparents seemed to be particularly important. One student had a grandfather whose work as sculptor influenced her. Another had a grandfather who critiqued her work and taught her various techniques. That same student's great aunts were painters as well. A focus group member's grandmother provided art materials and assisted her grandchildren in putting on an art show for their parents. One of the teachers had grandparents who were involved in community theatre. He felt that their participation in something that they loved encouraged him to pursue what he was interested in. In addition, a senior student was impressed that her uncle used art in his chemistry dissertation and another student observed her aunt critiquing the student's sister's artwork. A focus group member recalled enjoying a cousin's drawings. Adults who were considered to be family, but were not related, were mentioned by two of the students. One was inspired by her godfather's interest in architecture, while another was influenced by the support of her long-term relationship with her piano teacher. Pets, often considered to be family members, directly inspired the artwork of two of the freshman students.

In all, three students had siblings who attended the magnet high school, one student had a father who was a teacher at the magnet school in another department, one teacher had attended the magnet high school as a student, and one student had been influenced to audition for the program by her art teacher's children, who had attended the magnet high school.

Music

Though there were no direct questions in the first interview about music experiences before the *Visual Arts Program*, many of the respondents shared experiences with music in their lives, in and outside of school. Seven of the students and one teacher said that they play or played a musical instrument, some of them several musical instruments. One senior thought that playing an instrument helped her to get in the mood for making art. Five of the students and two teachers reported that they had or have relatives in their families who were musicians and/or vocalists. Additional references to music that were not direct answers to interview questions have been added to the discussion about characteristics of setting that are important to the creative process.

Friends

Friends were also important in the lives of this group of people and it seemed to be particularly so for the senior students, as their responses alone provided six of the categories describing experiences with friends. The most common answers for the whole group were that their friends shared a common interest in art and provided encouragement. Friends admired and supported their artwork, helped connect them with artists, and encouraged them to apply to the fine arts magnet high school, or, in the case of the teachers, to continue with post-secondary art education and even make drastic

changes in their life paths. This encouragement supported the students' self-confidence and inspired them to do better work. Three of the teachers and one senior student had friends who were professional artists, while one third of the respondents had friends who were not artists, but they described as being creative. Some of the senior students had friends who they said exposed them to alternative ways of thinking and inspired them with ideas for artwork. Others had friends who shared interests outside of art, some of whom helped one of the students "think outside of the box." Only one senior student mentioned experiences with friends who did not support her art and one student felt that a lack of friends, and making several family moves, led her to making art.

School

The students shared an equal number of experiences in elementary school and middle school with teachers who encouraged their artistic development. Some of these teachers, particularly in elementary school, were regular classroom teachers and not art teachers. The classroom teachers also provided time to work on art for two of the students and one teacher and sometimes art materials as well. The art teachers in both elementary and middle schools taught valuable art techniques to 70% of the seniors and one freshman. They also encouraged a few of the students to apply to the fine arts magnet high school and some helped students with their portfolios. Art competitions at the elementary and middle school levels were important in contributing to the involvement in visual arts for six of the students, including one focus group member. For at least two freshman students and one senior student, a combination of these elements (encouragement of teachers, school competition, the teacher recommending an application to the magnet high school, and/or the teacher helping with the portfolio)

appeared to the investigator to be working together to contribute to where the students were.

As might be expected in light of their additional life experiences, the teachers did not relate very many experiences with elementary and middle school. In high school, two of the teachers remembered a sense of belonging and a sense of community that they hope they have emulated in the *Visual Arts Program*. One of these teachers also felt that the fact that his academic teachers challenged him was important. One teacher said that finding out what he did not want to do was instrumental in directing him to the visual arts and that high school classes provided him with the opportunity to do that.

Other experiences

Though the remaining experiences discussed by the respondents did not have as many common characteristics as those with family, friends, and school, they were still important on an individual level. At first glance, the neighborhoods that the respondents lived in did not seem to be influential, as ten of the respondents (half of each Grade) did not think that their neighborhoods contributed at all to where they were. One senior student went so far as to say that her neighborhood stifled creativity. However, five of the students and one teacher found their neighborhoods to be inspirational because of graffiti, architecture, or the presence of a garden, library or museum. This was supported by the most common response of the group regarding the contribution of where they lived to their creativity. Nine of the respondents mentioned that having access to art in such places (museums, art galleries, architecture, gardens) contributed to their creativity and six respondents found the architecture, colors, shapes, and presence of nature where they lived to inspire their art. For two of the seniors who could not think of any family

experiences that contributed to where they were, having the access to art where they lived was important.

Many of the respondents had experiences with work or volunteering that they viewed as contributing to where they were. Seven of the senior students had experiences while volunteering that led them to reflect on how they were doing their artwork or on their abilities.

S1AM: Uh, two years ago I went out with my mom to deliver, uh, Thanksgiving meals to the elderly people who couldn't leave their homes and just to travel throughout (Name of City) and do this good deed for them, because they were so grateful, you can see it in their eyes that they were happy that somebody actually cared about them and, you know, took the time out of their Thanksgiving day for them, made me really happy and it made me feel like a good person and, you know, it made me feel like that my art doesn't have to be all negative experiences, it can be good experience as well. So it's in my art, I do have my, my women, um, laughing or smiling, because, you know, they're looking back on this event of giving, rather than receiving.

Half of the freshman students volunteered with children and said that those experiences influenced their art or encouraged them to be more open-minded. Five of the students were able to meet people interested in art through their volunteer experiences. Three of the seniors and most of the teachers worked or had worked for artists or in art-related venues, such as art stores, studios, museums, art programs, or university art departments. It was interesting to note that those three seniors all had early childhood interests in art and had attended other art schools before coming to the magnet high school.

The respondents were also asked to reflect on contributions from a broader point of view. Media influenced the three groups in different ways. The freshman students said that films and movies, the internet, books, animation (including manga, anime, and cartoons), and music and lyrics contributed to where they were. Books, magazines, art events on TV or in other media, and animation contributed for senior students. Teachers said that experiences with music and lyrics, films and movies, magazines, news, and video had contributed to where they were. Some of the students mentioned that manga and anime were not well thought of as an art area in the Visual Arts department, but was a definite interest and influence for them as artists. Historical events were not as important to most of the respondents, but very important for a few of them. Not unexpectedly, three of the respondents felt that they were influenced by specific art movements or types of art. Two of the students tied elements from history directly to their art, one with an interest in genealogy and another with an interest in myths and legends. Two students stated that their family cultural histories contributed to where they were, though not yet tied in directly with their art.

Experiences with People in the Fine Arts School

In the Visual Arts Program

In order to understand how students' creativity was developed and supported at this school, it was important to explore the experiences with the people in the fine arts school and in the *Visual Arts Program* that stood out to the respondents. For the students, the most common experiences with the students in the *Visual Arts Program* had to do with providing them with the opportunity for the exchange of ideas and being able to observe the unique use of materials or the use of unique materials in their artwork. The

remainder of the experiences for the freshman students was very individual, including enjoying collaboration with older students and noting that the visual arts students were different and had interesting clothing. One freshman student said that most of her close friends were outside of school, though she felt that many of the visual arts students were friends, if not close friends. As might be expected of students at the end of the program, three of the senior students spoke of the other visual arts students as being close friends. Three of the senior students also appreciated knowing people who were going through similar experiences at school.

When students were asked about experiences with other students' work, they responded most often that they remembered experiences where the students' style of work was interesting, the work showed that the students had excellent skills and abilities, and they remembered the feelings that were evoked by the artwork. Some students found that observing other students' work caused them to reflect on their own work, which motivated them to work harder or "better" and made them realize that they thought about things in a similar way. Two senior students thought that critiques from their fellow students provided them with different perspectives on their own work and allowed them the opportunity to brainstorm about their work.

When teachers were asked about their experiences with the students and with the students' work, they were proud when the outstanding students received recognition and were grateful for being able to share in students' pivotal moments, such as for T1 when "the light bulb goes off" and a student's art becomes his or her own. Both peer checks categorized these experiences as being rewarding for the teachers. Teachers were grateful for being able to assist students who were dealing with personal difficulties and

were happy to see students succeed after struggling with a variety of issues. One teacher was amazed at the art work of the students and the unique ways that they developed it.

Another teacher viewed the students' work as evidence of the quality of the students in the program.

The students had several experiences in common that stood out for them with the teachers in the *Visual Arts Program*. They reported that the teachers provided them with honest, constructive feedback and encouraged them to develop their own ideas. They also appreciated that the teachers introduced them to new methods and new materials. The students found them to be good professional artists who were caring and had fun personalities. A few of the students thought that the teachers were very clear about their expectations. One of the senior students thought of some of the teachers as her friends.

When the teachers spoke about each other, they reported that they were mentors for each other, as well as for the students. One teacher said that he considered the others to be his friends and agreed with the students that the teachers had fun personalities.

Another teacher thought that it was important for previous students of the magnet high school to return as faculty members and, along with a senior student, appreciated the new perspectives provided by the consultants.

Artists in the community

When considering the consultants, visiting artists, college representatives, and other people from the community who were involved in the *Visual Arts Program*, the respondents reported that the visiting artists stood out to them, because they provided inspiration regarding their work and the business-like details of being a professional artist. Those artists also provided opportunities for work or volunteering in art. There

were mixed feelings about the artist who came annually from another state to work for about a week with the junior and senior students. Two senior students and one teacher felt that he gave good feedback to the students, while two other senior students did not feel that his visit was productive for them.

Similarly, there was slight disagreement about the experiences of the senior students with the college representatives who visited every year from universities and professional art schools. The freshman students did not deal with them directly, but were aware of their interactions with the older students. Several of the respondents said that the college representatives provided good feedback and helpful critiques for the students. Two of the freshman students thought that the representatives also shared different opportunities for finding jobs in art. One senior student reported that the college representatives did not recognize the needs of students who were not planning to major in art in college. This is especially interesting in light of the findings regarding the students' responses about pursuing non-art majors in college, which are elaborated on below in Students' Plans for the Future.

One student shared an experience with an artist in the community who was not involved in the program. S1AM met a man who was blind and made papier-mâché animals. She said that "to hear his story was really inspirational for me and, um, that experience probably stands out, because I learned a lot from him. And, you know, it made me realize that you don't need your eyes to make art."

The relationships of the program with the local museums, galleries, and art organizations were mentioned by several senior students and one of the teachers. They felt that the shows and competitions that the students could participate in prepared them

for the art world. They also thought that one museum in particular provided good opportunities for collaboration and participation in art shows.

Academic faculty

This being a fine arts school, the investigator wanted to know about any experiences that the students and *Visual Arts* teachers had with the academic faculty. She knew that there were high expectations for students regarding their academic courses, as well as in their art areas. The respondents seemed to have a variety of experiences. Two of the students and two of the teachers felt that the academic teachers tried to incorporate art into the curriculum, even though, as F2PM said, "it sometimes doesn't work." The teachers stated that there was more collaboration with the curriculum earlier on in the development of the school, but that things like standardized testing have made that more difficult to accomplish. The *Visual Arts* teachers felt that they were successful in collaborating with the academic teachers regarding student issues and problems, and that this was on a regular basis.

The students found many of their academic classes to be fun and the teachers to be nice and said that some of their teachers understood the demands of the *Visual Arts Program*. A few of the academic teachers went out of their way to help their students. The senior students had academic teachers who gave good, constructive feedback. Four of the students viewed some of their academic teachers as having problems with their instruction, such as being hard to understand, inconsistent, or lacking in creativity.

Administrators, counselors, and office staff

While the investigator acknowledged to the respondents during the interviews that sometimes contact with the people in the front office of a school could be due to negative

or disciplinary experiences, support from the front office could contribute to the success of a specialized program like the *Visual Arts Program*. Less than half of the respondents had experiences to share regarding administrators, counselors or office staff. Two of the teachers found the administrators to be supportive of the students, teachers, and parents, while one senior and one teacher thought that the administrators were good with students. One senior, who believed that there was less freedom for the students at the school than in the past, did not think that the administrators were helpful. None of the freshman students reported any experiences with the administrators.

Some of the teachers stated that the counselors were helpful, but needed to participate more in collaboration with the teachers in dealing with students' issues, perhaps more along the lines of what the *Visual Arts* teachers experienced with the academic teachers. The counselors were not helpful to two of the senior students. One senior student who said that the counselors had been helpful to her admitted, along with one other senior, that the counselors did not help at all with the college application process. A freshman student appreciated that a counselor had given her personal attention. Only two students reported experiences with the office staff. One said that people in the front office were helpful and the other stated that they were not helpful.

Students' parents

There were many parents who volunteered at the fine arts high school, chaperoned field trips, organized events, or may have been involved in some other way in the *Visual Arts Program*. Six of the students agreed that other students' parents were supportive in encouraging them regarding their art or volunteering for the school. Three freshman students specifically mentioned that the parents who were involved in the

school store were helpful and were involved in other events at the school as well. Three students appreciated the fact that other students' parents were artists themselves, or at least interested in art. One senior student viewed her friend and fellow student's parents like they were another set of parents. Both peer checks noted that one student thought that another students' parent was "cool," which the investigator had interpreted as meaning that the parent related well to teenagers. The professional who completed the second peer check went on to consider that perhaps this parent had found a balance in being involved in the school and this student was comparing that parent's behavior to that of her own mother. Two students and two teachers thought that some of the parents were overprotective or hovering and had not yet figured out how to separate more from their children. On the other hand, some parents were not as involved. One teacher pointed out that some parents did not understand their children or, in the words of T4, how the program was like a "miniature job." However, many of the parents wanted to understand and were seeking open communication with the teachers and their children.

Mentors

Twenty-three of the respondents said that they thought that mentors were important or necessary for a child to have in his or her field of interest, though their answers were often qualified based on when they should be involved and what they should provide. Most of the respondents thought that a mentor recognizes talent and sparks an interest in those being mentored and provides encouragement. Mentors also provide guidance and feedback. The most common answer for the students was that a mentor provides technical skills, knowledge, and materials. Respondents also mentioned that mentors provide inspiration and are models for those they are mentoring.

Three teachers reported that they thought that a mentor is needed later for visual art, which is different from some of the other arts areas, starting with the teenage years. They thought that visual artists develop later and that, as adolescents, they need to make a connection with someone who supports their art and have someone plant the idea that they are creative. One teacher felt that there is little art education available until later, even in middle school. A freshman student viewed a mentor as someone who provided more structure and felt that several mentors were necessary later (at age 14, 15, or 16), while allowing for more freedom of expression when younger. This is interesting, in light of the large number of students in this group who had early art experiences or attended art magnet schools in the lower grades. In fact, two teachers and one senior thought that a mentor is needed in the early years of childhood, as well as early art exposure.

Eleven of the respondents reported that they had a teacher in art, music, or academic classes who they considered to be a mentor as they were growing up. Three of the students considered their parents to be mentors. Out of the 11 students who had parents who were artists, only one of them responded that her parent was her mentor when growing up. Three of the students considered their siblings to be mentors. One freshman student spoke of her aunt as her mentor, because she bought materials for her and encouraged her to audition for the fine arts magnet high school.

Six of the ten people who spoke about having mentors currently said that a teacher in the *Visual Arts Program* was a mentor. Two of the senior students had a sibling or aunt as a mentor, while a third student considered the "art ancestors" to be mentors. In one of the classes in the program, students learned about various artists and

chose some of them who had similar styles, ideas, or interests to be their inspiration as their "art ancestors." One of the teachers had a mentor who was also an artist.

Perspectives on Creativity

Eighteen of the respondents, including all of the teachers and three focus group members, said that they were creative when asked if they considered themselves to be creative people. One freshman student, F1AM, did not consider herself to be creative:

"Not really <laughs>. I don't even usually I don't even know why I'm here. Like I see all these kids that are here, they're really creative and I'm sitting there and I'm like looking around and trying to get ideas from what they do, but I don't really consider myself a creative person."

Three of the focus group members questioned whether or not they were creative, but from the discussion that followed, this seemed to be primarily because there was disagreement about what creativity was. In addition, five freshman students and three senior students, 30% of the individual interview respondents, were not sure if they were creative or not.

Understanding of creativity

Respondents were provided with the opportunity to express their understanding of creativity in their lives and/or the meaning of creativity as they understood it. Fourteen categories were developed from their answers, with many respondents coming up with more than one descriptor. The most common answer for all of the Grades was that creativity was looking at things in a different way and doing things in a different way. This understanding was actively supported in the curriculum of the *Visual Arts Program*. The groups had common understandings of creativity as having many ideas, being

unique, making a product from one's ideas, and that creativity was part of who they are. Senior students and teachers agreed that creativity was being inventive and using imagination. Teachers also understood creativity as the <u>desire</u> to make things. Five of the senior students and one freshman student understood creativity specifically as "thinking outside of the box." Senior and freshman students also described their understanding of creativity as the ability to see potential in materials and ideas and having original ideas. The focus group members corroborated four of these categories and added two. One focus group respondent (FG2F) said that everyone was born with the same potential to be creative and the environment made the difference in terms of opportunities to "excel in creativity." Another said that creativity was due to being raised in a different environment, meaning having exposure to media, such as TV, and being influenced by culture and the presence or absence of siblings.

Understanding of creative person

The respondents were also given the opportunity to express their understanding of their own personality characteristics that they would consider to be important for a creative person. Though twenty-two categories were developed from their answers, it seemed to be much more difficult for them to express than their understanding of creativity. There were fewer descriptors in common among the groups than with creativity. Some respondents also found it easier to consider the characteristics of other people they believed to be creative, rather than themselves. The most common answer overall (only five respondents) was that a creative person should be inquisitive. The students also thought that a creative person was intelligent. Other characteristics that had minimal agreement (2 respondents) were outgoing, open to change, open-minded, content

with self, and "gets art fever." F1AM, the same student who earlier said that she was not creative, explained that "I have all these ideas that will come to me at one time and my mom calls it 'art fever'." A teacher described it as being the desire, commitment, and need to do something. Individual respondents used descriptors such as funny, different, diverse interests, happy, and observant. Some seemed to be contradictory, such as messy, meticulous, outspoken, and shy and introverted. The focus group respondents added four additional descriptors (ambition, patience, commitment, vanity), none of which corroborated the existing categories or had more than one respondent.

Genetic predisposition

The respondents then were asked a series of questions about their opinions on a few of the personality characteristics of creative people that were collected by Davis (1999) and described in Chapter III. Very often, they found connections among the characteristics. Half of the respondents, including three of the teachers, thought that a genetic predisposition for creativity did contribute to being a creative person, while six students and one teacher did not think that a genetic predisposition played any part in creativity. Four respondents were not sure. In answering this question, seven of the students appeared to equate creativity with artistic ability. Three freshman students said that no one in their immediate families was specifically an artist or artistic, so they did not think that there was a genetic predisposition for creativity. The senior students and one freshman student did have someone in the family who was an artist, so they thought that there might be a genetic predisposition for creativity. The freshman student actually answered both ways, depending on which family member she was considering.

Interest and curiosity

The respondents were asked about the connections between interest, curiosity, and creativity. The agreement on answers was not very strong, but some of the students and two of the teachers thought that curiosity led to looking for different ways of doing things, especially in terms of thinking and materials. For one student, curiosity led her to explore with her art. Eight of the students reported that interest was important for generating new ideas. A definite connection between the two seemed apparent when some respondents said that interest led to curiosity and some respondents said that curiosity led to interest. Four students and one teacher felt that their interests greatly influenced their art, as well as being interested in art itself. In contrast, one teacher thought that an initial lack of interest in a required task could lead one to search for ways of making the task interesting.

A good sense of humor

While a few of the respondents were unsure of the importance of a good sense of humor in a creative person and three did not think that it was important, most of them thought that a good sense of humor was important. As a group, the respondents reported that a good sense of humor was important in dealing with critiques. Several of the freshman students said that having a good sense of humor was important to their art and had a direct effect on it. Two of the teachers thought that having a good sense of humor was important for seeing things in a different way. For two respondents, a good sense of humor could help an artist if he or she was struggling and needed to persevere. The focus group respondents' remarks corroborated these ideas.

Lots of energy

There was much in common with the ways that the respondents viewed the importance of a creative person having lots of energy. Most of the respondents thought that both mental and physical energy were important. In addition, eight respondents stated that energy was related to having lots of new ideas and the same number said that energy was tied to being able to persevere and following through with ideas. A few of the respondents found connections between energy and emotion, energy and interest and curiosity, and energy and coming up with unique ideas. Again, the focus group's responses were similar.

Perseverance

While perseverance, or phrases with similar meaning, had been brought up with some of the other characteristics already, most of the respondents in each group said that perseverance was important for a creative person to have, primarily with regard to following through with ideas in order for others to see one's creativity.

S4PM: I think for your...a creative person to get anywhere, they have to like act out...act on their ideas. That's important because you have the greatest ideas and if you don't...if you don't do them, you don't have anything.

Perseverance was also important in overcoming obstacles, continuing after failing and, according to the second peer check, dealing with rejection as a specific obstacle.

F7AM: I know that when I'm creating something if I hit a roadblock it's very hard to see over it. And you have to keep working, and you have to keep being creative, like what else can I do to make this thing come together. And if you don't have a lot of perseverance, and if you don't have a lot of determination

<inaudible>, determination, it's very easy to kind of give up. And I know that's happened to me sometimes, but...when I have an interest in something, I'm— it's good to have perseverance because you're going to work through all the roadblocks because there's always going to be something that doesn't work that you have to create something that will help them. It's very important to me.

Optimism

Optimism was another characteristic that the respondents agreed was important for a creative person. More specifically, it was important in dealing with negativity, bad critiques, rejection, failure, or when people did not understand one's work. Seven of the respondents saw it as contributing to perseverance. Three of the freshman students felt that optimism meant that they felt good about their art pieces.

Risk-taking

Almost all of the respondents to this question said that it was important for a creative person to have the willingness to take risks. Half of the respondents recognized that taking risks led to mistakes, the resolution of which often led to success. In elaborating on this, several of the respondents talked about taking risks as a part of experimenting with ideas and materials, which was emphasized in the *Visual Arts Program*.

Understanding of creative process

The respondents were each given the opportunity to express their understanding of someone who was a creative thinker. They developed seventeen categories of responses so there was not a lot of agreement, as was the case with their initial understanding of creativity or a creative person. The most common answer (for 5

respondents) was that a creative thinker was someone who communicates his or her ideas well. Some of the remaining descriptions echoed the earlier discussions about a creative person. For these respondents, a creative thinker was humorous, a careful planner, friendly, had many different ideas, was open to other opinions, was optimistic, persevered after failing is intelligent, and was adventurous. Three of the senior students considered creative thinkers to be good writers.

The respondents were then asked to consider three of the elements of creative thinking as defined by Torrance (2008): fluency, flexibility, and originality. The teachers were very familiar with these concepts, as the Torrance Test of Creative Thinking was a part of the audition process for the program and some creative thinking and problem solving strategies were used in the curriculum. While the students had been exposed to the TTCT during their auditions, it was not expected that they would necessarily remember its purpose or emphasis.

Fluency – many ideas

When asked if it was important for a creative thinker to have the ability to come up with many ideas when solving a problem, thirteen of the respondents said that it was important. With the remaining answers, the respondents discussed the reasons why coming up with many ideas was important. For the teachers and several students, when one could come up with many ideas, then there were many options. Similarly, for many of the students and one teacher, having the ability to come up with many ideas was important in finding one idea that worked. An interesting twist was provided by respondents who thought that having many ideas meant that a person could accept others' ideas. Other respondents said that a creative thinker needed to be able to build ideas on

each other. Three respondents pointed out that developing the ability to come up with many ideas was part of the *Visual Arts Program* curriculum. The focus group responses corroborated these answers.

Flexibility

When asked whether or not flexibility in thinking was important for creativity, more than half of the respondents thought that it was necessary for dealing with changes and obstacles. Many of the students said that being flexible opened one up to others' ideas. Students also thought that one had to have flexible thinking in order to have ideas that were different from each other. A few respondents thought that flexible thinking was important when dealing with other people, which was necessary for artists. Flexible thinking was one way to deal with risk as well. One teacher and one student pointed out that one had to balance the willingness to be flexible with ultimately making a commitment to an idea. Here again, the focus group response was similar to one of these responses.

Originality

Six categories were developed by the investigator when respondents were asked what the relationship was between a person's ability for originality and creativity. They were (in order of number of respondents): originality was personal and was based on an artist's personality and style (6 students, 3 teachers), originality meant that something is completely different, new, and had not been done (6 students), originality was built on what had come before (4 students, 2 teachers), originality showed one took a risk (1 senior), originality was judged by the public or media (1 senior), and originality was not as important as effort and perseverance (1 senior).

The discrepancies with the two peer checks prompted the investigator to return to the responses and develop the categories again, as well as looking at the categories for creativity. This led to the development of 19 categories for originality, with little agreement in responses. The four most common answers overall were that nothing was original (1 freshman, 4 seniors, and 2 teachers), originality was the same as creativity (3 seniors and 1 teacher), originality meant that one could use someone else's idea and change it in a way that no one else had (3 freshmen, 1 senior, and 1 teacher), and originality was looking at things from a different perspective (1 freshman and 2 teachers). The investigator created a table (Table 1) in which the new categories for creativity and originality were displayed, including the ones that were common to both. This table showed that there remained a significant amount of disagreement about what these terms mean and what their relationship is for this group of respondents.

Emotion

The students and teachers were asked what part they thought emotion played in creativity. Most of them, including one focus group member, said that emotion guided creative thinking. They also reported that artists used their artwork to express their emotion and that they used their artwork in the same way. Several of the respondents and four focus group members stated that emotion was tied to having a passion about something and that emotion was involved in classroom critiques. Three respondents thought that emotion was not only expressed but evoked by artwork. One focus group member spoke about the emotion that resulted after completing her artwork. Three seniors said that emotion was not necessary to be creative, including one student who thought that sometimes emotion, especially negative, drove creativity, but that one did

Table 1

Comparison of Categories for Creativity and Originality

Creativity	Originality
Doing things differently, in a new way	Doing things differently, in a new way
Seeing things from a different or new	Seeing things from a different perspective
perspective	
Thinking outside the box	Thinking outside the box
Making something your own	Making something your own
Thinking differently	Nothing is original
Seeing things differently	Same as creativity
Not normal or standard	Characteristic of being creative
Thinking process, brainstorming	Different from creativity
Being original, according to what you	Have to be creative to be original
know	
Being original, like no one else	Not important for creativity
Something can be creative, even if loses	Using someone else's idea and changing it
originality	in a way that has not been done before
Desire to be unique, different	Using unique materials or techniques no
	one else does
Everyone is creative in different ways	New, unfamiliar to you, something you
	haven't thought of before
Not everyone is creative	No one else has done it

Creativity	Originality
Is a gift	Different and new way of putting things
	together
How you make art is always different from	Defined by and goal for society
others	
Requires effort, perseverance, emotion	May not take much effort
Seeing potential of what something could	Art is original if it shows the artist's
be	personality and style and is creative
Translating new ideas into a product	What students compete and strive for in
	Visual Arts Program

not have to be an overtly emotional person to be creative. When examining their own creative processes, a little more than half of the students and teachers said that emotion spurred their ideas and directly affected their artwork.

Five of the respondents described the emotions that they experienced when they worked, including stress, passion, excitement, and happiness at being productive. Two respondents shared stories of times when they worked through emotions associated with traumatic life events with their art.

Flow experience

All of the students and teachers who participated in the individual interviews reported whether or not they had flow experiences (Csikszentmihalyi, 1996), which were described as doing something you enjoy in which you were only aware of the here and now, you did not worry about failing, and you were not really aware of yourself, time, or your surroundings. Most of the respondents had experienced something like what was described with a non-art experience. The students associated the experience with such things as reading a book, watching a movie, riding a horse, or attending a music concert that they really enjoyed and were absorbed in. One student reported having a similar experience when writing in her journal. The teachers had experiences working in a garden or physically-demanding jobs. Almost as many respondents had flow experiences while making art in school.

S3AM: Oh, yeah, I can tell you a lot of stories about that. There was this one time that, uh, OK, I only heard about this after the fact. These two girls, they were having some sort of silly argument about the pronunciation of "crayon."

Cuz this one girl was told that it was, like, pronounced "crown," which everybody

else was like, "What?" And the girl that thought it was "crown," she was getting a little "Aaaaa!" She's matured since then and she had a...an Exacto knife in her hand and she was kind of flailing around and...

Interviewer: Ah oh.

S3AM: And one girl, you know, kind of tried to catch her hand and she got her finger cut open. And, uh, the next day, I walked over to the classroom. The classroom was locked, so everybody was in the hallway and the girl has a bandage on her hand and I'm like, "What happened?" And they all stare at me like, "Where were you?" (Both laugh) Apparently, I was in life drawing land at the time. I remembered none of this.

Interviewer: Wow.

S3AM: And apparently, that's a common experience within the Art department, to get, you know, with the iPods on, and stuff and we just totally zone out.

For the teachers, this was during their college years, when they had the opportunity for working on their art pieces for long periods of time. Nine of the respondents had similar experiences while making art outside of school. Two students, including one senior student, said that they had not experienced anything like what was described.

Elements of the creative process

Most of the respondents described the processes that they went through when coming up with their ideas and seeing them through to an art piece. Categories were then developed from their answers that represented the different parts of the process. Most of the students and one teacher mentioned the part of the process when they were generating ideas. The generation of many ideas was an important step that was emphasized by the

teachers with every assignment. The respondents also mentioned choosing an idea, planning the execution of an idea, refining an idea, and seeking feedback. Nine of the respondents used writing in their journals when developing ideas, while six respondents used sketches. Several students said that they looked for ways to make their ideas different. Another student reported sometimes going back to previous ideas when one that was chosen did not work.

Three students shared experiences which might be interpreted as being less procedural and more intuitive. One freshman student spoke about getting into an art mindset.

F2PM: Then when I go to art, I kind of really get spacey sometimes, but I'm still thinking, it's just, I don't know, my thoughts kind of are just off to random places. When people are talking to me I just kind of stare into the distance sometimes, even though I hear them. I hear 'em and all, but it also gets really bad in art. I'm not sure about that.

Interviewer: So, what are you thinking about during that time?

F2PM: It's not - it's not very structured exactly how I'm thinking.

Interviewer: What do you think is happening during that time, might be a better question?

F2PM: Okay. I think I'm just kind of getting into the art mindset.

Two students spoke about ideas coming to them, rather than expending effort to generate them.

S1AM: You know, my friend was in metal shop and she was just standing there looking...at all the metal and she was just, like, you know, smiling. She's like, "I

just got an idea!" And, you know, it just comes to you like that. So, you know, she started making this piece and it's what we all do.

Presence of other people

All of the respondents considered times during the creative process when they preferred to work alone (or "alone time") and when they needed colleagues or lots of activity around them. There were some differences in their responses. Seven of the students and three of the teachers reported that they needed alone time most of the time during the creative process and four respondents (two students and two teachers) said that they always needed alone time during the creative process. Four of the students who needed alone time most of the time also said that they found the presence of others to be distracting. One of these students did not think that the presence of others was important at all for her creative process. Seven of the students said that they needed alone time occasionally, particularly during the planning part of the process. Two respondents reported that they did not ever need alone time.

Eight of the respondents, especially the senior students, thought that the presence of others was especially important during planning and seven thought this was important for final product feedback. Six students and one teacher also needed feedback from others while working on their art pieces. Four students and one teacher said that they liked having people around for company and social support while they were working. Three of the freshman students reported that the presence of others was important, but not at any particular time during the creative process.

Product - response of others to artwork

The investigator wanted to provide an opportunity for the respondents to share the ways that other people responded to their artwork, thinking that some of these responses might lead to some understanding about what those people considered to be creative about the artwork. A little more than half of the respondents answered this question and most of those reported that people responded to the physical characteristics of their art pieces. These remarks tended to be what the investigator interpreted as being rather general, such as "That looks interesting" or "It's cool," or something about the details of the art piece, such as "I really like the colors," "This texture is really nice," or "We like how you placed the figure here." Six students reported that people made remarks about the originality of the idea or the piece, pointing out how they were different or that others had not thought of them.

People responded emotionally to the work of five senior students and one teacher, saying things like "I love this," or "That's crazy" in reaction to the size and complexity of a very large piece. The artwork of one student made others laugh, while people described the mood expressed by another student's art piece or the feeling they got from it.

According to the respondents, people also tended to make comments about the techniques of the artists, referring to the use of unusual materials and asking, "How did you do this?" Three of the students reported that people made remarks about them, as the artists, such as "You're a very creative person" and "That's so you," meaning that the art piece was easily identifiable as the artist's. This was appreciated by the student as it meant that her artwork showed that she was being true to herself.

Press or environment

Most inspirational setting

For more than half of the students and teachers, the most inspirational setting for developing creative ideas was the outdoors or natural settings. Examples included walking home from school, hiking or running, taking trips, changes in weather, drawing things from nature, working in a garden, camping, and places, such as the ocean, a park, or desert or mountain regions.

S6 PM: Um, well, also part of my work is about looking at patterns in nature, so I...um, so looking out...like, if I go outside, I'll always look at the trees and, like, you see how the branches form into a spiral as they go up and they get smaller, bigger, and whatnot, so I look at a lot of...so not just the materials, but also the patterns and we had a speaker who told us about how a spiral was, like, one of the most common patterns in nature, so any time I'm outside, I always look for spirals in, like, plants or anything.

Other than outdoors, there was not a lot of agreement about inspirational settings. Four of the students reported that their bedrooms were the most inspirational settings for them. Not surprisingly, these were the students who preferred "alone time" most of the time or occasionally during their creative process. One senior and one teacher reported that a place that provided time alone was the most inspirational.

Three students reported that places with people were inspirational, as were public places, such as coffee shops and libraries for two senior students and a teacher. One freshman student said that going to new places of any kind was inspirational. One senior and one teacher reported that an art venue, such as an art gallery or museum, was the

most inspirational. Two of the teachers felt that their studios were the most inspirational settings. Only one freshman student, and no other students or teachers, said that her art class was inspirational.

Different setting for parts of the creative process

The respondents were asked if there were different settings that they preferred for different parts of their creative processes. Seven of the students and one of the teachers said that they did not need different settings for different parts of their creative processes. For five senior students, two freshman students, and three of the teachers, the settings for inspiration were different from their workspaces, which some described as a studio or classroom. For two other students, the workspace was the same as the inspirational setting. One senior student preferred to do planning of an art piece at school, but would work on it at home and at school. Another senior student preferred to plan an art piece at home and work on it at school. One senior student did not specify a setting for planning, but preferred to work on artwork at home.

Characteristics of settings for creative process

When asked what the most important characteristics were for their creative processes, there most common answer for eight of the students was that it had few distractions. Four of the students and two of the teachers said that they preferred that a setting have ample work space, often including a large table or desk. A comfortable setting, in terms of clothing, furniture, or temperature, was important for six of the students. In addition, a few students and teachers said that good lighting, art materials and resources for ideas, such as books, were important characteristics of these settings.

Four respondents mentioned that music was an important characteristic of these settings and this was supported by comments made by respondents in other parts of the interviews. These responses were referred to earlier in the section about Music. Students mentioned in the interviews that they were allowed to play music in some art classes, either privately with earphones or listening as a class to music chosen by the teacher. Three students thought that listening to music helped them while developing their ideas. Five students and one teacher said that they used music and/or lyrics as inspiration for their art pieces. Five students used music to "zone out," block out distractions, get in the mood for making art, or focus on art. Five of the respondents liked to have music playing in the background while they were working. One student said that she danced to music at home when she needed a break when working on an art piece.

Adjusting settings to enhance creativity

Creative people sometimes adjust their surroundings to enhance their creativity (Csikszentmihalyi, 1996). While five of the students and one of the teachers said that they did not change their surroundings, the most common adjustment that this group of respondents made to a setting was to organize their surroundings before working on an art piece. Six of the respondents were more specific in saying that they made sure that their supplies and resources were at hand. Two of the teachers and two of the students made sure that objects with special meaning were around them, sometimes providing inspiration. Four of the respondents, including one teacher, mentioned again that they would turn on music to enhance their creativity. Making some kind of change, such as painting or applying fabric, to the walls of their rooms was important for three of the students. Three students made space to work on the floor to enhance their creativity and

two freshman students and a teacher said that they liked to place some of their art pieces around the room.

Having access to the field of interest

According to Csikszentmihalyi (1996), a creative person needs to have access to the knowledge, tools, and skills of their particular field of interest as well as access to the mentors and peers who would recognize their creativity and provide them with opportunities to participate in the domain. While only half of the respondents actually answered this question, six of the students said that having access to materials in their field of interest was important to their creativity. Three students reported that having access to teachers and experts in their field of interest was important. Two senior students also said that having access to knowledge and resources in their field of interest was important to their creativity. Three of the teachers said that the *Visual Arts Program* allowed the students to find their creativity. Two of the freshman students did not feel that they had access to their particular areas of interest within visual arts with the *Visual Arts Program*. One of these students admitted that the exposure to other visual arts areas provided by the program could expand her creativity. The focus group responses corroborated the categories for this question.

Perceptions of Creativity in the Visual Arts Program

Several questions focused on a combination of the person, process, and press or environmental elements of creativity, seeking students' and teachers' perceptions of how the *Visual Arts Program* contributed to and supported their creativity.

Change in creativity

The respondents were asked if their creativity had changed as they became involved in the program. The most common answers of the senior students revealed that they had been allowed to develop their own ideas and that their creativity had become more personal over time. Four of the students said that the program had provided them with new interests. As students at the beginning of their program, the freshman students said that they had gained new skills and thought that they used their creativity more often than in the past.

Physical aspects contributing to creativity

When thinking about the physical aspects of the program that contributed to and supported the students' creativity, about half of the respondents had something to share. Teachers also gave their opinions based on what they saw as contributing to or supporting the students' creativity. Most of the respondents thought that the facilities, meaning the classrooms and the specialized equipment for the different art areas, contributed to their creativity. Students and teachers appreciated the smaller classes and the size of the school. Two of the freshman students mentioned that having the gallery in the school contributed to creativity. Several of the students for grateful that the program provided a lot of art materials.

Curricular aspects contributing to creativity

All of the respondents who participated in the individual interviews had something to say about the curricular aspects of the *Visual Arts Program*. Most of the teachers and the students thought that the fact that students were exposed to so many art areas contributed to creativity, that students were supported in finding their own interests

and paths, and were given lots of constructive feedback. Several students and one teacher reported that teaching about the creative thinking process, particularly being told to come up with many ideas for assignments, contributed to the students' creativity. Additional observations were that the program contributed to creativity by providing the opportunity for students to learn and improve their technical skills, having a three-hour block of time for art every day, and having field trips that provided opportunities for the students to learn about other artists and their art. Students said that the structure of the program itself over the four years contributed to creativity, as well as having an emphasis on writing in the program. Teachers agreed that teaching students to conceptualize contributed to the students' creativity, as did having consultants teaching some of the courses. A few of the students thought that having announcements in homeroom about art activities that they could participate in contributed to their creativity. Also mentioned were the important elements of learning to critique effectively and the end-of-semester portfolio reviews. The focus group members agreed with these categories.

Psychological and emotional aspects contributing to creativity

The psychological and emotional aspects of the program were mentioned by 62% of the respondents. The students and teachers agreed that the students had good relationships with the teachers, which contributed to the students' creativity. For a couple of respondents, this was expressed specifically in the way, over all four years, the program allowed the students to interact with the teachers more than with teachers in the academic classes or at other high schools. This may have contributed to what four of the freshman students and one teacher thought was a sense of community in the program. Five of the focus group members expressed the more general opinion that they had

received psychological and emotional support from their teachers. For some of the freshman students, having the influence of other students from both the *Visual Arts*Program and the other art areas of the high school contributed to their creativity. From the point of view of the beginning of the program, two freshman students said that the program was stressful but fun, so contributed to their creativity.

Teachers' creativity

The teachers also provided information about their creativity and the *Visual Arts Program*. Most of the teachers reported that the change that they saw in their own creativity was that it was currently focused on the students. One teacher spoke of the importance of finding a balance between creativity with the students and one's own creativity and art. The teachers found that they could be creative in their instruction and curriculum, use their own creative experiences to help the students adapt when problems in life arose, or use creativity to help the students to see and do things in different ways.

The physical aspects of the program that contributed to the teachers' creativity were having lots of art materials around and being surrounded by different images that people were working on. This paralleled a comment about the curricular aspects, as two teachers were inspired by the students' work. Sharing the creative process with their students contributed to the creativity of two of the teachers and sharing his/her art knowledge contributed to the creativity of another. As far as the psychological and emotional aspects of the program, two of the teachers said that they found the students to be energizing, which contributed to the teachers' creativity. One teacher enjoyed the company of talented people and another found the collaboration of the *Visual Arts*

teachers to be supportive. One teacher thought that the consultants brought younger perspectives to the program, which contributed to his/her creativity as well.

Aspects not contributing to creativity

The respondents were also given the opportunity to express any thoughts about how the *Visual Arts Program* might not be contributing to or supporting the students' creativity. Six of the students reported that they were not interested in some of the art areas that were taught. Even though they understood the reasoning behind being exposed to the different art areas, they did not feel that this contributed to their creativity. Four of the senior students thought additional courses or more of the existing courses, such as art history, drawing skills, comics and animation, and sculpture, would have supported their creativity. Some of the students and teachers mentioned that problems with the building itself, such as lack of space for storage, did not contribute to creativity. Two of the teachers were concerned that the program might be too stressful for some of the students, which might not support their creativity.

Some individual students had some interesting points about the issues that they had with the program. One student thought that, though the block scheduling for art each day was key to the program, there were no physical education classes and the students needed some physical activity to support the need for energy in their creativity. Another student thought that the gaps in courses that she was interested in could possibly be filled by allowing some of the older, skilled students to lead classes on special topics. A focus group member spoke about some recent problems with the attitudes of some students who did not seem to appreciate being in the program and did not take it seriously, which might have an effect on other students' creativity.

Students' Plans for the Future

As mentioned previously, one of the senior students said that the college representatives who visited the fine arts magnet high school each year did not recognize the needs of the students who were not planning to major in art in college. This appears to be relevant for many of the students who responded to this question. When asked about where they saw themselves going in the future, only one senior student was planning on attending a professional art school. Two senior students had college plans for an art major along with a non-art major. Six of the senior students said that they were going to college with non-art majors. Two of those students stipulated that they would be using aspects of what they have learned in the *Visual Arts Program*, while two others mentioned that they would still be doing art in some way.

Some of the freshman students, still at the beginning of their program, were less sure of the details of their plans for the future, though three of them had particular paths in mind. Those three were all planning on college, one with a non-art major and continuing to do art on the side and a second student using what she had learned in the *Visual Arts Program*. The third student did not express any other plans. Three of the freshman students acknowledged that they were going to be doing something with art, but did not yet know what that might be.

CHAPTER V

Discussion

One of the goals of this study was to explore the respondents' perspectives regarding the creative experience in order to identify critical themes that together define creativity in this context. Another goal was to gather information from the experiences of the respondents in order to provide evidence to support the choice of instruments that are valid for measuring creativity in this context. To accomplish this, the respondents were asked about the people, events, and experiences that led to their involvement in the Visual Arts Program. Respondents were given the opportunity to reflect on connections among their experiences that might have led to their involvement in the program. The respondents also talked about people, events, and experiences at present in the Visual Arts Program and at the fine arts magnet school. Their responses provided insights into their understanding of the meaning of creativity and their opinions on some of the ways to define creativity according to theory. They also revealed some of the characteristics of settings that were important to them as visual artists. They were then asked to discuss the various aspects of the Visual Arts Program that they perceived as supporting their creativity. The students also spoke of their plans for the future.

General Observations

After getting to know the respondents and attempting to analyze and interpret their creative experiences, the investigator observed that, even within this group of people who were identified as gifted and artistically talented in a specific domain, there were many individual differences in their experiences and beliefs. The findings from this study support the contention in that giftedness, talent, and creativity are not concepts that

are homogeneous or unidimensional (Fishkin, 1999; Gagné, 2003; Renzulli, 2003). While finding patterns of experiences in common appeared to be the most useful, efficient, and economical way to assist a school in evaluating existing elements and finding additional ways to support creativity, the investigator was struck by the importance of illuminating individual experiences when the focus in the school's mission statement is to support each individual student's creativity (Clark & Zimmerman, 1998; Zimmerman, 2009).

Experiences before the Visual Arts Program

Family, friends, and school experiences were all very important to most of the students and teachers in contributing to their involvement in the *Visual Arts Program*. Many of the students had at least one parent who was an artist, began "making art" at a very early age, or participated in art classes or art programs previous to their involvement. The students felt encouraged and supported in their interests by their parents and their teachers, both art teachers and classroom teachers, who seem to have recognized them as artists or "good at art." Both classroom and art teachers provided time, materials, and exposure to valuable art techniques. The influence of other family members, particularly siblings and grandparents with interests in the arts was also apparent in the responses. Friends who shared common interests shared ideas, influenced the respondents' thinking, and provided support. Some family members, friends, and teachers were considered to be mentors. Interestingly, the students who identified at least one parent as an artist did not identify that parent as a mentor later in the interview.

Though the respondents did not identify any specific connections among events in their lives that led to their involvement in the *Visual Arts Program*, some potential

connections were identified during the data analyses. Several of the students whose parents were artists and/or had an early interest in art also attended private art classes or elementary or middle school fine arts programs. For a couple of these students, the thread seemed to continue to lead them to working for artists or in an art venue. For some of the students, having the opportunity to participate in art competitions in elementary or middle school, and having teachers who encouraged them to audition for the *Visual Arts Program* and guided them with their portfolios all contributed to their involvement in the program. For one teacher, a chance suggestion by a friend resulted in being in the right place at the right time to become involved in the *Visual Arts Program* as a teacher.

The stories about the parents and teachers recognizing the respondents as being artists seemed to imply that those adults had developed implicit theories of creativity, which they used to judge the children's creativity (Runco & Johnson, 2002). The fact that friends judged the respondents to be artists, if not explicitly creative, and encouraged them in the pursuit of their interest in art seemed to indicate that the friends were developing implicit theories of creativity as well.

Volunteer and work experiences were important to many of the respondents, influencing their art or causing them to reflect on their art. Many of the respondents played musical instruments or listened to music and these experiences were connected to their artwork. While there were not as many experiences in common for factors such as where respondents lived or how media or historical events affected who they were, some of these factors had a direct effect on the art of individuals.

Experiences in the Visual Arts Program

Identity

While an exploration of identity, either personal or as visual artists, was not part of the interview questions, students who are visual artists are expected to develop their personal identity through their work (Freedman, 2010). There was evidence that some of the people in the *Visual Arts Program* tended to consider themselves to be different from the norm. Gore's (2007) observation that students who attended this high school in the past considered themselves to be different from others in their previous schools and eventually came to feel that they had found a place where they fit in was echoed in some of the responses provided by the students in this study.

One freshman student (F2AM) felt like "no one understands me" and perhaps thought that, based on the experiences of her older brother who was also in the program, that she would find understanding from the people in the *Visual Arts Program*. Another freshman student (F3AM) said that she had synesthesia, which she described as seeing colors in letters "and stuff." When she discovered that artists and other creative people often have it, she thought that she should be an artist, which made her feel comfortable about being in the program. F7AM thought that, because she was "weird," liked "to be weird," and was "not like everybody else," this school would "be the place for" her with other people who are "open and really different." One senior student (S3PM) said that, when she came to the school, she found friends who were stimulating to talk with and who had many things in common with her, and she was essentially "growing up" with people in the program with similar interests. This process of finding their niche was not easy for all of the students, despite their common interests with the other students in the

program. Some of the students, particularly the freshman students, were still adjusting to a place where everyone was a good artist and they would no longer stand out as the "artists" of the school.

The younger students also seemed to be developing their identity through the network of students around them, attempting to create a new support system that was similar to what they had in elementary and middle school. This could be seen with the differences in perceptions of friendships with students in the program, with the freshman students still developing them and the seniors comfortable in the relationships with other students and some of the teachers. In fact, one senior student considered her teachers to be her friends, implying that she thought of them more as equals, but without loss of respect or admiration as her instructors. She was in turn respected by the teachers and entrusted with various responsibilities in the department.

The investigator and one peer check reviewer observed that the students' identities were also influenced by adults who were involved with the program, drawing encouragement, guidance, and support from relationships with adults other than their parents. The students were discovering who they were as young people as well as artists. Some of the students compared these other adults (parents of other students, family friends, and teachers) to their parents. In effect, they were using these adults as role models and as resources that complemented their relationships with their parents. One student seemed to be observing differences in the relationships that these adults had with their own children, perhaps providing an understanding of what she considered to be good adolescent-parent relationships.

Understanding of creativity

It seemed that participation in this study provided opportunities for the students and teachers to reflect on their experiences as visual artists and the meaning of creativity. A few of the students commented after the interviews that they appreciated having had that opportunity for reflection on their experiences. It was not clear from the responses or discussion with the faculty how much time was spent in the curriculum talking specifically about creativity, but it was hoped that the two interviews were useful in helping the respondents to develop their understanding of creativity.

Creative person

All of the teachers considered themselves to be creative. However, if the emphasis in the school is on creativity, it was not clear if the students understood the meaning of it. During the interviews, the students were very articulate and were able to relate details of their experiences without preparation. Yet 38% of the senior students, including the focus group members, did not think that they were creative or were unsure if they were creative or not. Fifty-five percent of the freshman students were unsure if they were creative and one student did not think that she was creative at all. Students also found it difficult to talk about their personalities as being creative and, when asked to describe their understanding of creativity, there was not much agreement in their answers. Any agreement seemed to be centered on the creative process (looking at and doing things in a different way, having many ideas, and being unique).

Every student in this program was expected to have considered herself or himself to be creative, or at least a creative thinker. Creative thinking was measured by the Torrance Test of Creative Thinking, Figural Form A (Torrance, 2008) in their auditions

and emphasized in the program. Though this was not the only assessment used in the audition, it seemed likely that more, if not all, of the students would have identified themselves as being creative, especially in light of what was reported as the early identification of artistic ability by their families, friends, and teachers.

Creative personality characteristics

The expression of an artist's personality and the personality characteristics of visual artists provide evidence of creativity in research in the arts (Getzels & Csikszentmihalyi, 1976; Clark & Zimmerman, 2001). According to Getzels and Csikszentmihalyi (1976), personality characteristics and values set fine arts students apart from other students, more than intellectual or perceptual skills. The expression of an artist's personality or personal style was mentioned in some of the teachers' responses for both creativity and originality. The students were not inclined to generate personality characteristics of their own that they thought were creative. However, there was high agreement with the few characteristics that were suggested by theory and included in the interview questions, such as perseverance, physical and psychological energy, optimism, and the willingness to take risks.

According to Stalker (1981), perseverance and affective intensity are very important for visual artists. Treffinger's Creative Learning Model emphasizes the affective factors as well (Treffinger et al., 1983). Emotion played a big part in some of the students' creative processes and their art, including in dealing with roadblocks. However, emotion was difficult for others to recognize or express about themselves or their work.

Several of the students' and teachers' responses showed that they were aware of the connections between personality characteristics and their creative processes. They saw that one needed to take risks (expressed as experimenting and exploration in the curriculum) and push boundaries when coming up with ideas and working on their art pieces. One of the risks a visual artist faces is that people might not recognize the uniqueness of their efforts. One student mentioned that one needed emotional strength to take risks with one's ideas.

Creative process

The students and teachers seemed to be in agreement about the meaning of flexibility and fluency (having many ideas) and the need for both in the creative process. The greatest challenge that the investigator saw in examining the responses was in distinguishing creativity from originality. All of the teachers considered themselves to be creative, but they were not in full agreement about the meaning of creativity. The teachers did not seem to distinguish between creativity (thinking differently) and originality (looking at things from a different perspective) and this was reflected in the students' responses. This was not unexpected in light of the program's emphasis on creative thinking and originality. Yet there was disagreement and confusion about the meaning of originality as well. Freedman (2010) acknowledged that there are differences in interpretation regarding originality in arts programs.

As was seen in Table 1, there were many descriptions of the two concepts and four of the ones for creativity and originality were the same. One person considered both creativity and originality to be the same while another said that they were different. With creativity, another student implied that there was an interesting comparison between

"seeing" things in a different way, as almost a personality characteristic that happens all the time as with the student with synesthesia, and "looking" at things in a different way, which is more purposeful and directed. While there was quite a bit of disagreement, the categories overall for each word were examined again, leading to some understanding of what was intended in terms of the program. One of the students said that originality was a characteristic of creativity, and the investigator felt that this came very close to what the teachers intended. More specifically, their use of the Torrance Test of Creative Thinking led her to believe that the teachers saw originality as an indicator of creative thinking.

According to the responses, the investigator thought that many of the respondents understood creativity to involve action, ability, exploration, and the desire to be unique, different, or "not normal." She found it interesting that one student said that one needed effort for creativity, but not necessarily for originality, or for an art piece to be considered to be original. For her, the creative process required effort and taking risks. On the other hand, originality seemed to be more involved with using or doing things in a unique way as defined by society or a person. Originality in an art piece was a demonstration of an artist's personality and style (which are part of creativity as well). Freedman (2007) would agree that art should be meaningful to the student according to his or her interests. In a way, originality was involved in the physical evidence of creativity. This highlighted the importance of defining originality in both personal terms and in terms of the visual arts domain.

There seemed to be agreement among the teachers that nothing is original.

Freedman (2010) pointed out that it is important for visual artists to build on what came before, in recognition of tradition, but also to move things forward. Therefore, one can

use someone else's idea and make it one's own by changing it as no one has done before or put things together as no one has done before, both of which were included in the responses. The teachers expressed the importance of the students doing something that was personally original as well, meaning new or unfamiliar to the student or something the student had not thought of before. Even though a few of the students admitted that the teachers talked with them about artwork being personally original, they still thought that the competition among the students in the program and the desire not to copy anyone, or have their own ideas or work copied, led them to think of originality as meaning something no one had ever done before and something completely different from the other students' work.

There were several points that stood out regarding the students' and teachers' preferences for creative settings during the creative process and characteristics of those settings. For both teachers and students, the most inspirational settings were outdoors. Only one student found inspiration in the classroom. There were differences in the preference for the company of others when coming up with ideas, planning, or working on art pieces. Many of the students and teachers needed alone time in their creative processes, some of whom always preferred to work alone. Some students found the presence of others to be distracting, which is difficult to change in the classroom. This issue seemed to some students to have been addressed by allowing the students to listen to music while working and after teachers have completed group instruction. Other students preferred the presence of others during specific parts of their creative processes or even most of the time, which is easier to accommodate in the classroom.

Flow experiences indicate that a person is highly engaged in something that he or she is interested in and enjoys and is related to optimizing intrinsic motivation (Rea, 2000). These experiences are very likely in programs such as this one which provide challenge and the opportunity to control one's path of self-expression (Whalen, 1998). Most of the students and teachers had experienced something like flow experiences either inside or outside of school, with art or in other contexts.

Creative product

The interview questions did not focus as much on the creative products. The answers about critiques and responses to the respondents' artwork were not very specific about what "creative" might mean in that context or to their audience. Physical characteristics of their artwork were often described as "nice," "interesting," or "different." This may have indicated that the pieces were thought of as original. Some respondents reported emotional reactions to their art and three of the students received comments that affirmed that their personalities or personal styles were evident in their work. Kindler (2008) suggested that teachers discuss originality in terms of the boundaries of what is decent and respectful in artwork with their students. There was some evidence of this occurring in the program when one of the students (S3PM) talked about an example of an art piece that pushed or went over the boundaries and was mentioned in Kindler's article. The example was of an artist who chained a dog to the wall of an art gallery and left the dog to starve (though it was unclear whether the dog actually did). The student felt that this might have been very different from anything that other people had done, but "you have to draw a line somewhere." She felt that just because something had not been done before did not mean that it was creative.

Support of creativity

Mentors

There seemed to be a slight discrepancy between the perceptions of the teachers regarding the need for mentors in the visual arts before high school and their students' early experiences. Some of the teachers saw mentoring as being necessary in high school, with little available before then. While a few family members were considered by the students to be mentors, most of the students viewed a teacher as serving as a mentor when they were growing up. Many of the students received assistance with materials and techniques in both elementary and middle schools, with opportunities for art competitions and continued support for understanding of themselves as artists. Middle school teachers also played a big part in assisting students with their portfolios and encouraging them to audition for the program.

The fact that so many students who identified their parents as artists did not report that they considered them to have been mentors in the past or present was puzzling. The investigator surmised that this might be due to the fact that the early development of visual artists is not as structured or formulaic as the instruction in some of the other arts areas, particularly that of instrumental music or even that of youth sports. It may simply be that, while early support and mentorship is appreciated, it is not recognized as an essential part of the path to a professional career in the visual arts. This stands out as unique from artistic talent development of the past when students would apprentice with masters of particular genres or techniques.

Important aspects of the program

The responses in the interviews regarding how the Visual Arts Program was supporting or contributing to the creativity of the students and teachers revealed that a lot of what was already going on in the program was being done well and corresponded to the recommendations of the creativity and visual arts education literature. The students had access to materials, equipment, and other students (McCoy, 2005). The program led to independent study (Getzels & Jackson, 1962) and the students found their own creative style according to their own interests (Freedman, 2007), which were expressed in their artist's statements. They also had good relationships with the teachers (Cole et al., 1999). The program had features similar to the Inner Spark program (Chin & Harrington, 2009), including access to a gallery and constructive feedback from teachers who cared about them and the opportunity to develop friendships with their peers. In addition, the students had access to professionals in their area of interest, including artist-consultants who taught on a regular basis, visiting artists, and college representatives who provided additional feedback on their work. They were exposed to a great variety of art areas and large blocks of time every day devoted to their area of interest.

Students' Plans for the Future

One of the most perplexing results of this study was that most of the students who participated did not seem to be planning to pursue a professional art career, or at least continuing with education in a professional visual arts program. Several students wanted to pursue areas that were somewhat related, such as architecture, fashion design, or graphic design. Two students were thinking about anthropology and retaining the tie to art. Other students were thinking about non-related art majors, but most of the

respondents mentioned at least doing art for themselves. Unfortunately, the investigator did not have the opportunity to probe into the reasons why this was occurring. Two students mentioned that being an artist was not a promising career, particularly financially. In their study with the students at the School of the Art Institute in Chicago, Getzels and Csikszentmihalyi (1976) noticed that the teachers in the program valued originality over technical skill, while the general public (who would buy the students' work) valued skill over originality. It would be interesting to find out if there is a similar dichotomy in the local art community and whether or not the teachers could address this in supporting the students in pursuing professional art careers. It would also be interesting to find out how much the way American society values (or does not value) artists contributes to the way the students perceive a professional art career.

Suggestions for This Program

The conception of creativity as having the elements of person, process, product, and press (Davis, 1999; Plucker, et al., 2004) could be useful for working out a more comprehensive understanding of creativity for the program. It might be possible to find the most economical definition that is most relevant for the program and still ensure that everyone understands what it is, even if they do not agree with it 100%. The emphasis might remain on the creative process and originality, while a broader definition of creativity would help in understanding what those terms mean. A common understanding of creativity is necessary in order to teach it, evaluate it, and support it (Freedman, 2010).

There is a need for discussion and clarification of the definition of originality and its relation to creativity, as a characteristic of creativity or the creative process. It seems that the most relevant definition of originality for these teachers and students has to do

with something being personally original or new and demonstrating the artist's personality and style. However, there may be occasions during the program when an art piece should be original according to the local or larger visual arts domain. Both definitions could be useful for this program, but students need to be made aware of when they are appropriate.

It is recommended that the teachers and students discuss the multiple elements of creativity and how creativity relates to being a visual artist or artistic ability, starting freshman year and continuing through senior year, taking into account the fact that the definition and understanding of creativity is dependent on the audience as well as the artist (Stalker, 1981; Freedman, 2007). Having a broader understanding of creativity would assist the students in differentiating creativity from originality and artistic ability. It would also provide a foundation for students in recognizing themselves as creative people and provide richer internal resources for students to draw from in their development of ideas and art pieces. This understanding of creativity might also influence the specific language chosen to describe creative products during critiques.

While a personality assessment might not be relevant to the audition process, providing one for students starting the program could be helpful as a way to reflect on their personalities and characteristics, such as perseverance, optimism, and the willingness to take risks, that are important for people in who are successful in the visual arts. The awareness of the students' personal interests and how they might influence their art is also an important factor than can be discussed with teachers and developed and supported in the program. Interest inventories, both general and specific to the visual arts, would be tools that could provide some of this information.

It is also recommended that the teachers investigate the senior students' choices of non-art majors when applying to colleges. The *Visual Arts Program* is successful in carrying out its philosophy of providing a solid foundation in the visual arts and building a broad-based fine arts experience that emphasizes idea and concept development.

Students do have the opportunity to pursue their particular areas of interest. The program provides ample access to college representatives and visiting artists who share their perspectives on programs and careers in art. It is, of course, not expected that every student will continue with a college-level program in visual arts. In addition, the senior students in this study are not necessarily representative of the other students in the program. However, it is suggested that the teachers consider the experiences of the senior students in this study and discuss whether or not additional support might be needed to make the transition to professional art schools or art careers, as well as what role the school counselors might play in providing that support.

This study provided the teachers with the opportunity to reflect on their own preferences. Having access to information about their students' personal preferences might assist them in supporting their students' creativity on an individual basis.

- 1. Teachers could provide more opportunities to deal not only with the conceptual, but also with the affective aspects of creativity, including making the connection with the ongoing need for support, recognition, and encouragement, which were strengths of the program that were recognized by the students.
- 2. While the program does emphasize the use of journals in writing, sketching, and developing ideas, teachers might consider supporting the students in broadening their opportunities for reflection on a regular basis. These opportunities would include

- exploring the ways that they see themselves as creative and as visual artists, as well as what they need from others to be supported in their efforts.
- 3. Teachers and students had the opportunity to reflect on their flow experiences and to recognize the conditions that might support them in their classrooms. This insight could be important for the students who did not think that they had experienced flow. For instance, providing opportunities for students to examine some of their interest areas outside of visual arts might reveal potential sources for inspiration for their art, as was the case with at least two of the students in this study. Helping them to recognize their interests and tie them to their work might contribute to experiencing flow.
- 4. Some of the students and teachers did not have mentors while growing up.

 Recognition of these differences would be useful in deciphering whether or not additional support and encouragement might be necessary for those students who did not have early mentoring, or providing assistance in identifying potential mentors. Teachers and students should discuss the roles of mentors and the potential contribution of apprenticeships, while underscoring the connection with the opportunities for working with artists in the community that are already part of the program. This could be particularly important for those students whose specific interest areas in visual arts do not reflect those of the teachers.
- 5. Though limited in the ability to provide this at school, teachers could take into consideration students' preferences for alone time during their creative processes when dealing with assignments, knowing that some students do better with planning at home or working at home than at school.

- 6. Students should also be made aware of the current boundaries of art and originality, including moral and ethical issues, as well as the issues of time, materials, budget, and location specific to the school and the local art community (Kindler, 2008; Freedman, 2010). The students might then have a better understanding of when to conform and when to be original (Runco, 2003b).
- 7. The teachers are encouraged to be more explicit about the physical characteristics, technical skills, or "quality" of the art pieces that they look for as being creative and/or original and how these expectations relate to similar ones for professional visual artists. This would most likely support the students in using more specific language in their critiques of their peers' work and when evaluating their own work.
- 8. Even though the students said that they felt comfortable expressing their opinions about the program to the teachers, the teachers are encouraged to include the students more formally in the annual evaluations of the program.

Limitations

One of the primary limitations with this study was that, by chance and according to who happened to return their assent/consent forms, most of the students who participated as respondents were female. The three male students were members of the focus group and their responses generally corroborated the categories of responses of the female students who participated in the individual interviews. Four of the teachers were also male, but, because there were so few teachers to begin with, it reduced the likelihood of having responses in common. It would therefore be preferable in future studies to include a larger number of male respondents, in order to confidently interpret any potential differences in experiences according to gender.

After reading the summary report of the second member check, S5PM wondered whether or not people were truthful when saying that something or someone "inspired" or "influenced" them. The investigator agreed that there were reliability problems inherent in self-report. In addition, one of the disadvantages of individual interviews is that the respondents do not find out what the other respondents have said until the end of the study. Member checks help, but the respondents did not have the opportunity to share ideas or memories that might have been triggered in a group discussion. Providing that opportunity to the focus group was one way to attempt to address that issue.

The investigator debated whether or not to give respondents the questions ahead of time, so that answers could be more prepared. She decided instead to pursue the spontaneous responses and provide the time between the interviews for reflection and then the second interview provided the opportunity to make additional remarks.

Unfortunately, because of their very busy schedules, most of the respondents did not have time to reflect between the interviews. However, the investigator was very impressed with how articulate the students were without preparation.

Recommendation for the Next Study

The results of this study provided many common themes having to do with experiences before and during the program and the understanding of creative personality characteristics, the creative process, and elements of the environment that support creativity. The results seemed to support the validity of examining creativity in this program using measures of creative thinking. Additional discussion with the respondents, particularly the teachers, is necessary before moving forward using the four

P's of the "systems" definition, but the responses showed that there was some agreement in understanding in that direction.

The teachers' implicit theories of creativity (Runco & Johnson, 2002) in judging the students' work are likely to be valid for this program because of their years of experience as artists and their years of experience with the program and previous students' work. Their evaluation of portfolios and senior shows would therefore be important to include in the studies that follow this one.

The review of the literature and the experiences with the respondents, revealed that there were additional options for assessment of creativity in the visual arts that had not yet been considered and that multiple assessments for each element might be appropriate. These might include personality assessments, biographical questionnaires, rating scales of originality or artistic potential, peer and self-ratings, attitude scales, measures of artistic creativity, measures of creative visual arts ability, evidence of creative work in academic classes, and the students' artist statements as evidence of art that is personally meaningful (Getzels & Csikszentmihalyi, 1976; Runco, et al., 1994; Freedman, 2007; Zimmerman, 2009).

One senior student (S5PM) recommended that the next studies in the series include the opportunity for students to express themselves not only verbally, but visually, since that was her best area of expression. She also suggested that studying "what actually goes on in their brains" should be considered, looking at "what sections of the brain are active during different stages of the creation of a piece, such as inspiration, planning, construction, and critique." She thought that this might correct any bias in the study resulting from self-report.

Significance of This Study

The results of this study may assist the fine arts school in defining the creativity that they endeavor to support, recognize what they are already doing to support it, and apply their new insights to practice. Though not generalizable, due to its qualitative nature and the fact that the majority of respondents were female, it is hoped that the results of this study and the studies that follow may also contribute to promoting the broadening of the understanding of creativity, developing explicit definitions of creativity, and effectively supporting creativity in the visual arts programs in other high schools.

Future Applications

After discussion with the teachers and identification of appropriate measures of creativity for this program, it is hoped that this series of studies can be completed by following the eighth graders who will be auditioning for the program through their admission and all four years of the program. This longitudinal viewpoint may allow for the use of a growth model approach to creativity.

This study could be expanded to include the other areas of fine arts in the school (dance, instrumental music, and vocal music) and the creative experiences of the teachers and students. It would be interesting to look for similarities between the creative experiences in these areas of emphasis, particularly the more collaborative ones, and the team collaboration found in some of the "creativity in the workplace" studies. Also, the use of the term "innovation," so important in workplace studies, might be defined and incorporated into educational studies of creativity.

Of course, creativity does not reside solely in the arts, and it would be important examine creativity in the academic courses. In addition, this series of studies could lead to more studies that look at interactions among the elements of creativity. This will strengthen the research paradigm, encouraging systematic research of these interactions.

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APPENDIX A DEMOGRAPHIC INFORMATION FORM

UNIVERSITY OF HOUSTON DEMOGRAPHIC INFORMATION FORM

PROJECT TITLE: The Creative Experience: A Phenomenology among Artistic Adolescents and Their Teachers at a Magnet High School

The purpose of this form is to provide information to the principal investigator, Susan Jackson, so that she can create sample groups for interviewing that will be most representative of the freshman and senior Visual Arts classes. Your name and e-mail address are requested so that she will be able to contact you when the transcripts from your individual or focus group interview and the project report are ready to be reviewed, as described in the assent/consent form. If you indicate on your assent/consent form that you give permission to be contacted for future studies, then you will be contacted via the e-mail address that you provide below.

Please return this form with your assent/consent form and parent permission form to (Name of Teacher) in the Visual Arts Department office by December 9, 2009.

NAME			
E-MAIL ADDRESS _			
GRADE (circle one):	Freshman	Senior	
SEX (circle one):	Male	Female	
RACE/ETHNIC GRO	UP (check all that	apply):	
Asian	America	American Indian Hispanic	
Pacific Islander	Alaska N	Alaska Native Other (explain)	
Black	White		
		RTS (If more than one, indicating area of most	
Animation	Drawing	Painting	Sculpture
Architecture	Graphic Desig	n Performance	Video

Art History	Installations	Photography
Ceramics	Mixed Media	Printmaking

APPENDIX B SEMI-STRUCTURED INTERVIEW QUESTIONS STUDENTS

SEMI-STRUCTURED INTERVIEW QUESTIONS

STUDENTS

FIRST INTERVIEW

- 1. Take a few moments to think about some of the events, people, and your own internal experiences that have led to your involvement in the visual arts and your involvement in the program here at (Name of School).
 - a. What were some of the experiences that you remember that contribute to where you are today?
 - i. With your family
 - 1. How important do you think having the support of your parents was to you?
 - ii. With your friends
 - iii. People and events in your neighborhood
 - 1. How much do you think where you live contribute to your creativity, if at all?
 - iv. People and/or events in elementary school, middle school
 - v. People and/or events at work
 - vi. People and/or events in your community
 - vii. People and/or events in the media
 - viii. Historical events
- 2. I would like to know what your experiences have been like in the *Visual Arts Program*. To start with, take me through a typical day, starting with getting out of bed in the morning and ending with going to bed at night.
 - a. Are there any experiences that stand out for you with other students in the program?
 - i. Other students' work
 - ii. Teachers
 - iii. Other faculty or staff
 - iv. Administrators
 - v. Other students' parents
 - vi. People in the community
 - b. To what extent do you consider it necessary for a child to have mentors in his or her field of interest? Did you have a mentor or mentors when you were growing up? Do you have a mentor or mentors now? Tell me about your experiences.

SECOND INTERVIEW

- 1. Now that you've had some time to reflect on what we discussed in the first interview, do you have anything that you'd like to add or talk about before we continue?
 - a. Were there some connections between events or people in your life that you see now as contributing to your involvement in the *Visual Arts Program* that you did not see before? If so, please describe them to me.
- 2. Do you consider yourself to be a creative person?
- 3. How do you understand creativity in your life? What sense does it make to you?
- 4. What characteristics do you have that you would consider important for a creative person?
 - a. How much do you think having a genetic predisposition for creativity contributes to being a creative person, if at all?
 - b. Tell me what you think the connection is, if any, between interest and curiosity and creativity.
- 5. How important is it for a creative person to have a good sense of humor? Lots of energy? Perseverance? Optimism? Willingness to take risks? Why or why not?
- 6. What qualities do you think describe someone who is a creative thinker?
 - a. How important is it for a creative thinker to have the ability to come up with many ideas to solve a problem? Why or why not?
 - b. What is the relationship between a person's ability to be flexible in his or her thinking and creativity? The ability for originality and creativity? Why or why not?
- 7. What part do you think emotion plays in creativity? What part does it play in your creative process?
 - a. Have you ever had an experience where you were doing something that you enjoy in which you were only aware of the here and now, did not worry about failing, and were not really aware of yourself, time, or your surroundings? If yes, what were the circumstances? Tell me more about your experience.
- 8. Describe what you do as a creative person. How do others respond to what you create?
 - a. Tell me a story about the process or processes that you go through when you come up with an idea and see it through.
 - b. How often do you need "alone time" in your creative process, if at all? Describe times when you need lots of activity and colleagues around you, if any. Are these different times in the process? How so/how not?
 - c. Describe the setting that is most inspirational to you in developing creative ideas.

- d. Are there different settings for different parts of your creative process? If so, describe them to me. What are the characteristics of these settings that you feel are most important for your creative process?
- e. What are some things that you do to your surroundings to enhance creativity?
- 9. Is there a relationship between your creativity and having access to your field of interest? How so/how not?
 - a. Has it changed as you have advanced in your program here at (Name of School)? How so/how not?
 - b. How do you think that the *Visual Arts Program* has contributed to and supported your creativity? How has it not?
 - 1. What are the specific aspects of the *Visual Arts Program* that have contributed how and why?
 - a. physical, curricular, psychological, or emotional

APPENDIX C SEMI-STRUCTURED INTERVIEW QUESTIONS TEACHERS

SEMI-STRUCTURED INTERVIEW QUESTIONS

TEACHERS

FIRST INTERVIEW

- 3. Take a few moments to think about some of the events, people, and your own internal experiences that have led to your involvement in the visual arts and your involvement in the program here at (Name of School).
 - a. What were some of the experiences that you remember that contribute to where you are today?
 - i. With your family
 - 1. How important do you think having the support of your parents was to you?
 - ii. With your friends
 - iii. People and events in your neighborhood
 - 1. How much do you think where you live contribute to your creativity, if at all?
 - iv. People and/or events in elementary school, middle school
 - v. People and/or events at work
 - vi. People and/or events in your community
 - vii. People and/or events in the media
 - viii. Historical events
- 4. I would like to know what your experiences have been like in the *Visual Arts Program*. To start with, take me through a typical day, starting with getting out of bed in the morning and ending with going to bed at night.
 - a. Are there any experiences that stand out for you with other students in the program?
 - i. Other students' work
 - ii. Teachers
 - iii. Other faculty or staff
 - iv. Administrators
 - v. Other students' parents
 - vi. People in the community
 - b. To what extent do you consider it necessary for a child to have mentors in his or her field of interest? Did you have a mentor or mentors when you were growing up? Do you have a mentor or mentors now? Tell me about your experiences.

SECOND INTERVIEW

- 10. Now that you've had some time to reflect on what we discussed in the first interview, do you have anything that you'd like to add or talk about before we continue?
 - a. Were there some connections between events or people in your life that you see now as contributing to your involvement in the *Visual Arts Program* that you did not see before? If so, please describe them to me.
- 11. Do you consider yourself to be a creative person?
- 12. How do you understand creativity in your life? What sense does it make to you?
- 13. What characteristics do you have that you would consider important for a creative person?
 - a. How much do you think having a genetic predisposition for creativity contributes to being a creative person, if at all?
 - b. Tell me what you think the connection is, if any, between interest and curiosity and creativity.
- 14. How important is it for a creative person to have a good sense of humor? Lots of energy? Perseverance? Optimism? Willingness to take risks? Why or why not?
- 15. What qualities do you think describe someone who is a creative thinker?
 - a. How important is it for a creative thinker to have the ability to come up with many ideas to solve a problem? Why or why not?
 - b. What is the relationship between a person's ability to be flexible in his or her thinking and creativity? The ability for originality and creativity? Why or why not?
- 16. What part do you think emotion plays in creativity? What part does it play in your creative process?
 - a. Have you ever had an experience where you were doing something that you enjoy in which you were only aware of the here and now, did not worry about failing, and were not really aware of yourself, time, or your surroundings? If yes, what were the circumstances? Tell me more about your experience.
- 17. Describe what you do as a creative person. How do others respond to what you create?
 - a. Tell me a story about the process or processes that you go through when you come up with an idea and see it through.
 - b. How often do you need "alone time" in your creative process, if at all? Describe times when you need lots of activity and colleagues around you, if any. Are these different times in the process? How so/how not?
 - c. Describe the setting that is most inspirational to you in developing creative ideas.

- d. Are there different settings for different parts of your creative process? If so, describe them to me. What are the characteristics of these settings that you feel are most important for your creative process?
- e. What are some things that you do to your surroundings to enhance creativity?
- 18. In light of your answers to the previous questions, is there a relationship between your creativity and your position as a faculty member of the Visual Arts Department? How so/how not?
 - a. How do you think that the *Visual Arts Program* has contributed to and supported your creativity? How has it not?
 - b. What are the specific aspects of the *Visual Arts Program* that have contributed how and why?
 - i. physical, curricular, psychological, or emotional
- 19. How would you describe the relationship between the students' creativity and the *Visual Arts Program*?
 - a. How do you think that the *Visual Arts Program* has contributed to and supported their creativity? How has it not?
 - i. physical, curricular, psychological, or emotional
 - b. What are the aspects of the *Visual Arts Program* that are explicitly included to support students' creativity?
 - c. What are the aspects of the *Visual Arts Program* that, in your opinion, may not be explicit, but are still important for supporting students' creativity?
 - d. Tell me about any aspects of the *Visual Arts Program* that, in your opinion, may not support students' creativity?
 - e. Is there anything that you think is important for supporting and enhancing students' creativity that may be lacking in the program or need improvement?

APPENDIX D SEMI-STRUCTURED INTERVIEW QUESTIONS FOCUS GROUP

SEMI-STRUCTURED INTERVIEW QUESTIONS

FOCUS GROUP

- 1. Take a few moments to think about some of the events, people, and your own internal experiences that have led to your involvement in the visual arts and your involvement in the program here at (Name of School).
 - a. What were some of the experiences that you remember that contribute to where you are today?
 - i. With your family
 - 1. How important do you think having the support of your parents was to you?
 - ii. With your friends
 - iii. People and events in your neighborhood
 - 1. How much do you think where you live contribute to your creativity, if at all?
 - iv. People and/or events in elementary school, middle school
 - v. People and/or events at work
 - vi. People and/or events in your community
 - vii. People and/or events in the media
 - viii. Historical events
- 2. I would like to know what your experiences have been like in the *Visual Arts Program*.
 - a. Are there any experiences that stand out for you with other students in the program?
 - i. Other students' work
 - ii. Teachers
 - iii. Other faculty or staff
 - iv. Administrators
 - v. Other students' parents
 - vi. People in the community
 - b. To what extent do you consider it necessary for a child to have mentors in his or her field of interest? Did you have a mentor or mentors when you were growing up? Do you have a mentor or mentors now? Tell me about your experiences.
- 3. Do you consider yourself to be a creative person?
- 4. How do you understand creativity in your life? What sense does it make to you?
- 5. What characteristics do you have that you would consider important for a creative person?

- a. How much do you think having a genetic predisposition for creativity contributes to being a creative person, if at all?
- b. Tell me what you think the connection is, if any, between interest and curiosity and creativity.
- 6. How important is it for a creative person to have a good sense of humor? Lots of energy? Perseverance? Optimism? Willingness to take risks? Why or why not?
- 7. What qualities do you think describe someone who is a creative thinker?
 - a. How important is it for a creative thinker to have the ability to come up with many ideas to solve a problem? Why or why not?
 - b. What is the relationship between a person's ability to be flexible in his or her thinking and creativity? The ability for originality and creativity? Why or why not?
- 8. What part do you think emotion plays in creativity? What part does it play in your creative process?
 - a. Have you ever had an experience where you were doing something that you enjoy in which you were only aware of the here and now, did not worry about failing, and were not really aware of yourself, time, or your surroundings? If yes, what were the circumstances? Tell me more about your experience.
- 9. Describe what you do as a creative person. How do others respond to what you create?
 - a. Tell me a story about the process or processes that you go through when you come up with an idea and see it through.
 - b. How often do you need "alone time" in your creative process, if at all?

 Describe times when you need lots of activity and colleagues around you, if any. Are these different times in the process? How so/how not?
 - c. Describe the setting that is most inspirational to you in developing creative ideas.
 - d. Are there different settings for different parts of your creative process? If so, describe them to me. What are the characteristics of these settings that you feel are most important for your creative process?
 - e. What are some things that you do to your surroundings to enhance creativity?
- 10. Is there a relationship between your creativity and having access to your field of interest? How so/how not?
 - i. Has it changed as you have advanced in your program here at (Name of School)? How so/how not?
 - ii. How do you think that the *Visual Arts Program* has contributed to and supported your creativity? How has it not?

- 1. What are the specific aspects of the Visual Arts program that have contributed how and why?
 - a. physical, curricular, psychological, or emotional

QUESTIONS CHOSEN DURING ACTUAL FOCUS GROUP SESSION

- 1. What were some of the events, people, and your own internal experiences that led to your involvement in the visual arts and your involvement in the program here at (Name of School)?
- 2. Do you consider yourself to be a creative person?
- 3. How do you understand creativity in your life? What sense does it make to you? What does creativity mean to you?
- 4. What personality characteristics do you have that you would consider important for a creative person?
- 5. How much do you think having a genetic predisposition for creativity contributes to being a creative person, if at all?
- 6. How important is it for a creative person to have a good sense of humor?
- 7. How important is it for a creative person to have lots of energy?
- 8. How important is it for a creative thinker to have the ability to come up with many ideas to solve a problem?
- 9. What is the relationship between a person's ability to be flexible in his or her thinking and creativity?
- 10. What part do you think emotion plays in creativity?
- 11. Is there a relationship between your creativity and having access to your field of interest?
- 12. How do you think that the *Visual Arts Program* has contributed to and supported your creativity?
- 13. How has the *Visual Arts Program* not contributed to or supported your creativity?

APPENDIX E SECOND MEMBER CHECK SUMMARY OF RESULTS BY QUESTION

The Creative Experience: A Phenomenology among Artistic Adolescents and Their Teachers at a Magnet High School

University of Houston

Dear Participant,

You are being asked to review this summary of the answers that were given by yourself and the other students and teachers to the questions during the interviews for this study in Spring, 2010. Nineteen students (nine freshmen and ten seniors) and five teachers were interviewed for this study, for a total of twenty-four. Six senior students participated in the focus group.

During data analysis, categories were created according to your answers and this report contains the most common categories for each question. Some individual answers are also considered if they contribute to insight regarding creativity at (Name of School). The focus group answers have been used to corroborate the categories that were created.

Sometimes the same student answered the same question in various ways, so the answer for one person may be recorded in more than one category. For example, with Question 2, a student might have stated that one parent is an artist **and** he or she went to art venues with the family. When the number of students is reported for a particular answer, there is no assumption that the remaining students answered in any other particular way. Often a participant shared experiences that could be categorized under other questions. Occasionally, a participant did not directly answer a question or his or her experiences could not be categorized under any other question. Some participants did not answer certain questions or questions were not answered because of lack of time.

Your input is very important and will be taken into consideration for the final report. Please comment using the Comments tool in the Review tab of Word or type in comments at the end of the report. Save your comments and return the document to Sue Jackson at (e-mail address removed) by October 11, 2010. If you have any questions, send her an e-mail message.

1. What were some of the events, people, and your own internal experiences that led to your involvement in the visual arts and your involvement in the program here at (Name of School)?

18 of the 24 participants answered this question. The most common answer overall (12 participants – 3 freshmen, 8 seniors, 1 teacher) and the most common for the senior students was that they took art classes or attended other art schools before attending the magnet high school. Four had private lessons, one attended a fine arts magnet elementary (change reported by S3AM – and a fine arts magnet middle school), four went to a

magnet school for art in middle school, three attended classes at (Name of Private Art School), one attended classes abroad, and one attended another high school magnet. The second most common answer overall (7 participants – 3 freshmen, 3 seniors, 1 teacher) was that they had experiences with fields of interest outside of art that inspire their art. These include architecture, environmental issues, dance, mathematics, and genealogy.

The most common answer for freshman students (6), with 6 seniors, was that early childhood experiences (before and into early elementary school) were important in influencing their interests in visual arts. The experiences ranged from general memories of always drawing to preschool arts and crafts.

Four of the focus group participants said that they had an early childhood experience that was important in influencing their interests in visual arts. This answer corroborates an existing category.

2. What were some of the experiences with your family that you remember that contributed to where you are today?

23 of the 24 participants answered this question. The most common answer overall (12 participants – 7 freshmen, 4 seniors, 1 teacher) and the most common answer for the freshman students was that one parent at least is an artist. Students told of drawing with their parents or observing their parents' work and wanting to emulate them. The second most common answer overall (8 participants – 1 freshman, 6 seniors, 1 teacher) and most common answer for senior students was that experiences with other relatives outside of the immediate family contributed to where they are today. These experiences often involved the relative having an interest in art or crafts and teaching or encouraging the participant. The third most common answer overall (4 participants – 2 freshmen, 1 senior, 1 teacher) was that a parent was creative, but not an artist.

Three answers had 6 participants each. Three freshmen and three seniors said that experiences with their fathers were important. Four freshmen and two seniors said that experiences with their mothers were important. Two freshmen and four seniors felt that experiences with their siblings were important.

Four participants (3 seniors, 1 teacher) did not recall any family experiences that contributed to where they are today. Three of the freshman students said they were inspired by their pets. Three of the senior students responded that family trips contributed to where they are today. Two seniors said that family visits to art venues contributed to where they are today. Two seniors reported that their families' expectations for their educations in following their interests contributed to where they are today. Two students (1 freshman, 1 senior) said that they had family friends who contributed to where they are today.

3. How important do you think having the support of your parents was to you?

22 of the 24 participants answered this question. The most common answer overall (17 participants – 7 freshmen, 8 seniors, 2 teachers), the most common answer for the freshman students and one of the most common answers for the senior students and the teachers was that their mothers were supportive of their interests. One of the second most common answers overall (13 participants – 4 freshmen, 8 seniors, 1 teacher) and the freshman students, and one of the most common answers for the senior students, was that their fathers were supportive. The other second most common answer overall (13 participants – 4 freshmen, 7 seniors, 2 teachers) and one of the most common answers for the teachers was that parental support was important. The third most common answer overall (3 participants – 1 freshman, 1 senior, 1 teacher) was that they were unsure about the importance of parental support.

Two teachers reported that their fathers were not supportive. One teacher said that his/her mother was not supportive. One senior student did not think that parental support was important.

One participant in the focus group said that parental support was important. This answer corroborates an existing category.

4. What were some of the experiences with your friends that you remember that contributed to where you are today?

20 of the 24 participants answered this question. The most common answer overall (14 participants - 4 freshmen, 7 seniors, 3 teachers) and the most common answer for each group was that a friend or friends shared a common interest in art. The second most common answer overall (8 participants - 3 freshmen, 3 seniors, 2 teachers) and for the students was that friends provided encouragement. The third most common answer overall (5 participants – 1 freshman, 3 seniors, 1 teacher) was that their friends were creative (with this word provided by the participants).

Four participants (1 senior, 3 teachers) had friends who were professionals in the arts. Four answers had three participants each. One freshman and two seniors said that they had friends in other arts areas. Three seniors reported that their friends provided alternative ways of thinking. Two freshmen and one senior stated that their friends provided ideas. Two freshmen and one senior had friends who provided information about the *Visual Arts Program* of the magnet high school.

Three of the answers had two participants each. Two seniors said that their friends competed with them in art. Two seniors said that their friends also shared other interests.

5. What were some of the experiences with people and events in your neighborhood that contributed to where you are today?

21 of the 24 participants answered this question. The most common answer overall (10 participants- 4 freshmen, 4 seniors, 2 teachers) and for each group was that the neighborhood did not contribute to the participant's creativity. One participant stated that the neighborhood stifled creativity. However, 6 of the participants (2 freshmen, 3 seniors, 1 teacher) said that their neighborhoods were inspirational because of graffiti, architecture, or the presence of a garden, library, or museum. Three participants, one from each group, said that their neighbors were artists. One freshman and one senior responded that Hurricane Ike was a significant event for their neighborhoods.

6. How much do you think where you live contributes to your creativity, if at all?

21 of the 24 participants answered this question. The most common answer overall (9 participants – 1 freshman, 5 seniors, 3 teachers) and for the seniors and teachers was that a location contributed to creativity when it provided access to art (museums, galleries, architecture, gardens). The most common answer for the freshman students (6) and one senior student was that a location contributed to creativity when it was inspiring with such things as architecture, color, nature, and shapes. For one freshman and three seniors, a location also contributed to creativity when it provided an atmosphere that was appealing.

7. What were some of the experiences with people and events in elementary or middle school that contribute to where you are today?

20 of the 24 participants answered this question. An equal number of senior participants (9 each) spoke of elementary and middle school events, while freshman participants talked about more elementary experiences (7) than middle school experiences (4). The most common answer for the students (12 participants – 7 freshmen, 5 seniors) and for freshman students was about experiences with a teacher who encouraged artistic development. The second most common answer for students (8 participants – 1 freshman, 7 seniors) and most common answer for senior students was that they had teachers who taught them valuable techniques in art. Four seniors had elementary teachers and three seniors had middle school teachers who did so. One freshman shared that experience in middle school. The third most common answer for students (5 participants – 1 freshman, 4 seniors) was that school art competitions were important to them.

The only answer common to all three groups (3 participants, 1 for each group) was that they had school experiences related to creativity that were important (writing, activities, architectural drawing). Two other answers had three participants each. One freshman and two seniors had teachers who encouraged them to apply for (Name of School). Two

freshmen and one teacher had non-art teachers who provided time for them to work on art.

Two freshmen had teachers who helped them with their portfolios. One freshman and one teacher had non-art teachers who provided art materials.

One focus group participant corroborated the category of an important elementary school event and one student had an important experience with school competition.

8. What were some of the experiences with people and events at work or volunteering situations that contributed to where you are today?

19 of the 24 participants answered this question. The most common answer overall (9 participants- 1 freshman, 7 seniors, 1 teacher) and for the seniors was that volunteering led to reflection on one's abilities and art. The second most common answer overall (7 participants – 2 freshman, 4 seniors, 1 teacher) was that their work or volunteering was connected to a non-art interest that was important to them, such as music, outdoor activities, or repairing houses. The most common answer for freshman participants (5, with 1 senior) was that they volunteered with children and the experiences influenced their art or encouraged them to be open-minded. The most common answer for the teachers (3, with 3 seniors) pertained to experiences with work for an art-related venue such as museums or university art departments.

Five students (3 freshmen, 2 seniors) said they were able to meet people interested in art through their volunteer experiences. Two teachers worked for an art program or taught an art class. Two freshmen had art-related volunteer activities that allowed them to bond with a family member.

9. What were some of the experiences with people and events in your community that contributed to where you are today?

9 of the 24 participants answered this question. The most common answer overall (3 participants, one from each group) was that experiences with art galleries contributed. For one teacher and one freshman student, museums and having artists living in the area were also important. For one senior student, access to music and dance lessons was important.

10. What were some of the experiences with people and events in the media, whether film, TV, music, radio, internet, or other that contributed to where you are today?

20 of the 24 participants answered this question. The most common answer overall (6 participants- 3 freshmen, 1 senior, 2 teachers) was regarding experiences with film or movies. This was one of the most common answers for freshman students and teachers.

The second most common answer overall (3 participants -1 freshman, 1 senior, 1 teacher) was about experiences with the news.

The most common answer for the students (5 participants – 2 freshmen, 3 seniors) and one of the most common answers for the senior students was books. Another of the most common answers for the senior students (3) was TV shows. Another one of the most common answers for freshman students (3) and one senior was the internet. Four participants (2 freshmen, 2 seniors) reported experiences with animation, anime, manga, and cartoons. Three participants (2 seniors, 1 teacher) had experiences with magazines. Two senior students responded regarding art events that they learned about through the media in general.

11. What were some of the experiences with historical events, whether in your own lifetime or events that you've learned about, that contributed to where you are today?

12 of the 24 participants answered this question. There were no common answers for all three groups. The most common answers (3 participants each) were events in art history (2 seniors, 1 teacher) and events in world history (2 freshmen, 1 senior) that influenced their art. Family history (2 freshmen) and September 11, 2001 (1 freshman, 1 senior) were also important.

12. Students - Are there any experiences that stand out for you with other students in the program?

16 of the 19 students answered this question. The most common answer overall (10 students – 4 freshmen, 6 seniors) and for both groups was the experience of exchanging ideas with other students. Equally common with freshmen (4 participants) and the next most common with seniors (4 participants) was the experience of witnessing the unique use of materials or the use of unique materials by other students. Also important for seniors (3 each) was the recognition that other students were going through similar experiences at school and having students as close friends in the Visual Arts department.

13. Teachers – Are there any experiences that stand out for you with students in the program?

4 of the 5 teachers answered this question. The most common answer (3 teachers) was regarding experiences with outstanding students who received recognition for their work. Two teachers shared experiences about students who struggled, yet eventually succeeded and two teachers shared experiences where they were able to assist students with personal difficulties.

14. Students - Are there any experiences that stand out for you with other students' work?

15 of the 19 students answered this question. The most common answer overall (7 students – 3 freshmen, 4 seniors) and for each group was that they found other students' styles interesting. The second most common answers overall had 5 participants each. Two freshmen and three seniors admired other students' excellent skills and abilities. Two freshmen and three seniors recognized the feelings evoked by other students' work. Three freshmen and two seniors said that other students' styles were different.

Two freshman students and one senior also found that other students' work caused them to reflect on their own work. Two seniors recognized the variety and diversity of other students' work. One freshman and one senior said that other students' work motivated them to work harder and better.

15. Teachers – Are there any experiences that stand out for you with students' work?

5 of the 5 teachers answered this question. The most common answer overall (2 teachers) was that they were able to share pivotal moments with their students. They referred to breakthroughs in student work and seniors reaching the peak in their development. One teacher also found much of the students' work to be unique and one teacher was pleased when assignments led to pieces in students' senior shows. Another teacher found that the students' work provided evidence of the quality of the students in the program.

16. Are there any experiences that stand out for you with the teachers in the Visual Arts department?

22 of the 24 participants answered this question. No answers were common to all three groups. The most common answer for the students (10 participants- 4 freshmen, 6 seniors), the most common answer for the seniors and one of the most common answers for the freshman students was that the teachers provided honest, constructive feedback. The next most common answer for the students (7) was that the teachers were caring. Six of the students stated that the teachers encouraged them to develop their own ideas. Four freshman students and one senior thought the teachers had fun personalities. One freshman student and three seniors appreciated that the teachers introduced new methods and new materials. One freshman student and three seniors reported that the teachers were good professional artists.

The most common answer for the teachers (3) was that the teachers were mentors for each other, as well as for the students. The next most common answer (2) was that the teachers were good collaborators. One senior and one teacher responded that the teachers were their friends.

Regarding the consultants, one teacher commented that it was important for former students of this magnet high school to return to teach and another teacher and one senior student stated that the consultants provided new perspectives.

17. Are there any experiences that stand out for you with the academic teachers?

21 of the 24 participants answered this question. The most common answer overall (4 participants – 1 freshman, 1 senior, 2 teachers) was that the academic teachers tried to incorporate art into the curriculum. The most common answer for the students (2 freshmen, 4 seniors) was that an academic teacher's class was fun. The next most common answer for the students (4 freshmen, 1 senior) was that the academic teacher understood the demands of the art program. Three freshman students and one senior found that their academic teachers were nice people. Four of the students (2 freshmen, 2 seniors) felt that their academic teachers had problems with their instruction. Three freshmen observed that their academic teachers went out of their way to help their students. Three seniors have academic teachers who gave good, constructive feedback.

The second most common answer for the teachers (2) was that the academic teachers collaborated with the Visual Arts teachers regarding student issues and problems.

18. Are there any experiences that stand out for you with the administrators, counselors, or office staff?

10 of the 24 participants answered this question. The most common answer overall (4 participants – 1 freshman, 1 senior, 2 teachers) was that the counselors were helpful. Two of the seniors found that the counselors were not helpful and two of the seniors felt that the counselors had problems regarding college counseling.

Two of the teachers found the administrators to be supportive of the students, teachers, and parents. One senior and one teacher thought that the administrators were good with students. One senior and one teacher thought that the administrators were not helpful.

One freshman reported that the office staff was helpful. One senior reported that the office staff was not helpful.

19. Students - Are there any experiences that stand out for you with other students' parents?

14 of the 19 students answered this question. The most common answer overall (6 participants – 3 freshmen, 3 seniors) and for both groups was that other students' parents were supportive in encouraging art or volunteering for the school. Three of the freshman students specifically mentioned that the parents who were involved with the school store were helpful. Two seniors and one freshman reported that other students' parents were

artists or were interested in art. One freshman and one senior felt that some students' parents were overprotective.

20. Teachers – Are there any experiences that stand out for you with students' parents?

4 of the 5 teachers answered this question. The three most common answers overall (2 each) were that experiences that stood out were with parents who were unhappy, parents who wanted to understand their children, and the observation that some parents were overprotective. One teacher referred to experiences where parents were not involved in the school. One teacher reported experiences where parents were grateful for the teacher's influence on their child. One teacher felt that parents were seeking open communication.

21. Are there any experiences that stand out for you with people from the community, including visiting artists and college representatives?

16 of the 24 participants answered this question. The most common answers overall had 5 participants each. One freshman, two seniors, and two teachers said that the visiting artists provided inspiration. One freshman, two seniors, and two teachers reported that the visiting artists provided opportunities for work or volunteering in art. One freshman, three seniors, and one teacher said that college representatives provided good feedback and helpful critiques. This last answer was the most common answer for seniors. The most common answer for freshmen (2) was that the college representatives shared different opportunities for finding jobs in art.

Two seniors and one teacher mentioned that the (Name of Museum) provided a good opportunity for collaboration and participation in shows. Three seniors felt that the shows and competitions that students could participate in prepared the students for the art world.

Two seniors and one teacher reported that the artist from California gave good feedback. Two seniors felt that the visit with the artist from California was not productive.

One senior reported that the college representatives did not recognize the needs of students who are not planning to major in art in college.

22. To what extent do you consider it necessary for a child to have mentors in his or her field of interest?

23 of the 24 participants answered this question. The most common answer overall for the students (9 participants -6 freshmen, 3 seniors) was that a mentor is important in providing technical skills, knowledge, and materials. The most common answers overall for the three groups (5 each) were that a mentor provides encouragement and that a

mentor recognizes talent and sparks an interest in those being mentored. The next most common answer (4 participants – 2 freshmen, 1 senior, and 1 teacher) reported that mentors provide guidance and feedback.

Three teachers and one freshman student reported that a mentor is needed later, starting with the teenage years. One said that artists develop later, while another participant felt that there is little art education available until later, even in middle school. Two teachers and one senior thought that a mentor is needed in the early years of childhood, as is early art exposure.

Investigator went back through the answers and, though many of them were qualified according to the categories already listed for this question, 23 of the 23 respondents who answered this question said that mentors were important or necessary.

23. Did you have a mentor or mentors when you were growing up?

14 of the 24 participants answered this question. The most common answer overall (11 participants – 5 freshmen, 3 seniors, 3 teachers) and for each group was that a teacher was a mentor when the participant was growing up. Three of the students had a parent as a mentor. Three of the students had a sibling as a mentor. One freshman student had another relative as a mentor.

24. Do you have a mentor or mentors now?

10 of the 24 participants answered this question. The most common answer for the students (6 participants - 5 freshmen and 1 senior) was that a teacher at (Name of School) is a mentor now. The other senior students (1 each) have mentors who are a sibling, another relative, or art ancestors. One teacher has a mentor who is an artist.

25. Do you consider yourself to be a creative person?

24 of the 24 participants answered this question. The most common answer overall (15 participants – 3 freshmen, 7 seniors, 5 teachers) and for the seniors and teachers was that he or she is creative. The most common answer for the freshman students (5 freshmen, 3 seniors) was that they were not sure if they are creative. One freshman student reported that she is not creative.

Three of the focus group participants considered themselves to be creative. Three of them reported that they are not creative. These answers corroborated the existing categories.

26. How do you understand creativity in your life? What sense does it make to you? What does creativity mean to you?

23 of the 24 participants answered this question. (**Correction – 14**) categories were developed from the answers. The most common answer overall (17 participants – 5 freshmen, 8 seniors, 4 teachers) and the most common for each group was that creativity is looking at things in a different way and doing things in a different way. The second most common answers overall had 5 participants each. One freshman, two seniors, and two teachers said that creativity is having many ideas. One freshman, 3 seniors, and 1 teacher responded that creativity is being unique. The third most common answers overall (3 participants, one in each group) were creativity is making a product from one's ideas and creativity is a part of who I am.

The second most common answer for the students (6 participants -1 freshman, 5 seniors) was specifically thinking outside the box. The next most common answer for students (2 freshmen, 1 senior) was that creativity is having original ideas.

The second most common answer for the teachers (2 participants) was that creativity is the desire to make things.

For the focus group, three participants responded that creativity is the desire to make things. Two participants reported creativity is the ability to see potential. One participant said creativity is being unique. One participant responded that creativity is being inventive. One participant reported that creativity is looking at things in a different way and doing things in a different way. These responses corroborate the existing categories.

One focus group participant stated that everyone is born creative and the environment makes the difference. One participant said creativity is due to being raised in a different environment. These do not fit the existing categories.

27. What personality characteristics do you have that you would consider important for a creative person?

19 of the 24 participants answered this question. 22 categories were developed from the answers. The most common answer overall (5 participants – 3 seniors, 2 teachers) and for the seniors and the teachers was that a creative person should be inquisitive. An answer that was most common for the students (3 participants – 2 freshmen, 1 senior) was that a creative person is intelligent. Four answers had two participants each. One freshman and one teacher said that they get art fever. One freshman and one senior said that a creative person should be open-minded. One senior and one teacher responded that a creative person should be open to change. Two freshmen felt that a creative person should be outgoing. One person said that a creative characteristic is funny.

The focus group had one participant for each of the following responses: ambition, patience, commitment, and vanity. None of them corroborate the existing categories.

28. How much do you think having a genetic predisposition for creativity contributes to being a creative person, if at all?

23 of the 24 participants answered this question. The most common answer overall (12 participants – 5 freshmen, 4 seniors, 3 teachers) and for each of the groups was that a genetic predisposition does play a part in creativity. Seven participants (3 freshmen, 3 seniors, 1 teacher) did not think that a genetic predisposition plays any part in creativity. Four participants (1 freshman, 2 seniors, 1 teacher) were not sure.

While the focus group was asked this question, none of the discussion led to clear, specific answers.

29. Tell me what you think the connection is, if any, between interest and curiosity and creativity.

21 of the 24 participants answered this question. One of the most common answers overall (6 participants – 3 freshmen, 1 senior, 2 teachers) and one of the most common for teachers was that curiosity is tied to different ways of doing things, in terms of thinking or materials. The other most common answer overall (1 freshman, 3 seniors, 2 teachers) was that interest is important. The most common answer for students (6 freshmen, 2 seniors) was that interest is tied to new ideas. The third most common response overall (5 participants – 3 freshmen, 1 senior, 1 teacher) was that interest is tied to a person's art.

Two responses had three participants each. One freshman, one senior, and one teacher said that curiosity is tied to inspiration. One freshman and 2 seniors said that interest leads to curiosity. Two participants (freshman students) responded that curiosity leads to interest. Two students stated that interest is tied to inspiration. One teacher felt that a lack of interest in a required task can lead to a search for ways of making that task interesting.

30. How important is it for a creative person to have a good sense of humor?

24 of the 24 participants answered this question. The most common answer overall (17 participants – 6 freshmen, 7 seniors, 4 teachers) was that a good sense of humor is important. Three participants (1 freshman, 2 seniors) did not think that a good sense of humor is important. Three participants (1 in each group) were unsure if a good sense of humor is important.

The participants made further comments about the importance of a good sense of humor. The second most common answer overall (6 participants - 4 seniors, 2 teachers) and for

the senior students was that a good sense of humor is important in dealing with critiques. Five of the freshman students responded that a good sense of humor is tied to their art and has an effect on it. Two teachers reported that a good sense of humor is tied to seeing things in a different way. One freshman student and one teacher felt that a good sense of humor is tied to perseverance.

Three participants in the focus group thought that a good sense of humor is important. One participant responded that a good sense of humor is important in dealing with critiques, and one participant thought that a good sense of humor is tied to seeing things in a different way. All of these corroborated the existing categories.

31. How important is it for a creative person to have lots of energy?

24 of the 24 participants answered this question. The most common answer overall (22 participants – 7 freshmen, 10 seniors, 5 teachers) and for each group was that mental energy is important. The second most common answer overall (14 participants – 5 freshmen, 4 seniors, 5 teachers) was that physical energy is important. The third most common answers overall had 8 participants each. Two freshmen, three seniors, and three teachers said that energy is tied to perseverance. One freshman, four seniors, and three teachers said that energy is tied to having lots of new ideas.

Four participants (1 freshman, 2 seniors, 1 teacher) felt that energy is tied to emotion. One participant in each group responded that energy is tied to interest and curiosity. Two freshman participants reported that energy is tied to originality.

Three of the focus group participants responded that mental energy is important. Two participants thought that physical energy is important. One participant thought that energy is tied to having lots of new ideas. All of these corroborate the existing categories.

32. How important is it for a creative person to have perseverance?

22 of the 24 participants answered this question. The most common answer overall (20 participants – 7 freshmen, 9 seniors, 4 teachers) and for each group was that perseverance is important. The second most common answer overall (13 participants – 5 freshmen, 4 seniors, 4 teachers) and for each group was that perseverance is tied to following through with one's ideas. The third most common answer overall (5 participants – 2 freshmen, 2 seniors, 1 teacher) and for each group was that perseverance is important in overcoming obstacles.

33. How important is it for a creative person to have optimism?

21 of the 24 participants answered this question. The most common answer overall (15 participants -5 freshmen, 9 seniors, 1 teacher) and for the students was that optimism is

important. The second most common answer overall (9 participants -2 freshmen, 6 seniors, 1 teacher) and the seniors was that optimism is important in order to be able to deal with the negative. The third most common answer overall (7 participants -3 freshmen, 3 seniors, 1 teacher) and seniors and the second most common answer for freshmen was that optimism is tied to perseverance. Three freshman students responded that optimism means that they feel good about their art piece.

34. How important is it for a creative person to have the willingness to take risks?

23 of the 24 participants answered this question. The most common answer overall (22 participants – 8 freshmen, 9 seniors, 4 teachers) and for each group was that the willingness to take risks is important. The second most common answer overall (10 participants – 4 freshmen, 2 seniors, 4 teachers) and for freshman students and the one equal to the most common answer for teachers was that taking risks leads to mistakes, which lead to success. The third most common answer overall (6 participants – 3 freshmen, 2 seniors, 1 teacher) and for each group was that taking risks is a big part of experimenting, which is emphasized in the *Visual Arts Program*.

35. What qualities do you think describe someone who is a creative thinker?

15 of the 24 participants answered this question. 17 categories were developed from the answers. The most common answer overall (5 participants -1 freshman, 3 seniors, 1 teacher) and for seniors was that a creative thinker communicates ideas well. The next most common answer overall (3 participants -2 freshmen, 1 teacher) was that a creative thinker is humorous.

Several of the categories have 2 participants responding. In these categories, a creative thinker is a careful planner, friendly, has many different ideas, is open to other opinions, is optimistic, and perseveres after failing. Three of the senior participants responded that creative thinking is tied to writing.

36. How important is it for a creative thinker to have the ability to come up with many ideas to solve a problem?

21 of the 24 participants answered this question. The most common answer overall (13 participants – 6 freshmen, 5 seniors, 2 teachers) and for the students was that having the ability to come up with many ideas is important for creativity. The second most common answer overall (10 participants – 3 freshmen, 4 seniors, 3 teachers) and the most common for teachers was having the ability to come up with many ideas means there are many options. The third most common answer overall (7 participants – 4 freshmen, 2 seniors, 1 teacher) and second most common answer for freshman students was that having the ability to come up with many ideas is important in finding one idea that works.

Five participants (1 freshman, 3 seniors, 1 teacher) responded that having the ability to come up with many ideas means that one can accept others' ideas. Four of the participants (1 freshman, 1 senior, 2 teachers) thought that having the ability to come up with many ideas also involves building the ideas on each other. Two of the participants (1 senior, 1 teacher) stated that developing the ability to come up with many ideas is a part of the Visual Arts curriculum.

Two of the focus group participants responded that having the ability to come up with many ideas is important in finding one that works. One participant stated that developing the ability to come up with many ideas is a part of the Visual Arts curriculum. These responses corroborate the existing categories.

37. What is the relationship between a person's ability to be flexible in his or her thinking and creativity?

21 of the 24 participants answered this question. The most common answer overall (13 participants – 5 freshmen, 6 seniors, 2 teachers) and for each group was that flexibility in thinking is necessary in dealing with changes and obstacles. The second most common answer for the students (4 freshmen, 2 seniors) was that flexibility in thinking is necessary in order to be open to others' ideas. The third most common answer for the students (1 freshman, 2 seniors) was that flexibility in thinking is necessary for ideas to be different from each other.

Several of the categories had two participants responding. For one freshman and one teacher, in art, flexibility must be balanced with a commitment to an idea. Two seniors responded that for an artist, flexibility in thinking is important when dealing with other people. One freshman and one senior felt that flexibility in thinking is how one deals with risk. One senior and one teacher said that for an artist, flexibility is expressed when reacting spontaneously.

One focus group participant said that flexibility in thinking is necessary for ideas to be different from each other. This answer corroborates an existing category.

38. What is the relationship between a person's ability for originality and creativity?

21 of the 24 participants answered this question. The most common answer overall (9 participants – 4 freshmen, 2 seniors, 3 teachers) and for freshman students and teachers was that originality is defined on a personal level and is tied to the artist's personality and style. The second most common answer overall (6 participants – 2 freshmen, 2 seniors, 2 teacher) was that ideas are built on what's come before. The most common answer for the students (6 participants – 2 freshmen, 4 seniors) and the senior students was that

originality means that something has never been done before, is completely different, and/or is new.

39. What part do you think emotion plays in creativity?

23 of the 24 participants answered this question. The most common answer overall (15 participants – 7 freshmen, 5 seniors, 3 teachers) and the most common for all three groups was that emotion guides creative thinking. The second most common answer overall (14 participants – 7 freshmen, 4 seniors, 3 teachers), equal to the most common answer for freshmen and teachers, and second most common for senior students, was that artwork is used to express their emotion and the emotion of others. Two responses were third most common overall (4 participants). Three senior students and one freshman stated that emotion is tied to passion about something. One freshman, two senior students, and one teacher reported that emotion is involved in critiques.

Two freshman students and one teacher responded that emotion is evoked by art. Three seniors felt that emotion is not necessary to be creative.

Four of the focus group participants responded that emotion is tied to passion about something. One participant said that emotion guides creative thinking. These responses corroborated existing categories. One participant stated that completing artwork results in emotion. This did not fit into an existing category.

40. What part does emotion play in your creative process?

22 of the 24 participants answered this question. Two answers were the most common with 12 participants each. Seven freshman students, 4 senior students, and 1 teacher responded that, for them personally, emotion directly affects their products. Six freshman students, 4 senior students, and two teachers stated that, for them, emotion spurs ideas.

Four seniors and one teacher described emotions they experienced when they worked. One freshman and one teacher described working through emotions associated with traumatic life events with their art.

41. Have you ever had an experience where you were doing something that you enjoy in which you were only aware of the here and now, you didn't worry about failing, and you were not really aware of yourself, time, or your surroundings? If yes, what were the circumstances?

24 of the 24 participants answered this question. The most common answer overall (14 participants – 5 freshmen, 6 seniors, 3 teachers) and for the students was that they had experienced something like what was described with a non-art experience, often outdoors. The second most common answer overall (13 participants – 4 freshmen, 5

seniors, 4 teachers) and for the students and the most common answer for the teachers was that they had experienced something like what was described while making art in school. For the teachers, this was during their college years. The third most common answer overall (9 participants – 4 freshmen, 2 seniors, 3 teachers) was that they had experienced something like what was described while making art outside of school. One freshman student and one senior student said that they had not experienced anything like what was described.

42. Describe what you do as a creative person. Tell me a story about the process or processes that you go through when you come up with an idea and see it through.

20 of the 24 participants answered this question. The categories that were created reflect the parts of the creative process or things that were important during the process that the participants told about in their stories. The most common answer overall (14 participants – 6 freshmen, 7 seniors, 1 teacher) and for the students was generating ideas. The teachers' answers all fit different categories. The second most common answer overall (12 participants – 6 freshmen, 5 seniors, 1 teacher) and for the senior students and equal to the most common answer for the freshmen was refining the idea. The third most common answer overall (9 participants – 5 freshmen, 3 seniors, 1 teacher) and for freshman students was that they used writing in their journals.

Seven students (4 freshmen, 3 seniors) described choosing an idea.

Two responses were each given by 6 participants each. Three freshman students, two senior students, and one teacher spoke of using sketches in their journals. Two freshman students and four senior students described planning the execution of the idea.

Two responses were each given by 5 students each. One freshman student and four senior students said that they looked for ways to make their ideas different. Four freshman students and one senior student said that images around them were important.

Four participants (1 freshman, 2 seniors, 1 teacher) talked about seeking feedback during the process.

One freshman student and one senior student reported going back to previous ideas. One freshman student and one senior student said that ideas came to them, rather than searching for them.

43. How do others respond to what you create?

13 of the 24 participants answered this question. The most common answer for the students (9 participants – 5 freshmen, 4 seniors) was that people responded to the physical characteristics of their art pieces ("It's interesting," "It's cool," "I love this."). This was the most common answer for the freshman students. The teachers all answered

in different categories. Two responses were the second most common overall (6 participants). Three freshman students and three senior students reported that people made remarks about the originality of the idea or the piece. The most common answer for the senior students (5) and one teacher was that people responded emotionally to their work. The third most common answer overall (4 participants – 3 seniors, 1 teacher) was that people responded to their techniques.

One freshman student and two senior students said that people made comments about the artist ("You're creative," "That's so you.").

44. How often do you need "alone time" in your creative process, if at all?

24 of the 24 participants answered this question. The most common answer overall (10 participants – 3 freshmen, 4 seniors, 3 teachers) and for the teachers and one of the most common for the freshman students and senior students was that they needed alone time most of the time. Equal to the most common answer for the students (3 freshmen, 4 seniors) was that they needed alone time occasionally. An additional response with 7 participants (2 freshmen, 4 seniors, 1 teacher) was that alone time was needed during planning. The third most common answer overall (4 participants-1 freshman, 1 senior, 2 teachers) was that they needed alone time always.

Two participants (1 freshman, 1 senior) felt that they never needed alone time.

45. Describe times when you need lots of activity and colleagues around you, if any. Are these different times in the process?

24 of the 24 participants answered this question. The most common answer overall (8 participants- 2 freshmen, 5 seniors, 1 teacher) and one of the most common answers for senior students was that the presence of others was important for final product feedback. One of the second most common answers overall (7 participants-2 freshmen, 5 seniors) and one of the most common answers for senior students was that the presence of others was important for planning. The other response with 7 participants (2 freshmen, 4 seniors, 1 teacher) was that the presence of others was important for feedback during the process. The third most common answer overall (5 participants - 2 freshmen, 2 seniors, 1 teacher) was that the presence of others was needed for social support. One of the most common answers for freshman students (3) and teachers (2) was that the presence of others was important, but not at any particular time.

Three freshman students and one senior student felt that the presence of others was distracting. One freshman student and two teachers said that the presence of others was not important.

46. Describe the setting that is most inspirational to you in developing creative ideas.

24 of the 24 participants answered this question. The most common answer overall (12 participants – 4 freshmen, 5 seniors, 3 teachers) and for all groups was that the most inspirational setting was outdoors. The most common answer for the students overall (4 participants – 1 freshman, 3 seniors) and for senior students was that the most inspirational setting was their bedrooms. Three responses were the third most common answers overall with 3 participants each. Two senior students and one teacher reported that new places were most inspirational. Three freshman students stated that places with people were most inspirational. Two senior students and one teacher felt that public places were most inspirational.

Four responses were each given by two participants. One senior and one teacher said that an art venue was the most inspirational setting. One senior and one teacher reported that a place that provided time alone was the most inspirational. Two teachers felt that their studios were the most inspirational settings. Two senior students said that weather was tied to their mood and inspiration.

When writing up the results, the investigator reconsidered two of the responses in the category of "new places." These were more appropriate under "outdoors," for a total of 13 responses and four teachers, leaving one student's response in "new places."

47. What are the characteristics of these settings that you feel are most important for you creative process?

18 of the 24 participants answered this question. The most common answer for students (4 freshmen, 4 seniors) was that the setting had few distractions. The teachers did not have a single most common answer. The most common answer overall, including the teachers (2 freshmen, 2 seniors, 2 teachers) was that the setting had ample work space. Equal to the most common answer for seniors (4) and second most common for freshman students (2) was that the setting be comfortable (furniture, temperature).

Four responses were each given by four participants. Two freshman students and two teachers felt that art materials were important characteristics of the setting. Two senior students and two teachers said that good lighting were important characteristics. Two freshman students, one senior student, and one teacher felt that music was an important characteristic. Two seniors and two teachers reported that resources for their ideas, such as books, were important characteristics.

48. What are some things that you do to your surroundings to enhance creativity?

22 of the 24 participants answered this question. The most common answer overall (8 participants – 3 freshmen, 3 seniors, 2 teachers), one of the most common answers for the teachers and the second most common answer for the students was that they organize their surroundings. Two answers were the second most common overall (6 participants). One was the most common answer for freshman students (4), with one senior student and one teacher. This answer was that they made sure that their supplies and resources were at hand. The other answer was the most common answer for senior students (4), with one freshman student and one teacher. They said that they did not change their surroundings. Two answers were the third most common overall (4 participants). One was equal to the most common answer for teachers (2), with one freshman student and one senior student. They reported that they had objects with special meaning that they need around them, sometimes for inspiration. The other answer (2 freshmen, 1 senior, 1 teacher) was that they put on music.

Three answers were given by three participants each. The first (2 freshmen, 1 senior) was that they made some kind of change to the walls, including painting and applying fabric. The second answer (2 freshmen, 1 teacher) was that they placed their art pieces around the room. The third answer (1 freshman, 2 seniors) was that they made space to work on the floor.

49. Is there a relationship between your creativity and having access to your field of interest?

13 of the 24 participants answered this question. The most common answer for the students (6 participants – 3 freshmen, 3 seniors) was that having access to materials in their field of interest was important to their creativity. The most common answer for the teachers (3) was that the program at (Name of School) allowed the students to find their own creativity. The second most common answer for the students (3 participants – 2 freshmen, 1 senior) was that having access to teachers and experts in their field of interest was important. Two senior students reported that having access to knowledge and resources in their field of interest was important. Two freshman students said that they don't have access to their particular area of interest at (Name of School).

Two of the focus group participants reported that having access to knowledge and resources in their field of interest was important. One participant said that having access to materials in his or her field of interest was important. Both of these answers corroborated the existing categories.

50. Students -Has your creativity changed as you have advanced in your program here at (Name of School)? How so or how not?

16 of the 19 students answered this question. The only answer in common with both groups of students (4 participants – 2 freshmen, 2 seniors) was that the program has provided them with new interests. The most common answer for the senior students (6) was that the program has allowed them to develop their own ideas. The second most common answer for the senior students (5) was that their creativity has become more personal.

Two additional answers were given by 2 freshman students each. The first answer was that they have gained new skills. The second answer was that they use their creativity more often.

51. How do you think that the *Visual Arts Program* has contributed to and supported your creativity?

The teachers also answered this question in terms of the students' creativity.

a. Physical aspects

13 of the 24 participants had answers regarding the physical aspects of the program. The most common answer overall (7 participants – 2 freshmen, 3 seniors, 2 teachers) and for each group was that the facilities (classrooms, equipment) contributed to their creativity. The second most common answer (5 participants – 2 freshmen, 2 seniors, 1 teacher) was that the program provided lots of materials. The third most common answer (4 participants – 2 freshmen, 1 senior, 1 teacher) was that the smaller size of the school and classes had contributed to creativity. Two freshman students also felt that having a gallery in the school contributed to creativity.

b. Curricular aspects

24 of the 24 participants had answers regarding the curricular aspects of the program. The most common answer overall (14 participants – 3 seniors), for the freshman students (8), and one of the most common answers for the teachers (3) was that the students are exposed to many art areas in the curriculum, which contributed to creativity. The second most common answer overall (10 participants) and for the senior students (3) and for the teachers (2), and the third most common answer for the freshman students (5), was that the program supported the students in finding their own paths and interests. Two answers were the third most common answers overall with 9 participants each. The first answer (2 freshmen) and most common answer for the senior students (7) was that giving students lots of constructive feedback contributed to creativity. The second answer (6 freshmen, 2

seniors, 1 teacher) was that teaching the creative thinking process (particularly finding many ideas) contributed to creativity.

Seven participants (6 freshmen and 1 teacher) reported that students learning and improving their skills contributed to creativity. Five participants (2 freshmen, 1 senior, 2 teachers) said that having the three-hour block of time for art contributed to creativity. Four participants (1 freshman, 2 seniors, 1 teacher) said that having field trips that provided opportunities to learn about artists and their art contributed to creativity.

Three of the participants (1 freshman, 1 senior, 1 teacher) felt that the structure of the program in general was good in supporting creativity. Three participants (2 seniors, 1 teacher) stated that teaching students to conceptualize contributed to their creativity. Three participants (1 freshman, 2 seniors) said that announcing art activities in homeroom contributed to creativity. Three participants (1 senior, 2 teachers) think that having an emphasis on writing in the program contributed to creativity. Three teachers said that having consultants in the program contributed to creativity.

Two participants (1 senior and 1 teacher) thought that having students learn to critique effectively contributed to their creativity. Two participants (1 senior, 1 teacher) said that the portfolio reviews contributed to creativity.

Three focus group participants said that having the three-hour block of time for art contributed to creativity. These answers corroborated that existing category.

c. Psychological and emotional aspects

15 of the 24 participants had answers regarding the psychological and emotional aspects of the program. The most common answer overall (7 participants – 2 seniors, 1 teacher) and one of the most common for the freshman students (4) was that the students had good relationships with the teachers, which contributed to creativity. None of the other answers were common to all three groups. The second most common answer for the students (6 participants – 3 freshmen) and most common answer for the senior students (3) was that the students were free to be themselves, which contributed to creativity. One of the most common answers for freshman students (4) and one teacher was that there was a sense of community in the program that contributed to creativity. Three of the freshman students said that having the influence of other art students contributed to their creativity.

Four answers were given by two participants each. Two freshman students said that the influence of students from other art areas in the school contributed to their creativity. One senior and one teacher reported that the ability to interact with the teachers so much contributed to creativity. Two freshman students said that the program was stressful, but

fun, which contributed to their creativity. One freshman student and one teacher said that having the teachers for all four years was important and contributed to creativity.

One focus group participant felt that he or she was free to be him or herself, which contributed to creativity. This answer corroborated an existing category. Five of the participants said that they received psychological and emotional support from the teachers which contributed to their creativity. This answer did not corroborate an existing category, though it appears to be a broader category under which some of the existing answers might fit.

52. How has the *Visual Arts Program* not contributed to or supported your creativity?

The teachers also answered this question in terms of the students' creativity.

15 of the 24 participants answered this question. There were no common answers for all three groups. The most common answer for the students overall and for each group (2 freshmen, 4 seniors) was that they were not interested in some of the art areas that were taught, so this did not contribute to their creativity. Another answer for the senior students with 4 participants was that the program should add a variety of courses to support their creativity. Two seniors and two teachers said that problems with the building, such as lack of space, did not contribute to creativity.

Two senior students felt that they needed more technical skills to support their creativity. Two teachers thought the program was stressful, particularly for some students, and might not support their creativity.

One focus group participant said that there were some students who did not appreciate being in the program, which might have an effect on other students' creativity. This answer did not corroborate the existing categories.

53. Students - In light of your experiences in the program, where do you see yourself going in the future?

15 of the 19 students answered this question. The most common answer overall (1 freshman, 2 seniors) was that the student would be going to college with a non-art major while doing art on the side. The most common answer for the senior students (4) was that they would be going to college with a non-art major. The most common answer for the freshman students (3) was that they would be doing something with art, with no specific mention of college. The second most common answer overall (1 freshman, 2 seniors) was that they would be going to college with a non-art major, but would use the skills that they've learned in the *Visual Arts Program*. Two seniors stated that they would be going to college with an art major and a non-art major. One senior said that she

would be going to a professional art school. One freshman said she would be going to college.

Note: In preparing Chapter IV, the investigator realized that three senior students had answered this question twice. The responses were reviewed and one response for each was chosen as giving the most information. This affected two categories (college with a non-art major, college with non-art major and art on the side), reducing the number of responses in the first category to 2 and the second category to 2. Therefore, the most common answers overall (1 freshman, 2 seniors) were that the student would be going to college with a non-art major while doing art on the side and they would be going to college with a non-art major, but would use the skills that they've learned in the *Visual Arts Program*. Two senior students stated that they would be going to college with an art major and a non-art major. Two senior students reported that they were going to college with a non-art major. One senior would be going to a professional art school. Three freshman students are going to be doing something with art, with not specific mention of college. One freshman said she would be going to college.

54. Is there anything else that you can think of that you wanted to add, based on what we've been talking about?

Some of the answers to this question were coded into the answers for other questions, where appropriate. The remaining answers are suggestions for the program.

3 of the 19 students gave suggestions. The answer that was common to both groups (1 freshman, 1 senior) was that the department needs more space. Two senior students recommended an elective in comic art. One senior suggested having more critiques from guest artists and former students.

Three of the focus group participants suggested that the field trips be spread out over the school year. One of the participants suggested that the teachers provide more classroom structure. One participant asked for opportunities for more student feedback on the senior shows (while in progress). None of these answers corroborated the existing categories.

55. Teachers- In light of your answers to the previous questions, is there a relationship between your creativity and your position as a faculty member of the Visual Arts Department? How so/how not?

4 of the 5 teachers answered this question. The most common answer (4 teachers) was that the change in their creativity was that their creativity was currently focused on the students. One teacher said being creative in instruction and curriculum was important. One teacher reported that it was important to find a balance between creativity with the

students and one's own creativity and art. One teacher said that his/her own creative experiences helped the students adapt when problems in life came up. One teacher said that he/she could use creativity to help students see and do things in different ways.

56. How do you think that the *Visual Arts Program* has contributed to and supported your creativity? How has it not?

4 of the 5 teachers answered this question.

a. Physical aspects

One teacher said that having lots of materials around contributed to his/her creativity. One teacher reported that being surrounded by different images contributed to his/her creativity.

b. Curricular aspects

Two teachers said that they were inspired by students' work. Two teachers responded that sharing the creative process with students contributed to their own creativity. One teacher said that sharing his/her art knowledge contributed to his/her creativity.

c. Psychological or emotional aspects

Two of the teachers said that they found the students to be energizing and supported their creativity. One teacher responded that he/she thought that enjoying the company of talented people contributed to his/her creativity. One teacher said that the collaboration with the Visual Arts teachers contributed to his/her creativity. One teacher reported that the consultants contributed to his/her creativity and brought younger perspectives to the program.

Additional findings:

1. High school experiences outside of (Name of School)

The questions developed for the interviews did not really take into account the high school experiences of the teachers or those of students who came to (Name of School) as sophomores. Four of the teachers reported that high school events were significant to them. Two of the teachers said that they had a sense of belonging or feeling of community at their high schools. One teacher reported having an art teacher who encouraged him/her in his/her art. One teacher said that the fact that the academic teachers challenged him/her was important. One teacher related the importance of finding out what he/she didn't want to do, so that art became more appealing. One senior student had friends who were not artists, yet inspired her to think outside of the box.

2. Music

As I was reading through the experiences of the participants, I noticed that there were many references to music. There might have been more participants reporting these experiences if they had been asked about music directly. Some of these experiences were described in the results for Questions 47 and 48. The remaining references are described below.

18 of the 24 participants made references to experiences with music in their lives, in and outside of school. Eight of the participants (2 freshmen, 5 seniors, 1 teacher) said that they play or played a musical instrument. One senior thought that playing music helps her to get in the mood for making art. Seven of the participants (2 freshmen, 3 seniors, 2 teachers) reported that they had or have relatives in their families who are musicians and/or vocalists.

Five of the participants were not specific, but said that they like to have music playing while they are working. Six of the participants (3 freshmen, 2 seniors, 1 teacher) use music and/or lyrics as inspiration for their art pieces. Five of the students (3 freshmen, 2 seniors) stated that they use music to zone out (block out distractions, get in the mood for making art, focus on art). Three students (2 freshmen, 1 senior) said that they felt that music helps them while developing their ideas. Two freshman students responded that the dance and music time at the school on Fridays. Two seniors said that they find music to be distracting.

3. Genetic predisposition

When answering Question 28, seven participants (3 freshmen, 4 seniors) appeared to equate creativity with artistic ability. For the three freshman students, no one in the immediate family was specifically an artist or artistic, so they said that there isn't a genetic predisposition for creativity. For the four seniors and one freshman, someone in the family was an artist, so they said that there might be a genetic predisposition for creativity. One freshman student answered both ways.

One senior student said that talent is innate and creativity can be taught and learned.

4. (Name of School) legacy

Another observation was that several participants (6) had ties to (Name of School) before their current participation in the program. Two freshman students said that they had brothers who attended (Name of School), (added by investigator after second member check responses completed) one who was in the vocal program. One senior student said that her father is a teacher at (Name of School). One senior reported that her sister attended (added by investigator after second member check responses completed,

because it was left out in error) (Name of School) and was in the Visual Arts

Program. One teacher was a student at (Name of School). One senior student stated that the fact that her art teacher's children attended (Name of School) influenced her decision to audition.

APPENDIX F

PEER CHECKS

Categories Coded by Peer Check Professionals

Question	Categories	Categories
	Peer Check 1	Peer Check 2
Teachers-Are there any	Rewarding for teacher	Important issues
experiences that stand out	Helping students from	concerning students
for you with students in the	difficult situation to be	Taking feedback from
program?	successful	students
		Rewarding
		Pride in their
		accomplishments
Teachers-Are there any	Students gaining an	Students taking
experiences that stand out	understanding, the "Ah	ownership of their work
for you with students' work?	Hah!"	Trial and error, but
	Helping students to express	students rising up to the
	themselves	challenge
	Witnessing creativity	
	Having quality students	

Question	Categories	Categories
	Peer Check 1	Peer Check 2
Students-Are there any	Parents present on campus	Use their own parents as
experiences that stand out	Parents are "cool"	point of reference to
for you with other students'	Parent volunteers	evaluate other parents
parents?	Parents over-involved	Parents provide guidance
	Parents are supportive	Parents are supportive
	Parents like family	Parents are
	Own parents do not offer	overprotective
	encouragement	Parents are active
	Parents into art	Parents are role models
	Parents offer encouragement	Parents are "cool" –
	No experiences	balance between getting
		involved and not
		Parents model what it is
		to be good parent
		Parents are more
		informal adult
		relationship

Question	Categories	Categories
	Peer Check 1	Peer Check 2
Did you have a mentor or	Music teacher	Mentors are important
mentors when you were	Art teacher	Who are the mentors –
growing up?	Parent	art teachers, teachers,
	Other family	family members
	Teacher	What defines mentorship
	Sibling	– support,
	Artist	encouragement, pushing,
		challenging, inspiring,
		huge influence,
		understanding students'
		interest, believing in
		talents, knowledgeable in
		subject, can guide,
		respect, want to emulate

Question	Categories	Categories
	Peer Check 1	Peer Check 2
How important is it for a	Yes	Key factor in being
person to have perseverance?	Increases high achievement	successful as well as
	Completing projects	creative
	Getting through frustration	Mentors, teachers, and
	Avoiding burnout	friends help people
	Desire to finish	persevere
		See idea through
		Move past roadblocks
		Deal with failure
		Need it in order for
		others to see creative
		ideas
		Deal with rejection
		Tied to energy

Question	Categories	Categories
	Peer Check 1	Peer Check 2
What is the relationship	Nothing is truly original	Showing expression of
between a person's ability for	Creativity is making	yourself
originality and creativity?	something original	New
	Can be creative without	Nothing is really new,
	being original	but it's how you interpret
	Everyone is an original	it
	Only something original is	Take old idea and make
	creative	it unique
		Make it better than what
		you already have
		Not everything original
		is creative
		Don't need to be original
		Originality is a different
		take on something
		Tied to effort,
		willingness to take risks
		Risk- people may not
		recognize the uniqueness
		of your effort