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Investigating Spirituality Through Elementary Art Lessons: A Case Study

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INVESTIGATING SPIRITUALITY THROUGH ELEMENTARY ART LESSONS:
A CASE STUDY

Kimberly Ann McHenry

268 Pages

The purpose of this case study was to investigate the inclusion of spirituality in a five-week art unit. Spirituality was defined as the interconnectedness with nature and all living things, with human beings and with a higher power. This study was conducted within two Central Illinois public schools, working specifically with third and fourth grade students. Eleven students participated in the study by completing the unit, sharing their sketches/artwork, and participating in an audio-recorded interview conducted by the teacher/researcher. Daily teacher observations/reflections were also used as data.

The spirituality unit consisted of students exploring the subject of light in the framework of the three-part definition. The unit began with creating the sense of awe by students walking into a darkened candle lit classroom, covering works or artists and images from the different categories, creating sketches, and making Styrofoam plate prints. Interviews were held once the unit was completed.

In conclusion, this thesis determined that the teacher must find a definition for spirituality that is acceptable for the public school setting, create lessons that include spirituality by finding a broad subject matter to generate a variety of spiritual related outcomes, and acknowledge the influence of the teacher's predisposition toward spirituality as a factor in the success of teaching a spiritually-infused lesson. The thesis also determined that students will respond to a spiritually

oriented lesson with a sense of awe and draw upon their personal experiences, cross-curricular knowledge, and the three-part definition of spirituality in their artwork and responses. When creating artwork, students represented images that showed interconnectedness to human beings and nature/living things, as opposed to interconnectedness to a higher power while in conversation, eleven percent of the students' responses mentioned a connectedness to a higher power. This thesis aims to offer art educators useful tips on including spirituality in their art lessons and provide some ideas on how to create a more holistic approach to elementary art education.

KEYWORDS: Spirituality; Art Education; Elementary; Case Study; Cross-Curricular

INVESTIGATING SPIRITUALITY THROUGH ELEMENTARY ART LESSONS:
A CASE STUDY

KIMBERLY ANN MCHENRY

A Thesis Submitted in Partial
Fulfillment of the Requirements
for the Degree of

MASTER OF SCIENCE

School of Art

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INVESTIGATING SPIRITUALITY THROUGH ELEMENTARY ART LESSONS:
A CASE STUDY

KIMBERLY ANN MCHENRY

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CHAPTER I: THE RESEARCH PROBLEM AND ITS BACKGROUND

Introduction

In searching for ways to deepen meaning and learning in the art classroom, London (2007) has considered spirituality as a necessary component of art education. London's writing of *No More Secondhand Art* (1989) along with writings by numerous others led to a personal search as an artist/educator to study spirituality in art education. This journey includes active membership in the Caucus on the Spiritual in Art Education, an issues group within the National Art Education Association, which London founded and chaired for many years.

Art educators (London, 2007; Campbell, 2003; Bates, *in press*), in addressing spirituality, have advocated for teaching to the whole child by using a more holistic approach in the curriculum. One of the biggest hurdles in implementing a spiritual-based curriculum continues to be the elusive definition of spirituality and its ties to religion. The words spirituality and religion both stir up the divide supported by our nation's stance of separation of church and state in regards to public education.

The field of education has taken many steps towards the inclusion of spirituality in the curriculum for children. Holistic education, as a movement, was first introduced to the field in the 1960's and 1970's. Its roots in art and art education start farther back in history.

Strickland (1992) explained how the Romantic movements of England, France, Germany, and America brought two of the qualities of spirituality, interconnectedness to a higher power and to nature and all living things, to American art education. The third quality, interconnectedness to human beings, was visible in American art education starting with the Industrial Revolution. Holistic education, focused on one or more of the aspects of spirituality, was visible in various educational movements. These included Dewey's Progressive Movement,

Aesthetic Education, Values Education, and Social Justice Art Education (Wygant, 1993; Ingham, 1972; Silver, 1972; and Anderson, 2010).

In a broader focus on our spiritual nature, Spiritual Intelligence, or SQ was introduced as the third intelligence adding the spiritual realm to our Intellectual (IQ) and Emotional Intelligence (EQ). SQ encompasses creativity, discrimination, and our moral sense of compassion and understanding along with when and where to apply these morals to situations (Zohar and Marshall, 2000).

Respected educational theorists and researchers (London, 2007; Hay and Nye, 2006; Noddings, 2002; Palmer, 1998) have long advocated for the inclusion of spirituality within the classroom, yet the methodology for incorporating spirituality across all levels of academia and its impact on students has remained unclear. Art education needs to define and establish acceptable methods for incorporating a more intentional holistic approach to the education of our children.

Purpose of the Study

The purpose of this study was to investigate the relationship between the inclusion of spirituality in an art lesson and the response of the students to the spiritual aspects of the lesson. Although some examples of art lessons that focus on spirituality exist, many are focused on high school or college level settings. Many lessons focused on creating cultural and often sacred art objects. This study sought an alternative approach to teaching about spirituality focusing on the interconnectedness which human beings, nature and all living things, have with light. It also considered how light could symbolize a higher power.

Need for the Study

According to London (2007), Palmer (1998), and Noddings (2013), teaching to the whole student, including the spiritual aspects, is vital for meaningful learning to take place. Kidder and

Born (1998) presented spirituality in art education as ethical decision-making, encompassing five key, globally-common values: compassion, honesty, fairness, responsibility, and respect. Bates (*in press*) emphasized student-centered, holistic, studio-based, process-oriented, thematic, global, fluid, and fitting as characteristics of spiritually-informed art education. Campbell (2005) shared that reflective practice was key in spirituality, specifically when geared to pre-service art education. Shaban (2007) considered spirituality in art as “the connection between the magical unknown and us, where the unknown relationships between the two worlds of the soul and the soulless are established” (p. 1493).

The presence of spirituality in the classroom can take many different forms. Wesley (1998) described teachers as catering to the spiritual needs of students. Kidder and Born (1998) enlisted the teacher as an ethical role model, while Cloninger and Mengert (2010) saw teachers as creative role models in dealing with global problems and challenges with serenity and well-being. Suhor (1999) described the teacher’s role as an agent of joy and as a conduit for transcendence. EAUDE (2001) defined generosity, sensitivity, and an awareness of others as common qualities that teachers found in spiritually-aware students. Dealing with tragedies, losses, or severe illnesses all enhanced the spiritual growth in children.

What is not known is how an investigation of spirituality can successfully occur in the teaching practices of an elementary art teacher and how students respond to a lesson that includes a spiritual aspect. Campbell (2003) conducted research that focused on three higher education art professors with diverse spiritual beliefs and their shared common characteristics in their teaching of spirituality. More recently, Campbell (2012) focused on the human spirit, defined specifically as the interconnectedness of all life forms, as one of the five emerging themes in holistic art education. Cast (2012) used a holistic approach with a Catholic high

school art class working on glass tile mosaic inspired by the Islam culture. McKenna (2012) provided examples of how reflections on the context, the learner, the content, and the teacher can be used to create art experiences to bring the four components of a learning system into a dynamic relationship. McKenna shared that this is how more meaningful experiences may occur with both students and teachers at a high school level.

Published research on spirituality within elementary art education was even more limited. Freyermuth (2012) discussed her personal experience of conducting a learner-centered art education program at several elementary schools where the students were engaged in personally meaningful work that fully engaged their mind, body, and (2012) shared her experience in teaching 6th graders how to create a painting inspired by Chagall that is personally meaningful. Inspired by artwork she created while healing from the loss of her mother, McComb created a lesson that helped students reflect and heal from personal loss. Bates (in press) wrote a relevant transcript on spiritually informed art education in a secular K-12 classroom. Her writing focused on spiritually-informed and holistic art education, and included four sample units of study that were spiritually-oriented. These four units included project ideas including vestments, storytelling through myths and masks, mandalas, and effigy vessels.

This research provided an opportunity to see how third and fourth grade students responded to a lesson on the topic of light. Students experience light as both a necessity and luxury, in the mundane and special occasions, and as tangible and symbolic. Light is essential for humans and all living things. The goal of this lesson was to have students interpret and examine the term *light* from the spiritual context of its connectedness to people, nature and all living things, and how various cultures use light to represent a higher power in a way that would be acceptable by parents and administration in two public elementary schools.

h Questions

In order to discover some of the effects of spiritual-based art lessons have on third and fourth grade students, the research questions are stated as follows:

Research question 1: In what ways can an elementary art teacher in the public school system investigate the idea of spirituality within an art lesson?

Research question 2: How do elementary students respond to an art lesson that investigates spirituality?

Definition of Terms

The following represent the way various terms will be used in this study. The definitions, similarities, and differences between spirituality and religiousness (or religiosity) used throughout scholarly research is one of the major focuses of the research and spans across nursing, organizational management, psychology, psychology of religion, and education. Definitions derived from research will be used for this study.

Spirituality -- Spirituality will be defined in three distinct, correlated measures: interconnectedness with human beings, nature and all living things, and a higher power (Liu & Robertson, 2011).

Religiousness -- Religiousness will be defined by the spirituality construct of, “interconnectedness with a higher power” (Liu & Robertson, 2011, p. 38). By this definition, religiousness is considered a component of spirituality.

Holistic Education -- Holistic Education will be defined as education which engages the physical/sensory, emotional, and cognitive aspects as well as social, moral, and spiritual attributes (Simmons & Campbell, 2008). Holistic education will also define education in which spirituality is addressed.

Scope of the Research

The research involved one K-8 art educator (the researcher) teaching at two different rural schools in Central Illinois: 3rd and 4th grade classes from School A and one 3rd/4th grade class from School B. The principals/superintendents were contacted by email for consent to conduct the research in their school and parent permission and child assent forms were given out by the school secretary and sent home with the students at each school prior to beginning the study. Permission and assent forms were given to the school secretary to keep in a secure place in the school office until the researcher completed and grades were posted for the lesson unit.

The research study was held during their regularly scheduled forty-five minute art class. The researcher collected data during a five-week art lesson focusing on spirituality in which the whole class participated. The researcher gathered the following data from all students: written or illustrated student reflections in response to teacher-created prompts to artists' work and light, images of student work, and self-assessments. Students engaged in teacher-led class discussions about light. Students were given numerous examples regarding light and how it related to human beings, nature and all living things, and how it may be used to symbolize a higher power. Preliminary sketches were followed up by a final sketch which was used to create a Styrofoam plate for printing. Students learned about the process, created their own printing plate and printed at least 10 images, choosing their ink and paper color.

Following the lesson and the posting of grades, the researcher conducted oral interviews with student participants who provided student assent and parental permission. The researcher utilized a set slate of open-ended questions. The researcher also photographed and/or copied their writing and artworks after grades for the unit were turned in. The university Institutional Review Board granted permission #854248-2 for the study.

Third and fourth grade classes were selected because it is from ages 8-10 that a child begins forming moral reasoning (Kohlberg, 1984; Piaget, 1932). School A has a separate class for third and fourth grade art. School B, being much smaller, has combined grades throughout the first through eighth. Third and fourth grades are combined for all their classes, including art.

The data was collected and analyzed with an emergent strategy with the goal of determining themes based on the three-part definition of spirituality (Charmaz, 2008). The responses and observations were analyzed for trends and categorized so that generalizations or theories could be made. Triangulation between observation notes, student work and student interviews, were employed to analyze intersections among the data (Denzin & Lincoln, 2011).

This unit did not differ dramatically from typical art units. The first day of a unit is used to introduce the students to the concept and complete preliminary sketches. The teacher/researcher utilizes a modified approach of art criticism, art history, aesthetics and art production in all of the lessons, with some including all four components while others only touch on two or three aspects. The discussions regarding art history, art criticism, and aesthetics typically occur within the first few days of the unit so that the remaining time can be focused art production. Some lessons follow up with a critique while others don't.

The biggest difference in this unit was the content's focus on spirituality as the interconnectedness of people, nature and all living things, and a higher power and my effort to keep it in the forefront throughout.

Participants

Participant groups were the art teacher (the researcher) and her 3rd and 4th and 3rd/4th grade classrooms at two rural K-8 schools in Central Illinois. Three third graders and four fourth graders from School A were involved in the study. School A has a total of 111 students and an average class size of 12, with 51% of the students coming from low income situations and 17% of the students having disabilities. The range of racial/ethnic diversity includes 8.1% Hispanic, 3.6% Black, and 1.8% from two or more races. School A is located in a village of 455 in Livingston County (Illinois State Board of Education, 2014-2015).

At School B, three third graders and one fourth grader was involved in the study. School B has a total of 52 students with an average class size of six students. 19% of the students come from low-income situations, while 19% of the students have disabilities. School B has a small range of racial/ethnic diversity with only 3.8% of the students coming from two or more races (Illinois State Board of Education, 2014-2015).

This research was conducted in the teacher/researcher's fourth year of teaching at these two schools. These schools are also where the teacher/researcher's teaching career started four years ago. For the past two years, the teacher/researcher also taught at a third K-8 school which has a total enrollment of 299, with an average class size of 17, located in Peoria County.

At School A, third and fourth grade are taught separately, typically using a year-long curriculum for each catered to the Illinois State Standards and National Core Arts Standards.

The art class for School B consists of third and fourth grade together. A two year curriculum is

utilized which includes projects written for both third and fourth grade art. Since children ages 8 to 10 are beginning to develop their abstract thinking skills and moral reasoning (Kohlberg, 1984; Piaget, 1932) the teacher/researcher chose third and fourth graders for the study. Initially second grade was considered for the study, but the fine motor skills needed for block printing are not fully developed. Second graders would also have difficulty answering some of the abstract questions designed for the lesson.

Demographics

School A is located in a village of 455 in Livingston County (Illinois State Board of Education, 2014-2015). Casey's General Store and a local pub are the two largest businesses in the village. Three churches, a boarding/grooming dog business, community library, town shed, 3 churches, and a variety of locally-owned small businesses are located in the village and the surrounding farmland.

School B is located in an unincorporated farming community of 229 in Livingston County. Businesses in the community consist of a bank, post office, church, hardware store, and Cooperative Association, serves the community's need for grain, feed, insurance and Internet services (Illinois State Board of Education, 2014-2015).

Limitations

Limitations to the study included researcher/teacher bias, the numbers of participating students, student absences, and time constraints. When the teacher is also the researcher, care must be taken to limit bias. The methods used for limiting bias in this study included not knowing which students were involved in the study until after the lesson was completed and posting grades online and objective grading of the art project. Students' names were also replaced with letters from the alphabet to maintain anonymity. The teacher/researcher had no

control over the number of participating students or student absences. Concerning time restraints, when the IRB was approved, there were exactly five weeks remaining to teach the lesson. The unit was taught in the last weeks of the school year and ended on the last day of art for each class.

Summary

This study hoped to reveal the relationship between the inclusion of spirituality in art lessons and the students' awareness of spiritual aspects of the lesson. This research presented one way in which spirituality could be articulated in the teaching practices of a K-8 art educator, enabling the readers to reflect upon their own classroom practices regarding addressing the spiritual in art. From the viewpoint of the participants, the study created an opportunity for students to reflect upon their artwork, their own spirituality, and their thought processes when making art.

The data served as a starting point for educators wishing to incorporate more spiritual aspects in their lessons. By including data regarding student response to spiritual aspects of the lesson, this study hopefully provided a richer example of what spirituality in the visual arts classroom looks like and how it might be received by 3rd and 4th grade students. It may also reveal the benefits of implementing holistic education for art educators.

CHAPTER II: REVIEW OF RELATED LITERATURE

Introduction

This review of literature focused on spirituality and its relationship to religion, measuring spirituality, cross-disciplinary research on spirituality, history of holistic art education, definition of holistic education, current practices in holistic education, benefits of holistic education, and spirituality in the classroom.

Describing Spirituality and Its Relationship to Religion

Many researchers stated the necessity of considering the many meanings given to the terms spirituality and religion from religious and sectarian groups (Buck, 2006; Haynes, 1998; Zinnbauer, Pargament, Cole, Rye, Butter, Belavich, Hipp, Scott, & Kadar, 1997). Historically, spirituality has been used interchangeably with religiousness, as a separate construct that incorporates religiousness, or as a concept independent of religiousness (Dyson, Cobb, & Forman, 1997; Helminiak, 1996; Hill, Pargament, Hood, McCullough, Swyers, Larson, & Zinnbauer, 2000; London, 2007).

Tacey (2004) showed how spirituality was viewed as separate from religion when he interviewed young adults who felt religion got in the way of their return to the “primal ground” or “spiritual core” (p. 87). Irish scholar and social psychologist Diarmuid O’Murchu (1997) supports the separate nature in his book *Reclaiming Spirituality* with the opening statement, “Our spiritual story as a human species is at least 70,000 years old: by comparison, the formal religions have existed for a mere 4,500 years” (p. vii). O’Murchu considered spirituality as primarily significant in our search for meaning and purpose in life.

In the last decade, spirituality has increasingly been separated from religiousness (Buck, 2006; Hill & Pargament, 2003; Liu & Robertson, 2011). Spirituality, in its new context, may be

perceived more positively than religion. Kapuscinski and Masters (2010) viewed spirituality as a “healthy, freeing path toward growth, whereas religion is viewed as a potentially restrictive barrier” (p. 193).

Tacey (2004) shared a more complementary view of the relationship between religion and spirituality. His view was that religion that is contrary to the spiritual resists change, but when working with the spiritual, is able to invite change while looking to the future. Berryman (2001) considered spirituality as non-verbal and religion as the verbal language that refers to spirituality.

Others investigate spirituality while giving little or no attention to religion. Peck (1997) defined spirituality as involving harmony toward an unseen order of things. Eade (2001) recognized that the spiritual “seems to be the search for answers to the ‘why, where, and who’ questions, those which explore purpose, location, and identity” (p. 231). Hart (2003) considered people as spiritual beings who have human experiences, rather than human beings who have spiritual experiences. Hay & Nye (2006) claimed that children’s spirituality is “rooted in a universal human awareness”(p.18). Cloninger and Mengert (2010) perceived spirituality as the science of well-being. Focused on creativity, they advocated looking beyond, to see what is within us, to reinvent ourselves, and discover what being human means. Art educators looking to utilize a holistic approach to education are sensitive to the confusion between spirituality and religion. Campbell (2012) clearly stated that religion is not implied in the definition for spirituality used in holistic art education literature. London (2004) defined the spiritual as anything we hold at the “core of our belief and value system” (p. 4). London (2007) later defined the spiritual as “issues of ultimate concern” (p. 1483). Campbell (2012) defined spirituality as “the awareness of the interconnectedness of all life forms” (p. 78). She explained

that spirituality can be expressed without religion, yet some aspects of religious practice are unmistakably spiritual.

Measuring Spirituality

Initially, quantitative methods were used to measure spirituality. Spirituality scales became one of the most common tools used for this area of research (Fornaciari, Sherlock, Ritchie, & Dean, 2005; Heaton, Schmidt-Wilk, & Travis, 2004; King & Crowther, 2004). Fornaciari et al (2005) wrote, “Between the years of 1996 and 2004, 65 new scales were published within the Spirituality, Religion, and Work Domain (SRW) in an effort to appropriately measure spirituality” (p. 28). The scales measured a variety of topics such as spirituality at work; salient beliefs; spiritual therapies, benefits and circumstances; religion and the sociology of culture: visible and invisible Catholicism; spiritual values of John of the Cross; and individual’s ethical system. The research of Fornaciari et al revealed that a wide approach to spirituality was used in the creation of the scales. Pre-existing spirituality scales were used for research by Heaton, Schmidt-Wilk, and Travis (2004). Their research explored spirituality in organizations and targeted five indications including health, happiness, wisdom, success, and fulfillment. Others adapted scales from those proven valid through previous research (Jagers & Smith, 1996; Liu & Robertson, 2011).

Jagers and Smith (1996) used several scales in their research. The first was a spirituality scale that was composed of 20 items written from an Afro cultural perspective. A religious life inventory looked at internal, external and quest motivations for religion in one’s life. The third scale, the spiritual well-being scale, measured religious and existential well-being. God as causal agent measured the “degree to which God is seen as the primary causal agent for naturally occurring events” (p.434). The final scale used was locus of control which measured the

perception of control to situations or events as internal or external. Of most relevance to the current research, Liu & Robertson (2011) developed a scale to be used in the workplace. It was a cross-disciplinary scale to measure spirituality. The researchers described spirituality as interconnectedness with human beings, nature and all living things, and a higher power. They used the following statements in their survey to measure the interconnection with a higher power:

I believe there is a larger meaning to life; There is a power greater than myself; I believe that death is a doorway to another plane of existence; There is an order to the universe that transcends human thinking; and I feel that I have a calling to fulfill in life. (p. 41)

The following statements were used to measure the interconnection with human beings: It is important for me to give something back to my community; I am concerned about those who will come after me in life; Life is most worthwhile when it is lived in service to an important cause; Humans are mutually responsible to and for one another: and I am easily and deeply touched when I see human misery and suffering. (p.41)

The last interconnection listed by the researchers dealt with nature and all living things and included:

I sometimes feel so connected to nature that everything seems to be a part of one living organism; I have had moments of great joy in which I suddenly had a clear, deep feeling of oneness with all that exists; All life is interconnected; I believe that on some level my life is intimately tied to all of humankind; and I love the blooming of flowers in the garden in the spring as much as seeing an old friend again. (p. 41)

This description of spirituality guided this study. Although scales set clear boundaries on defining spirituality, research has indicated the need to question the validity of the scales used in

spirituality research (Hyman & Handal, 2006; Kapuscinski & Masters, 2010; Lui & Robertson, 2011). The inconsistencies in measuring spirituality were a topic found in academic journals from many disciplines including education, medicine, psychology, science, and business. To validate the spirituality scales created, many researchers relied on quantitative research methods.

Qualitative research provided alternative methods to examine spirituality and many researchers chose this path. One measurement of spirituality relied upon Van Manen's (1990) four lifeworld essentials including lived space (spatiality), lived body (corporeality), lived time (temporality) and lived human relation (relationality). This framework provided Hyde (2005) with a structure to gain insight into a ten year old's spirituality.

Berryman (2001) explained spirituality as part of our non-verbal communication system, specifically as non-verbal referencing. According to Berryman, connotation influences our language throughout our life, helps to reveal the non-verbal nature of spirituality, and "communicates through modes and vectors, a kind of deep body knowing" (p. 11). One pair of related terms that Berryman used to explain and measure spirituality was animate/inanimate on the x-axis and full/empty on the y-axis. The second pair was toward/away from as the x-axis while anima/animus created the y-axis. The final pairing was controlling/letting go on the x-axis with consuming/being consumed on the y-axis. He discussed laughing, crying, and silence as the three calls "used by human beings to signal aspects of their spirituality" (p. 15) Ecstasy, or overwhelming delight, is paired with devastation, or overwhelming the x-axis while crying/laughter make up the y-axis. Laughing categories included derision, sardonic, ironic, neutral (from tickling), comic, mirth, and delight. Crying categories included tears of pleasure, theological grace, heroism, mourning, revenge, seduction, escape, empathy, and fiction. He created one more measure with quiet (as inward motivation)/silence (imposed from outside)

taking up the x-axis and stillness as movement/stillness as sound on the y-axis. He was the only researcher who included the “dark side” (p. 18) or negative tone of spirituality in his measurements.

Hyde (2008) investigated four characteristics of children’s spirituality, including the felt sense, integrating awareness, weaving the threads of meaning, and spiritual questing. He believed that detecting and nurturing these characteristics in children would serve as a way to measure and enhance spirituality.

Cross-Disciplinary Research on Spirituality

The repeated focus on the inclusion of spirituality within cross-disciplinary research indicated a shift to a more holistic approach in the respective fields (Bruce, Sheilds, & Molzhan, 2010; Heaton, Schmidt-Wilk, & Travis, 2004; Hill & Pargament, 2003). Tacey (2004), urged the inclusion of spirituality in fields outside of teacher education, including psychology, philosophy, and public health. Nursing, science, organizational management, psychology, and psychology of religion have all acknowledged the need for an inclusion of spirituality in their respective disciplines (King & Crowther, 2004; Hill & Pargament, 2003; Kapuscinski & Masters, 2010). As with all of the research focusing on spirituality, the act of defining, measuring, and assessing its validity continues to challenge all disciplines (Benefiel, 2003; Bruce, Sheilds, & Molzahn, 2010).

History of Holistic Art Education

The field of education has taken many steps towards the inclusion of spirituality in the curriculum for children. Holistic education, as a movement, was first introduced to the field in the 1960’s and 1970’s. Its roots in art and art education start farther back in history.

Strickland (1992) explained that Art's Romantic movements of England, France, Germany, and America in the 1800-1850 all brought intuition, emotion, and imagination to the forefront of art. American Romanticism came about as the relationship between the natural environment and the American settlers shifted from menacing to inspiring and even spiritual. This shift was also apparent in the writings of American writers such as Emerson and Thoreau, who "preached that God inhabited nature, which dignified landscapes as a portrait of the face of God" (p. 81).

It is within the American Romanticism movement that two of the defining qualities of spirituality, interconnectedness to a higher power and to nature and all living things, first surfaced in American art education. As American artists turned to landscapes as a primary subject matter, art educators in 1840 made representational drawings of landscapes as a primary focus of art education, as a way to "nurture an appreciation of beauty as it developed accurate perception" (Wygant, 1993, p. 5). Efland (1990) shared that within the invention of the Common School Art Movement in America, vocal music and drawing were included in the curriculum to "elevate moral standards" (p. 74).

The third quality of spirituality, interconnectedness with all human beings, became visible in American art education after the Industrial Revolution. The introduction of Dewey's Progressive Movement in 1915 (Wygant, 1993) marked the first interest in multi-cultural influence on the art education curriculum.

The roots of spirituality in art education surface from as early as the 1830's and 1840's in America's common schools (Wygant, 1993). Practical drawing was present in the schools along with an overlying "general belief in the unity of the good, the true, and the beautiful" (p. 4-5). Representational drawing, which became part of the school curriculum, was thought to "nurture

an appreciation of beauty as it developed accurate perception” (p 5). In 1838, Henry Bernard advocated for aesthetic and moral values as part of the curriculum (Wygant, 1993). According to Wygant (1993), in 1915, Dewey was an advocate for art as experience and saw learning as a reconstruction of experience for society and the individual. For Dewey, art was a flux of doing and undergoing, action and reflection, and impression and expression (Wygant, 1993). Dewey (1934) believed experience was more than just observed, but became something which enveloped us. As a strong correlation to this research’s focus, he referred to the interconnectedness of human beings with nature and how this deepens our experience even more.

Wygant (1993) explained that the 1920’s brought a focus on creativity and self-expression as part of the Progressive Education Movement. Appreciation of beauty in everyday life shared the focus with art’s contribution to industrial education. Appreciating the beauty in everyday life was another link to the interconnectedness of human beings to nature.

In the 1930’s, the response to art was almost as important as its production. Appreciation and creative self-expression surfaced as major values in art education, influenced greatly by the studying of African artwork and a strong emergence in crafts. Expression became the primary focus over beauty and the first step towards connecting with art from other cultures began.

The 1950’s brought a new focus on healthy development of the whole personality. As mentioned by Wygant, art educators also saw “art as a medium of ‘one world’ understanding” (p. 143) further connecting us globally.

Since its beginnings, holistic education has managed to become a part of the education system and is addressed through activities connecting students to the community, locally and globally, the natural world, and through spiritual values such as compassion and peace. Visible

proof of holistic education is seen through educational movements incorporating inclusion, collaboration, and reflective thinking (Miller, 2000).

Several movements in education have focused on the aspect of spirituality concerning the local and global community. Starting in 1967, Aesthetic Education initially focused on the importance of the arts for personal growth, development, and self-fulfillment (Ingham, 1972), while working towards the unification of the arts for teaching values. Advocates for this movement saw an education in values necessary for dealing with the cultural crises of the times (Wygant, 1993). Values Education began in the 1970s to address the collapse of traditional values, along with cultural and racial conflict (Silver, 1976). Social justice art education advocated for art education that focused on developing relationships that promote community, “in the larger sense of understanding our place in the web of all peoples, everywhere” (Anderson, 2010, p. 8).

Today, our educational system is still looking to the arts, including the visual arts, to provide students opportunities to connect with their world to see how they are a part of a bigger picture. With the national focus on global math and science scores, the arts provide a chance for a more holistic experience.

Definition of Holistic Education

Although spirituality was not mentioned specifically in the history referenced from as far back as 1920, components linked to spirituality such as interconnectedness, moral values, expression, and nature were factors included during this period and are part of the guiding definition of spirituality in this study. Holistic education is a movement that started in the 1960's and 1970's advocating for spirituality. Caldwell (1960) suggested that if we view man as a spirit, art education is necessary in the curriculum to cater to the non-mechanistic characteristics

of man. He saw art as a way to balance the curriculum against the emphasis on mathematics, science, and language.

Dissanayake (1980) called for looking at art in an ethological view. Ethology was defined as the biology of behavior, a science concerned with “what living creatures *do* in their normal, everyday existence” (p. 397). Anderson (1981) stressed that the linear, linguistic approach to education need not only divide information into parts for analysis, but also to go beyond that step and synthesize for understanding. He also shared that “universal reality is interconnecting” and that a holistic education would be one that approaches “one’s life experience with a knowledge of as many systems as one can encompass” (p. 37). Systems, as defined by Anderson, are constructs of culture which determine a person’s view of the world. They are taught the social institutions of a culture and may be singular in thought. Miller (1998) defined holistic education as a broader vision of education and human development, involving balance, inclusion, and connection.

Miller, Cassie, & Drake (1990) perceived holistic learning as one that includes three facets: the transmission of facts, skills, and values. Transaction occurs when the student reconstructs knowledge through dialogue and transformation refers to personal and social change. This view of holistic learning ties in with the research’s definition of interconnectedness with human beings as they both explore community, both locally and globally, meaningful and purposeful living, along with inclusion, collaboration, and reflective thinking.

Current Practices in Holistic Education

Researchers acknowledged the condition for spirituality in many facets of education already exist (Palmer, 1998; Bates, *in press*). Palmer (1998) stated that the spiritual is always

present in education, the curriculum, and every subject, waiting to be acknowledged. He also shared that teachers teach who they are, spiritual or not. Many researchers support the idea that a teacher's values, sensitivities, and expertise are present and influence their students, whether intentional or not (Silver, 1976; Palmer, 1998; London, 2007).

Scherer (1999) acknowledged the soul's hunger for meaning through an interview with Rabbi Harold Kushner. She added that his perspective was that there were many spiritual values already in the classroom waiting to be acknowledged as spiritual, such as truth, accuracy, responsibility, respect, and cooperation. Kushner also shared that children need a sense of ritual and a sense of wonder to nourish their souls. In a corresponding view, Bates (*in press*) supported the idea that the spiritual already exists in all students and our job as art educators is to plan lessons and activities that bring it forth.

Caranfa (2003) encouraged integrating silence or solitude into education, specifically in the teaching of the liberal arts or humanities, to achieve the development of the whole person. She perceived silence or solitude as enabling a student to be seized with wonder, like a child. Hue (2010) considered his own experiences in learning the art of Chinese calligraphy along with the Chinese culture as a spiritual act and encouraged art educators to use calligraphy as a link for students to recognize the spiritual aspects of art.

Walker (2001) constructed meaning in artmaking through the use of open-ended problems and through working in repetition, creating a series of work. Open-ended problems and working in series both create opportunities for students to search for and create deep meaning in their work. She also stressed the use of play for experimentation, pretending, and trespassing boundaries. For Koppman (2002), the experiential, rather than the intellectual, ranked as the most important things we learn from the arts. Both of these researchers were looking to

discovery and meaning in artmaking, which helped students experience their interconnectedness with all human beings.

Benefits of Holistic Education

Miller et al. (1990) explained that the benefit of the integrated responses developed in holistic learning is the same that are required in real life situations. Accumulated wisdom and knowledge, rather than information derived from a single source, are used to make decisions. Suhor (1999) found that spirituality in the classroom can bring about the ‘Aha!’ moments in education. Kessler (1998) reported that encouraging spirituality in the classroom can support “the quest by adolescents for answers to profound questions about the meaning of life” (p. 49). Her classroom welcomed such conversations. She created an atmosphere of trust and openness where ground rules were set by students to maintain a safe, nurturing environment. Within this environment, students were honest and open and able to have discussions on topics like “Why am I here? Does my life have a purpose?” (p.50).

The Study Group for Holistic Art Education was formed during Peter London’s residency at the Maryland Institute College of Art during the 2001-2002 academic years (Carroll, 2004a). It consisted of practicing K-12 art educators who met monthly and brought holistic practices into the classroom and reported on the outcomes during their monthly meetings. Carroll (2004b) shared a list of habits and conditions that could engage learners “at the deepest possible levels of meaning-making” (p. 8). These included creating an atmosphere of trust, gaining knowledge of developmental characteristics to anticipate learning needs and become aware of teachable moments in instruction, ongoing student reflections, ongoing teacher reflections, analysis of larger curriculum and sharing with colleagues to create cross-curriculum connections. It also included exploring the visual culture of the school, students, and community, using diversified

instruction to cater to the varying learning styles of the students, inclusion of two- and three-dimensional artwork in projects, and collaboration with colleagues,

A. P. Castro (2004) found that using reflective questions helped elementary students think more deeply about themselves and their art. Ruopp (2004) summarized learning as a tangible experience when students could see how “each layer of experience, action, reaction, and emotion prepares one for the next” (p. 23). Exploring choices, seeing outcomes, and having visual evidence of personal growth in art over time were benefits experienced through visual journaling. Wittner (2004) found that a holistic approach in the classroom encouraged empathetic listening and gave students a voice in the classroom. Wolf (2004) believed the holistic approach created a safe classroom with mutual respect, McKenna (2004) reported other benefits such as the development of personal meaning, and creation of an interpersonal experience that challenged students’ social assumptions. J. C. Castro (2004) found the holistic approach taught the students how to think about something through questioning strategies such as “What is this to me?” (p. 54) as prompts for questioning their work. La Perriere (2004) utilized a combined approach in leading her college foundation classes. One part was intuitive and personal, while the other dealt with formal elements.

Spirituality in the Classroom

Wesley (1998) stated that teachers who give themselves fully and selflessly in the classroom cater to the spiritual needs of the students. Kellman (2007) defined the art teacher as a holy person and students as pilgrims on a spiritual journey as they create art that “moves the artist beyond time and isolating boundaries, that lifts the art maker’s world from the mundane to the extraordinary and sacred” (p. 59).

Some researchers regarded matters concerning the spiritual as ethical choices. Kidder and Born (1998) defined the teacher as an ethical role model for students and suggested three time-tested principles for decisions regarding ethical dilemmas that may erupt in the classroom. These included ends-based thinking (the greatest good for the greatest number), rule-based thinking (following this rule leads to the kind of world I want to live in), and care-based thinking (the Golden Rule).

Cloninger & Mengert (2010) saw the teachers' role as one that needs to utilize creativity and prompt our students to do the same to face the problems and challenges we face globally. They focused on growing the future generation, instilling the idea to face issues with serenity and well-being. Suhor (1999) described the role of teachers as seeing "themselves as agents of joy and conduits for transcendence, rather than merely as licensed trainers or promoters of measurable growth" (p. 16).

Eaude (2001) researched how four urban English teachers of elementary school (working specifically with students 5-7 years old) included spirituality in their teaching. Although Eaude was clear that defining spirituality was elusive, he did find that all of the teachers could pick out a spiritually aware child(ren) in their classrooms. The most common qualities used in their choice included generosity, sensitivity, and an awareness of others. Other findings included teachers believing that spiritual development was more than just religious development, that dealing with tragedies, losses, or severe illnesses all enhanced the spiritual growth of the children involved, and that the importance placed on relationships within the school and beyond was necessary for spiritual growth.

The findings of Hay and Nye (2006) included a list of four responsibilities that teachers have in the spiritual education of children. These include "helping children to keep an open

mind, exploring ways of seeing, encouraging personal awareness, and becoming personally aware of the social and political dimensions of spirituality” (p. 149).

Many of the methods promoted by Walker (2001) for teaching meaning in artmaking utilized similar approaches found to cultivate spirituality in an art classroom. Some of the activities she advocated for included purposeful play, manipulation of media, risk taking, and experimentation. She stated that such practices “communicate that artmaking is about searching for and discovering meaning” (p. 137).

Summary

A review of related literature found that many disciplines focus on spirituality. Looking at the history of spirituality in education and current practices involving spirituality in art education revealed its longevity and the plethora of ways it is defined and experienced. Recurring themes included globally common values, connection to community, both locally and globally, inclusion, and reflective practice. Research on the benefits of spirituality revealed the wide use of holistic methodology in the K-12 classroom. Lastly, research emphasized the important role of teachers in implementing successful holistic education.

This study investigated ways that an elementary art teacher in the public school system can investigate the idea of spirituality within an art lesson. It also looked into ways that elementary students respond to a lesson that investigated spirituality. This review of literature revealed that spirituality can be considered as separate but related to religion, providing a safe platform to carefully introduce this topic in the public school system. It also proved that the holistic movement has a long history in education and the supporters of the movement continue to come up with ways to re-focus students back to learning that includes personally meaningful

experiences while reconnecting students with all people, nature and living things, and the concept of a higher power.

The initial focus of this study was to observe two art educators who had a strong interest in spirituality and how this interest was manifested in their teaching. After working in the art education field, it made more sense to observe my own teaching in regards to spirituality.

CHAPTER III: METHODOLOGY

Introduction

The purpose of this study was to investigate the relationship between the inclusion of spirituality in an art lesson and the response of the students to the spiritual aspects of the lesson. This study was conducted in two Central Illinois third and fourth grade classrooms, considering both the perspective of the teacher/researcher through observations and the students' response, as reflected in personal interviews, artwork and writing. The research question is stated as follows: In what ways can an elementary art teacher in the public school system investigate the idea of spirituality within an art lesson? A secondary question was: How do students respond to an art lesson that investigates spirituality?

For this case study, data was collected including teacher/researcher observations, student work, and student interviews. The data was analyzed with an emergent strategy with the goal of determining themes based on the three-part definition of spirituality (Charmaz, 2008). Spirituality was defined as interconnectedness with nature and all living things, with human beings, and with a higher power. The responses and observations were analyzed for trends and categorized so that generalizations or theories could be made. Triangulation between observation notes, student work, and student interviews, were employed to analyze intersections among the data (Denzin& Lincoln, 2011).

This chapter describes the methodology used in this study. Sections include research setting, description of the classrooms, students, and teacher/researcher, data collection and management, data analysis, and limitations.

Research Setting

The research was conducted in two public K-8 schools in Central Illinois. School A is located in a small rural village within Livingston County and is the only school in its district. There were a total of 102 students enrolled with an average class size of 12. The grade school had little diversity with 84.3% White, 8.8% Hispanic, 4.69% Black, and 2% from two or more races. 16.7% of the students received special education services. School B is located in an unincorporated farming community within the same county and is also the only school in its district. It had a demographic of 96.2% White, 1.9% Hispanic, and 1.9% from two or more races. There were a total of 52 students with an average class size of 6. This school had 19.2% of the students from low-income situations, while 13.5% of the students had disabilities.

School A is in a community that has a state highway that runs through the middle of the village. Casey's General Store, with a gas station, and a local pub are the two largest businesses in the village. Three churches, a boarding/grooming dog business, a community library, a town shed, and a variety of locally-owned small businesses are located in the village and in the surrounding farmland. School B is located in an unincorporated farming community about .5 miles off of a state highway. Businesses consist of a bank, a post office, a church, a hardware store, and a Cooperative Association, which serves the community's need for grain, feed, insurance and Internet services.

Both schools are located about 10 miles from the county seat and surrounded by farmland. The communities for these schools are overall conservative, close-knit, and middle-class. Some families within both communities have the longevity of living in the area for a long period of time and often through several generations.

Classrooms

The classroom setting at School A was a designated space for art. It was part of a basement that was converted to two door-less classrooms and a teachers' workroom. The art room was rectangular with five garden view windows along two sides and had a drop ceiling with coated water pipes filling the low ceiling space. Three cafeteria-style tables provided seating for the students. Other amenities included a wall of storage cabinets, a double utility sink, a floor to ceiling two-sided drying rack, a dry erase board, and a teacher's desk. A laptop paired with a shared digital projector on a cart provided the technology needed to introduce the lesson. Images were projected on the dry erase board.

School B did not have an art room. The bus garage, which fits three full-size school buses, was used as an alternative space for art. It was also used for testing and as the teacher's daily lunch area. The first third of the garage had been converted to an office space for the custodian and the art teacher and the occasional use of the music and speech teachers, along with the school social worker. All the art supplies and the school's construction paper and paper rolls were located in this part of the garage. Shelving units and folded cafeteria tables divided the "classroom" from the office areas. In the morning, the two school buses are used to transport the children and then are parked in the school's gravel lot during the day. The art program used a long table which had to be folded up at the end of each day, and a short table which was left out and moved towards the front of the garage to allow for parking the mini bus. This table was also used as seating for teacher's lunch. An assortment of carts created the rest of a physical, temporary classroom. These, along with a mini drying rack, garbage can, aprons, water containers, etc. were stored in the art teacher's office area. The only running water in the garage was from a spigot mounted on one of the inside walls. The walls of the garage are filled with

maintenance tools and oversized gym equipment. The back of two tall file cabinets and a piece of eight-foot plywood that covered the back of three metal shelves served as a wall for posters and other teaching materials. A laptop and a shared digital projector was the technology used to introduce the lesson. The garage wall was used as a screen for the lesson.

Students

At School A, the lesson was taught to both third and fourth grade. These were both afternoon classes. There were 11 students in the third grade class and 10 in fourth grade, with three third graders and four fourth graders, seven students total, from School A involved in the study. By contrast, at School B, third and fourth grade are combined throughout their entire day including sharing the same classroom teacher. There were five third graders and six fourth graders, with three third graders and one fourth grader, four students total, involved in the study. All students were involved in the lesson and all of the activities. Only those who had provided student assent and parent permission were interviewed.

Teacher

As the teacher/researcher, I was in my fourth year of teaching at both schools when the research was completed. My teaching career started at these schools. For the past two years, I had also taught at a K-8 school near a large urban area for two days of the week which had an enrollment of 315 students and average class size of 16. I held a fourth art education position at one school in a large school district. This school was an elementary school with a full time art teacher and I was teaching only one kindergarten class of 20 students. At School A, I taught all the grades in art on Fridays for 45 minutes a day. For School B, art was offered to the combined grades (K, 1st/2nd, 3rd/4th, 5th/6th, and 7th/8th) on Mondays for 45 minutes a day.

Data Collection and Management

The school secretaries at both schools were the only school staff with access to who was involved in the research. They had read the script to the students, coordinated the distribution and collection of the parental permission and student assent forms, and held them until the project was completed and grades were posted in the online grade book.

Three sets of data were collected during the research which included teacher observations, student artwork, and student interviews. Teacher observations were written at the end of the school day after each day the lesson was taught. These were typed into the personal computer of the teacher/researcher. Student artwork, including preliminary and final sketches, and print were all scanned onto the same personal computer. Student interviews were conducted after the conclusion of the lesson and after the grades were posted. Interviews were completed with students who had parental permission and student assent. They were recorded with a voice recording device and then later transcribed on the personal computer of the teacher/researcher. Teacher observations, student artwork, including preliminary and final sketches along with the print, and student interviews were all saved on the same external hard drive.

In this study, spirituality was defined as the interconnectedness to nature and all living things, to people, and to a higher power. The teacher observations from the first day included observations when the students walked in the classroom to see a LED candle on in a darkened room. It also considered comments made during the discussions. On the first day, discussions focused on personal experiences when candles or fire was used for illumination or warmth (such as campfires, candlelight for loss of power or celebrations); sunlight for Vitamin D and brain function; and plants' need for light (photosynthesis), animals' need for light (diurnal, nocturnal, and bioluminescent animals and plants). Our last discussion focused on how light is used in

cultures, both ancient and contemporary and how many have considered light or the sun as something to worship often equating light as a symbol of a higher power and/or a god. We briefly mentioned the Plains Native Americans and their Sun Dance Ceremony, ancient Egyptians and their god Ra, and the Muslim and Christian faith which see light as Allah or God. After all of these examples of light were shared, students were introduced to the project and preliminary sketches were completed.

On the second day of the lesson, we looked at and discussed the works of several artists working with light, including Thomas Kinkaide's "The Guiding Light", an illustration from Paul Goble's book, "The Girl Who Loved Horses", Amish Kapor's "Cloud Gate", and an image of Ra, the Egyptian sun god. In small groups, we described, analyzed, interpreted, and evaluated one piece of artwork using an art criticism worksheet. We did not look specifically at how each artist used the three part definition of spirituality in their specific artwork about light. A generic art criticism worksheet, created by the teacher/researcher, was used and asked simple questions. The descriptive portion of the worksheet asked students to describe what they saw while the analytical portion looked for ways the artist used the elements of art and principles of design in their work.

The interpretive section used two multiple choice and two fill in the blank questions. It asked "Why did the artist make this Art?" and gave the student choices including to show nature, to show feelings, to tell a story, to document history, or other, which allowed the students to write in their own answer. Additionally, they were asked to circle which purpose of art described the artwork the best. Their choices were artistic expression, functional, narrative, or ceremonial. The last two questions of this section asked the students to write a response. The

questions were “What is the significance or importance of the work?” and “What does this artwork say or mean to you?”

In the evaluation section of this art criticism worksheet, students also had to write a response, answering three questions. They included, “Was this artwork successful? Why or why not?” and “Is this GOOD artwork? Give at least one reason.” The last question was “Do you like this artwork? Give at least one reason.”

Next, we looked at the process of printing. Another objective of the day was to create a final sketch, choosing or adapting one idea from the four sketches made in the previous class period. The students were told to make artwork that focused on light. Students were not told to make artwork about light that specifically fit into the three part definition of spirituality. Final sketches were scanned as a source of student artwork. Like ‘N’ Learn was the last activity and served as a review of the three-part definition of spirituality and how it applied to light. Teacher observations, written at the end of the day, mentioned the positive atmosphere created by the students when working together with the art criticism sheet.

In the remaining three days of the unit, we continued to talk about the artists’ work (mentioned in the previous paragraph) and began printing. To reconnect the students with the wonder created on the first day, the candle, an assortment of flashlights, two books on bioluminescence, and a collection of small bioluminescent toys were brought on the third day. The teacher made an attempt to recreate the awe of the first day by having students walk into a darkened room with the candles and flashlights on. Due to pending deadlines, this only occurred at School B.

In this unit, the students were taught how to plan for, create, and make Styrofoam prints. The subject of their print had to be light, with the goal of relating to how people, nature, and all

living things need light or how a culture or religion uses light to symbolize a higher power. Student artwork was scanned and used as data for the research. The teacher/researcher also continued to create daily observations for each day the lesson was taught.

Upon the completion of the project and the posting of the grades, eleven students had returned completed parental permission and child assent forms. These eleven students participated in a one-on-one twenty minute interview with the teacher/researcher privately answering the same open-ended questions. The interviews were recorded and later transcribed. Students were given a letter of the alphabet for anonymity. Their preliminary sketches, final sketch, and artwork were used as data for the research.

The questions used for the interviews included: What do you enjoy about making art? What was your favorite part of making this project? What are some of the ideas you were trying to express in your artwork? In this project we talked about the importance of light for people, animals, plants and living things. In what ways do you think light is important? Plants and animals both need light. Some even make their own light. What do you remember about animals and plants needing light? We talked about how many different cultures or groups of people use light for celebrations with their family. Does your family use light from candles or fire for celebrations? Many also use light as a symbol for a higher power or a supernatural power. What are some ways that you have seen light symbolize a higher power or a supernatural power? After each of these seven questions, I added, “please tell me more about that” in an attempt to create a more personal, detailed answer. The final question allowed for students to openly share what was on their mind. “Is there anything else you would like to share with me?” was the last question of the interview.

This unit did not differ dramatically from my typical art units. The first day of a unit is typically used to introduce the students to the concept and complete preliminary sketches. I utilize a modified approach of art criticism, art history, aesthetics and art production in all of my lessons, with some including all four components while others only touch on two or three aspects. The discussions regarding art history, art criticism, and aesthetics typically occur within the first few days of the unit so that the remaining time can be focused art production. Some lessons follow up with a critique while others don't.

The biggest difference in this unit was the content's focus on spirituality as the interconnectedness of people, nature and all living things, and a higher power and the teacher/researcher's effort to keep it in the forefront throughout the five weeks while the lesson was taught.

Data Analyses

The data was collected and analyzed with an emergent strategy with the goal of detecting themes related to the three-part definition of spirituality (Charmaz, 2008). The transcribed student interviews were read through and highlighted in three different colors when student comments focused on connecting light to humans, connecting light to nature and all living things, and connecting light to a higher power. The comments that corresponded to one of the definitions of spirituality were then placed in a spreadsheet, listing by student. Each comment referred to the lesson, but a few also referenced past art lessons. Most were references to other disciplines, specifically science and social studies. The corresponding comments were marked if they referenced other disciplines, and the researcher realized that it would be impossible to tell between a student's prior knowledge, knowledge learned in a setting outside of school, and

knowledge learned specifically in science or social studies class. All of these possibilities ended up falling under the category named “References to Other Disciplines”.

The research also calculated how many comments about light focused on light’s connection to humans, nature, or a higher power. Cross comparisons, such as the number of nature comments that referred to a past lesson, the number of human comments that referred to a past lesson, and the number of higher power comments that referred to a past lesson, were also calculated. The three types of comments were also compared against references to other disciplines in a similar fashion.

Limitations of the Study

Teacher/researcher bias was a concern throughout the study. The first method used to limit teacher/researcher bias included having the school secretaries hand out, manage and hold on to the parent permission and student assent forms. Additionally, the lesson was taught to both classes and each student participated in all activities dealing with the lesson. Once the lesson was completed, artwork was graded objectively, and grades were posted online, the participants of the study were revealed to the teacher/researcher.

Time created the second largest limitation of the study. Art classes in both schools met once a week. Because of the timing of the IRB approval, the lesson at School A started one week before School B. At School A, the teacher/researcher had to take a personal day on what was scheduled to be the second week of the unit and a substitute teacher was utilized with an alternative plan. This left exactly five class periods remaining in the spring semester of school to teach what could have easily been a seven week unit for both schools. For both schools, the week between each class may have caused the students to forget about the three part definition of spirituality and how it pertained to light.

Time limitations also affected what was taught. The discussions on aesthetics, art history, and how to sign a print were all omitted due to lack of time. The discussion on aesthetics would have engaged students in comparing the value of Eric Stallers *Synergy II* light painting photograph with James Turrell's *Wilson Tunnel*. The art history component would have students verbally sharing at least two observations about the cultures depicted in selected artworks about light. These choices included Thomas Kinkaide's *Guiding Light*, and illustration from the book *The Girl Who Loved Horses* by Paul Goble, Shih Chieh Huang's installation *Brisbane, Australia*, or James Turrell's *Wilson Tunnel*. Additionally, the teacher/researcher did not have time to teach the students how to sign a print or complete a print suite with fellow classmates. While all of these activities would have been beneficial overall to the lesson, none of them would have definitively added to the students' understanding of spirituality. Spending more time in the lesson to look at work focused on light, with both professional and peer examples, may have helped the students gain a deeper understanding of how spirituality can be expressed through the subject of light.

Time limitations also led the teacher/researcher to dismiss bringing the flashlights and bioluminescent books and toys to the 4th lesson at School B. At this point, there were two class periods left in the year to print, learn to sign a print, and have our final day of art. The omission of the second interaction with the candles and the flashlight would have served as a way to introduce the awe back to the lesson and may have assisted the students in gaining a clearer understanding of spirituality.

The lesson was taught right to the end of the semester, which meant the interviews could not be set up or completed until after school was over. During June 2016, the teacher/researcher contacted the parents of all of the participating students to set up interviews at the schools.

Gratefully, all eleven students were able to attend an interview at their respective schools over a three week period. Each interview was completed in a private area, either in the art room itself or in a private area in the school. School B's art room was serving as a bus garage and was not available.

Student absences were another limitation. Two students were gone from School A on the only day we had for printing the plates. With a shortened class and needing time to complete the student assessments for grading, these students did not get to print their plates. The teacher/researcher printed their plates for them so that their project would be complete and their artwork could be used for the study if they had given assent and permission and so that they could bring home a print of their work. One of the absent students was involved in the study.

Finally, the number of students involved in the study was also a limitation. Between the three classes taught, a third, fourth and third/fourth grade there were 32 students. At School A only three out of 11 third graders and four out of 10 fourth graders were involved in the study. At School B, in the combined third and fourth grade class, three out of five third graders and one out of six fourth graders were involved. Different results may have occurred if all or more of the students were involved in the study.

Summary

This chapter described the methodology planned for this study. Procedures used were gathered from research practices supported in the literature review in Chapter 2. The use of qualitative research methodology was used to answer the research question of how an elementary art teacher in the public school system can investigate the idea of spirituality within an art lesson. The teacher/researcher wrote a lesson that explored spirituality through a subject that allowed

many different interpretations, through teacher led discussions, and by using a school-acceptable definition of spirituality.

CHAPTER IV: ANALYSIS AND FINDINGS

Introduction

The purpose of this study was to investigate the relationship between the inclusion of spirituality in an art lesson and the response of the students to the spiritual aspects of the lesson. This study was conducted in two Central Illinois third and fourth grade classrooms, considering both the perspective of the teacher/researcher through observations and the students' response, as reflected in personal interviews and artwork. The following research question guided this study: In what ways can an elementary art teacher in the public school system investigate the idea of spirituality within an art lesson? The second question was: How do students respond to an art lesson that investigates spirituality? Spirituality was defined in three distinct correlated measures: interconnectedness with human beings, nature and all living things, and a higher power (Liu & Robertson, 2011).

This chapter looked at the daily teacher/researcher observations from both schools to see how each of the three-part definition of spirituality used in the study was addressed. Teacher observations were written at the end of each day for both schools. Next, the students' artwork, including preliminary and final sketches along with final artwork was analyzed to find imagery that depicted the three-part definition of spirituality. Additionally, the student interviews were analyzed to find quotes that referred to the three-part definition of spirituality. Finally, the unit plan procedure, including the differing circumstances in which the lesson was taught, was explained.

Teacher Observations Schools A and B

Day One

Several observations were made when the students walked into a darkened room, lit only with candlelight. Students were drawn into a cozy atmosphere, notably different than the typical art room. Students at School B did not even need their typical prompting to quiet down as they walked into a small circle of chairs lit by candle light. Students at both schools sat in some type of circle with the flickering LED candle placed in the center of the group.

The setting prompted several comments from the students relating to light and how it interconnects human beings; one example was candle light used in storms when the power goes out. Several students had personal experiences with this phenomenon, including the teacher/researcher. Candles were used by Student H to make the house smell better, while Student I's family used candles for light just to keep the electricity bill down. Student C shared that candles are used to celebrate birthdays and that a candle is lit every year to remember Grandma. The students all shared ways that a candle could fulfill a human being's reliance on light.

Candles were an excellent example of light used in connection with nature. With the lights of the rooms turned off and the creation of a darkened atmosphere, the setting echoed our need for natural light when dealing with storms. Using a candle in a storm and/or when the power goes out was the first connection made at both schools.

Only two students made any reference to a higher power on this day. Student A shared that at her church they dim the lights so it is almost dark, to help everyone focus on the Last Supper and not think about other things. Student C shared that she has a candle from when she was baptized.

After the initial introductory discussion, the lesson was introduced, which meant that students saw more than 40 images of light representing the three-part definition of spirituality. Each student was required to make a minimum of four preliminary sketches. Their assignment allowed them to draw anything, as long as it was school appropriate and related to light. It was hoped that the light images and discussion would influence their sketches. Information regarding their preliminary sketches and how they related to the three-part definition of spirituality is included in this chapter under the heading “Students’ Artwork School A and B”.

Day Two

Activities for the day included filling out an art criticism worksheet about a particular piece of artwork and creating a final sketch. The art criticism worksheet focused on the basic four components including describe what you see, analyze how the artist used the elements of art and principles of design, interpret the purpose and meaning of the work, and evaluate or judge the artwork. At School B, we participated as a class looking at *The Guiding Light* by Thomas Kinkaide. The subject of this painting is a lighthouse, for School A, we utilized small groups and three images. These included *The Guiding Light* by Thomas Kinkaide, *Ra, the Egyptian Sun God*, an illustration from the book, *The Girl Who Loved Wild Horses* by Paul Goble, and *Cloud Gate* by Amish Kapoor. The students also worked on their final sketch and some even began transferring it to the Styrofoam plate.

The work of Kinkaide and Kapoor served as examples of how artists make work about light that reveals our interconnectedness to human beings through our mutual dependence on light. Kinkaide’s painting showed the importance of the light by including a lighthouse with the crashing waves and rocks, a ship coming in from the distance, and a cozy home warm with light

and a burning fireplace. Kapoor's *Cloud Gate* image included two people standing underneath the sculpture as it is lit up by the nighttime reflection of Chicago's buildings.

Kinkaide's work, *Guiding Light*, along with Goble's illustration, *The Girl Who Loved Wild Horses*, were examples of two artists working with light to show our interconnectedness to nature and all living things. Kinkaide's work included a sun on the horizon, reflecting its light through the breaking clouds and onto the crashing waves and rocky landscape. Goble's illustration showed the unity of all living things with a large radiant sun in the background of a girl sitting bareback on a horse with the wind blowing through the horse's mane, the girl's hair and the long grasses below.

Kinkaide's *The Guiding Light* and *Ra, the Egyptian Sun God* were both focusing on light and to show our interconnectedness to a higher power. Kinkaide, well known as a Christian artist, used the imagery of a lighthouse to represent Jesus as a light. The painting also echoed the idea of creation causing some viewers to ponder the great Creator. Similarly, *Ra, the Egyptian Sun God* revealed his powers as he stands comfortably in the center of the boat, balancing the great sun effortlessly on his raven head.

School A had to have a substitute teacher and the lesson on light was postponed. When the second lesson was actually taught by the teacher/researcher, two weeks after the unit's introduction, the candle, a second LED multicolored candle, and an assortment of flashlights were used to recreate the dimmed light situation as they walked into class. The plan was to reignite the wonder from the first day. This activity brought back the discussion of how light can illuminate a room, focusing on light and our connection to light as human beings.

The flashlights prompted discussion about losing power and using them to see in the dark in several situations. These two topics focused on light and our connection to nature.

Our discussion also included light used at church, which is an example of light symbolizing a higher power. Student E shared that her family has a moving picture puzzle of a lighthouse. She explained that you see a lighthouse, but when you look at it the other way, it is Jesus and He has lights coming from His eyes.

Days Three –Five

During these last three days of the unit, at both schools, the teacher/researcher did not observe any activities that specifically tied our study of light to interconnectedness to human beings, nature and all living things, and/or a higher power. However, the teacher/researcher did note the excitement of the students on Day Three at both schools as they had a chance to print with old linoleum blocks.

On Day Three at School A, Student L continued to rework and rework the project. This happens with every project as she is never satisfied with her work. Student L did finally settle on a printing plate, freehanded the plate, and printed, all on Day 5.

Printing continued on Day Four at both schools as students were able to print images from their own plate. Some students hurried through the printing process, oblivious to the cleanliness and clarity of the print and seemed only interested in process. The focus on process is very common at this age. Some students who slaved over each print were about the final product. Process over product was certainly the majority at both schools. It was a rarity to find a student interested in product first.

During the Observation on Day 5 at School B, I also reflected on the need to create more moments to pause and reflect for the students. This would help them grow in being attentive to spirituality in art and in their everyday lives. Repeated and varied pauses, to focus over

connectedness to nature, people, and a higher power crossing cultural boundaries, would be beneficial to continue to nurture spirituality in the art room.

Students' Artwork Schools A and B

There were two categories, including preliminary sketches and final sketches/final artwork. Each student was required to make a minimum of four preliminary sketches onto a sketch worksheet. Four boxes, close to one quarter the size of a piece of paper, fill the front of the page. Most made four, while a few doubled or tripled that number by using a second worksheet or drawing on the back. Although each student was required to make only one final sketch, a few were not satisfied with their final sketch and made two or three additional ones before being satisfied. The final sketch was the same size as the plate and had to be approved by the teacher/researcher before it was transferred onto the plate. One student was dissatisfied with her final sketches and freehand drew directly on the plate. For this study, the final sketch and the final were typically one and the same, except where students made multiple final sketches or freehanded their plate (see Appendix I: Student Artwork School A for Students H, J and L)

Preliminary sketches occurred on the first day of the lesson, right after the lesson was introduced and images of light that represented the three-part definition of spirituality were shown. Table 1 categorizes the subjects of the students' preliminary sketches and final sketches/artwork into the three part definition of spirituality used for this research. The artwork was divided into the three part definition of spirituality by looking at the scale created by Lui and Robertson (2011). Each section of the scale had several questions that helped explain what interconnectedness to the areas of human beings, nature and living things, and a higher power looked like. The teacher/researcher then placed each sketch into one of these categories or placed it in the category, "other". Only one sketch was placed in "other". Although the students may

have mentioned what the preliminary sketches or final artwork meant during the lesson itself, each participating student was asked to talk about their sketches and artwork during the interview process. This helped the teacher/researcher in correctly categorizing.

Table 1.

Number of Sketches/Artwork Relating to Definition of Spirituality

Types of Sketches	Number of Images	Inter-connectedness to Human Beings	Inter-connectedness to Nature/Living Things	Inter-connectedness to Higher Power	Other
Preliminary Sketches	55	16	37	1	1
Final Sketches/Artwork	11	6	5	0	0

Interconnectedness with Human Beings

This section will highlight five examples of artwork relating to light's interconnectedness with human beings. The examples show final artwork, unless the colors of ink and paper chosen by the student created a low contrast situation. This occurred with Student D's print.

Figure 1. Student E Final Artwork, School A. Print of character Cat Boy from PJ Masks, yellow ink on blue paper.



Student E (see Figure 1) decided to make her artwork about a character from a cartoon she watched on the Internet. This character, Cat Boy, is a boy by day and has super powers that he uses in the night. The student used a zig zag line to show speed and how the character moves in a flash of light. The horizontal lines in the background mimic the quick colorful lines in the cartoon when the character transforms into Cat Boy after hitting his watch (see Appendix I: School Interviews School A, Student E).

Figure 2. Student J Final Artwork, School A, Print of lightbulb, red ink on blue paper.



Student J (see Figure 2) made a lightbulb in her preliminary sketches and then made two final sketches. The main difference between the final sketches was the background. In her final artwork, she chose to not include the words, Lightbulb, Inc., which was written on the left side of the base of the bulb in all of her sketches (see Appendix I: Student Interviews School A, Student J and Appendix D: Students' Sketches School A).

Figure 3. Student B Final Artwork, School B, Print of feeling orb, red ink on blue paper.



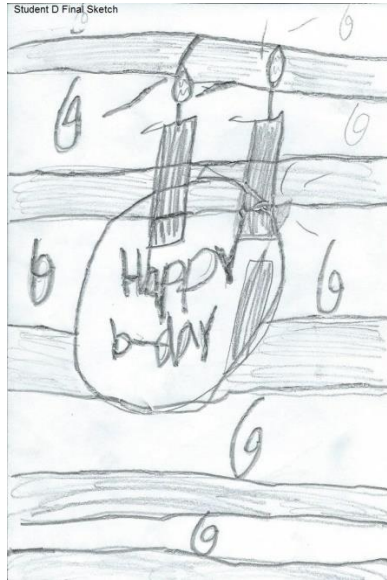
The feeling orb was an idea created by Student B (see Figure 3) in the preliminary sketch stage. The orb in the beginning did not have the imagery in the center, but the final shows the notations of mad, sad, happy, and happy. He further described that all of the background was generating the feelings through the use of ice crystals and light. The petal-like lines coming from the center generate into the orb for everyone to have feelings (see Appendix J: Student Interviews School B, Student E and Appendix E: Students' Sketches School B).

Figure 4. Student C Final Artwork, School B, Print of Empire State Building with lightning, white ink on black paper.



Student C's final sketch (see Figure 4) was the Empire State Building. It included a lightning rod, as she shared that her class had just learned about the use of lightning rods in science. It also included lightning and five stars, which are two forms of light found in nature (see Appendix J: Student Interviews School B, Student C).

Figure 5. Student D Final Sketch, School B, Sketch of birthday cake with candles.



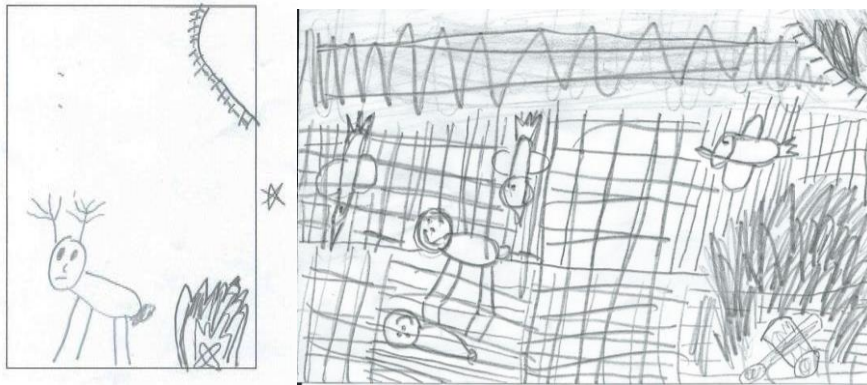
Student D (see Figure 5) created a print of a birthday cake with three candles and streamers. When asked why she had chosen three candles, she shared because it was going to be someone's third birthday. She then brought up her babysitter's son's birthday who would be turning four and stated the fact that he was three now. She then pointed out that she had used only two candles in previous sketches since she did not have enough room for more (see Appendix J: Student Interviews School B, Student D).

The subject of the artwork in this section ranged from an imaginary boy with light-based super powers and a feeling orb that generates feelings through the power of light to more everyday subjects such as a lightbulb, the Empire State Building with lightning, and a birthday cake with candles. All of these examples were chosen for their focus on the subject of light and how it relates to our interconnectedness to human beings.

Interconnectedness with Nature and All Living Things

This research shared five student examples of light and its interconnectedness with nature and all living things. The examples show both preliminary sketches and final artwork, chosen by which provide the clearest examples of light's interconnectedness with nature and all living things.

Figure 6. Student F Preliminary & Final Sketch, School A, Sketches of deer, fire and sun on left and two deer, three birds, fire, and a sun on the right.



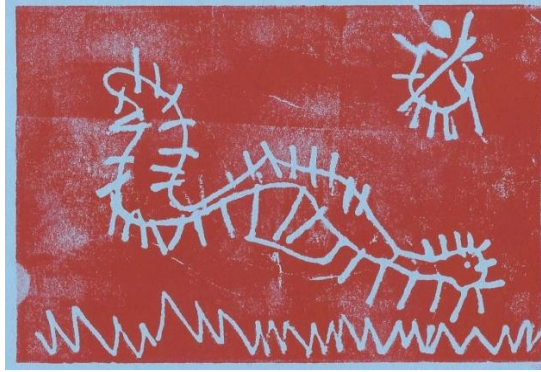
Student F (see Figure 6) did not attend school on the only day of printing. Some prints were made from his plate by the teacher/researcher. His preliminary sketch was also included to show how his final image transformed from his sketch. During a discussion with the student, he shared that in his final sketch he just felt like drawing lines in the sky. He added a deer lying down and three birds, too. Student F also shared that he just earned his hunter safety certification last year and hopes to go hunting next year (see Appendix I: Student Interviews School A, Student F).

Figure 7. Student G Final Artwork, School A, Print of campfire, white ink on black paper.



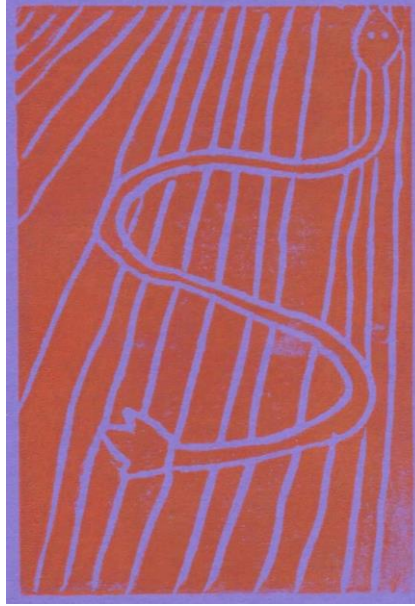
During the interview, Student G (see Figure 7) shared that he may have put too many logs in the fire in his final artwork. He also shared that he has a special memory of camping with his dad at his uncle's campsite and not getting bitten by the snake that was nearby. Another memory of the event is that he found five arrowheads near this campsite (see Appendix I: Student Interviews School A, Student G).

Figure 8. Student H Final Artwork, School A, Print of a glowing Herman the Worm in the grass with a sun, red ink on blue paper.



Herman the Worm is a song that the teacher/researcher uses occasionally with younger classes to engage students while waiting for the teacher to come at the end of class. Student H (see Figure 8) chose to make his artwork about the subject of this song and very specifically called it Herman the Worm. He also chose to make Herman a glowing bioluminescent worm, shown by the lines around the outside of the worm. From his sketches to his final artwork, the way in which his worm is drawn to show his glowing characteristic and the choice of a sun or moon in the sky continued to evolve until the student created his final sketch (see Appendix I: Student Interviews School A, Student H).

Figure 9. Student I Final Sketch, School A, Print of snake, red ink on blue paper.



Student I (see Figure 9) made his artwork about a snake that was underwater. Its tail was fire and the snake was swimming up from the bottom of the ocean towards the rays of the sun shining through the water. According to the student, the snake can turn the fire on his tail on and off, at will (see Appendix I: Student Interviews School A, Student I).

Figure 10. Student L Final Artwork School A, Print of abstract sun, stars, and lightning.



Student L (see Figure 10) was inspired by a piece of art she saw previously in art class. She was not able to identify it. This student was the only one, after struggling to make a final sketch that she was happy with, just freehanded the printing plate. Her artwork includes the sun in the center, stars around the periphery, and lightning bolts that frame each of the sides of the print (see Appendix I: Student Interviews School A, Student L).

The subject of the artwork in this section ranged from a campfire and deer near a campfire to a glowing worm and a snake with a fiery tail. The fifth image was an abstract image containing a sun, stars and lightning. All of these examples were chosen for their focus on the subject of light and how it related to our interconnectedness to nature and all living things.

Interconnectedness with a Higher Power

So far in this chapter, there have been plenty of examples of student artwork that represented the first two parts of part definition of spirituality and how it pertains to the subject

of light. Interconnectedness to human beings and nature and all living things has been easy to show through student artwork. Interestingly enough, only one student made any artwork about light, that specifically focused on the third part of the three part definition of spirituality, interconnectedness to a higher power.

Figure 11. Preliminary Sketches Student A, School B, Sketches starting at top left, clockwise: birthday cake with lit candles; girl and a bird next to a tree with the sun; flower and the sun; and a girl speaking and crying at the pulpit at church.



During the interview, when Student A (see Figure 11) was describing her preliminary sketches she revealed how she was clearly focused on the subject of light when making them. In describing her first sketch, she explained that she drew a cake because of the fact people light candles on the cake to make a wish. Her image of the girl and bird next to the tree with the sun represented how people and animals both need light. The flower and the sun showed how plants

need light and then her final sketch was one of the church (see Appendix J: Student Artwork School B, Student A). Her sketch of the church showed a crying girl or woman standing with her arms raised up behind a pulpit with two track lights shining on her. No other explanation was given for this sketch. Within the sketch is a star, which meant that initially the student had chosen this idea for their final sketch. Student A changed her mind and used the birthday cake idea, instead for her final sketch and artwork.

This section revealed multiple examples of student artwork about light. An overwhelming majority of the work shown displayed the subject of light and its interconnectedness with human beings and nature and all living things. Light's interconnectedness with a higher power was only represented by one preliminary sketch from the eleven students participating in the study.

Student Interviews Schools A and B

Due to the fact that the lesson ended at each school on the last day of art class for the school year, the interviews had to be held over the summer. The teacher/researcher made every attempt to uphold the interview guidelines as stated in the proposal and cleared by the IRB. The teacher/researcher contacted the parents of all of the participating students to set up interviews at the schools. All eleven students were able to attend an interview at their respective schools over a three week period. Each interview was completed in a private area, either in the art room itself or in a private area in the school.

Once the interviews were completed they were transcribed by the teacher/researcher. This section will focus on examples where the students spoke about light in relation to the three part definition of spirituality. This section will be ordered with quotes about light and its interconnectedness to human beings mentioned first, followed by light and its interconnectedness

to nature and all living things. The last part related to light and its interconnectedness to a higher power.

The interviews used the same set of questions for each student. During the interviews, each student was asked what they enjoy about making art and their favorite part of this project. The next question asked them about some of the ideas they were trying to express in their artwork. Artwork, including preliminary sketches, final sketches and final artwork was discussed in the previous section. This section will focus on student responses to the remaining research questions which include:

- In this project we talked about the importance of light for people, animals, plants and living things. In what ways do you think light is important? Please tell me more about that.
- Plants and animals both need light. Some even make their own light. What do you remember about animals and plants needing light? Please tell me more about that.
- We talked about how many different cultures or groups of people use light for celebrations with their family. Does your family use light from candles or fire for celebrations? Please tell me more about that.
- Many also use light as a symbol for a higher power or a supernatural power. What are some ways that you have seen light symbolize a higher power or a supernatural power? Please tell me more about that.
- Is there anything else you would like to share with me?

The first section will focus on examples of student comments that reveal light's interconnectedness to human beings.

Interconnectedness with Human Beings

A total of eleven students participated in the interviews. All of the interviews were transcribed and so the transcriptions were used to tally how many answers, made by each student, could be categorized as a comment pertaining to light and its interconnectedness to human beings, to nature and all living things, or to a higher power. A total of 185 responses were counted and categorized. Of the students' answers that related to any part of the definition of spirituality, 83 or 45% pertained to light and its interconnectedness to human beings. The question was stated as, "In this project we talked about the importance of light for people, animals, plants and living things. In what ways do you think light is important? Please tell me more about that." Similarly, the answers to another question also cultivated responses to our interconnectedness to humans through light. This second question was stated as, "We talked about how many different cultures or groups of people use light for celebrations with their family. Does your family use light from candles or fire for celebrations? Please tell me more about that."

In regards to the question of the importance of light for people, some students shared the benefits of the sun on humans. Student C answered that "the sun gives you vitamin D." Student E shared, "And humans need it (sunlight) because if you just stay inside....you just feel like...sometimes if outside is nice and cool and inside is hot and you're like, 'I'm hot' so if you go outside and it's cool like in the winter, put on some warm clothes and you can play and get happy!"

Some students saw the need for light by humans as a matter of life and death. Focused on the need for light to keep us alive, Student D shared, "to keep us alive from the heat, from the

sun, because if the sun does not like glow, all of us wouldn't have any heat and all of us would die.”

Other students also focused on problems created by the absence of light. “Like if there was no light you probably couldn't see and if it was dark you'd probably run into everything,” shared Student H. With a similar point, Student L stated,

Like if a storm's here, you need candles to see. You need light to see through the night if there could be, like, a person after you and you didn't know they were and you didn't know they were right in front of you because it was dark.

Student B, when explaining the importance of light, shared,

Well, Abraham Lincoln lived in a tiny house with four windows. They needed candles for light. How else...it would be so dark in his house without light or candles that you wouldn't need a window because the sun generates light. So you wouldn't need a window to bring light in (if you used candles)...Without light, it would be just dark and people would need sunlight to live. So without light, there would be no humans, no animals, no nothing. It would just be a plain, old, dark Earth!

In order to answer the second question, (Does your family use light from candles or fire for celebrations?) some students needed guidance. Several students could think of one instance where lights from candles or fires were used, but had to be prompted to recall more than one occasion. Birthdays, cook outs, and holidays, including the 4th of July and Christmas were the most common answers to this question.

Student H first answered with fireworks as a time when his family uses lights or fire for celebrations. When asked if he did fireworks with his family, he shared, “Yeah! And usually in Missouri, because it is not legal here.” Later in the interview, when trying to brainstorm with

him about using light to symbolize a higher power, he asked what the word “symbolize” meant. As the teacher/interviewer tried to define the word for him, Student H shared a family specific meaning for the fireworks on the 4th of July.

Well, we usually go on the boat to see the fireworks, for...because we have a pontoon, you know...We usually go on the river on the weekends, but ...and when it's the 4th of July, we'll usually see them, and the fireworks, I think, represent, like people who died in the war, or something like that.

Student E also shared two family-specific examples of using lights or fire for family celebrations. “We would do it on Halloween...we would do that to remember Raelyn, one of our sisters who died...Sometimes we would do it for our Mom and Dad's anniversary. We would turn off the lights and put a candle on a tray and we'll light it.”

In this section, student comments regarding our human reliance on light were shared. Our need for the sun as a provider of vitamin D was paralleled with its absence causing loss of heat and safety. Students stated that without light, we would not be able to live. Additionally, student responses included examples of families using light or fire for celebrations which commemorated loss or family bonds.

Interconnectedness with Nature and All Living Things

The second part of the definition of spirituality used in this research focused on the interconnectedness of nature and all living things to light. Forty-three percent or 80 of the total 185 students' comments during the interview pertained to light and its interconnectedness to nature and all living things. This interview question was stated as, “Plants and animals both need light. Some even make their own light. What do you remember about animals and plants needing light? Please tell me more about that.”

Many students responded with a scientific-like knowledge about a plant's need for light. "So without light or water, they (plants) can't produce photosynthesis. And if they can't produce photosynthesis, then they can't make sugar. If they can't make sugar, they cannot eat," shared Student B. The teacher/researcher prodded further, asking the outcome of this situation. "They die!" was the reply of Student B.

A similar response came from Student C. "Animals need...they use the sun. Like some are cold blooded animals...use the sun to warm up...because they can't warm themselves up." This student also shared the interdependence of plants, animals, humans, and light. "Plants...without the sun there would be no plants and without...plants there would be not animals and without animals there wouldn't be us," shared Student C. Student A also clarified nature's dependence on light. "Every living thing needs light or some sort of light to see or just get energy from," she stated.

Student G shared, "Plants would need light to grow and animals would need light to...survive?...I think...if they (animals) couldn't see in the dark that good, light could help them see where they could go and they can catch food." Likewise, nocturnal animals and their relation to light was shared by Student J. "For...animals that come out at night, it (the light) needs to go past for them (the animals) to come out and get food."

Some of the responses were of a more personal experience with light in regards to nature and living things. Student E shared,

Plants need it (light) because its food to them. Because if they don't have sunlight...like...for Mother's Day I got my mom some flowers, We kind of put it on the cabinet, with a wall here and a wall here (student gestures to show location of

walls)...But the window was all the way that way (student shows a distance). And we forgot to put it out in the light anymore, so it died.

Student D shared a personal experience concerning light and its interconnectedness to animals. “When it is a power outage we...get a lighter that we light...so that we can see around. I use my phone or my tablet to see. And of course, my little buddy...he can’t see in the dark.” When the student was asked who the little buddy was, she replied, “He’s a rat.”

In this section student comments focused on light and the interconnectedness of nature and all living things. Several examples revealed a prior knowledge of plants’ and animals’ dependence on light. Student responses also mentioned the interdependence of plants, animals, and humans concerning light. Personal experiences of the relationship between light and plants and light and animals were also included in this section.

Interconnectedness with a Higher Power

The final part of the definition of spirituality used in this research focused on how light can represent the interconnectedness to a higher power. Eleven percent or 21 of the students’ 185 comments during the interview pertained to light and its interconnectedness to a higher power. This interview question was stated as

Many (different cultures or groups of people) also use light as a symbol for a higher power or a supernatural power. What are some ways that you have seen light symbolize a higher power or a supernatural power? Please tell me more about that.

After a prompting by the teacher/researcher, one student shared an experience from her church. Student A explained why her church dims the lights sometimes during the service. “I think it’s like...I think that you do that to show how thankful they are and take a time to sit down and see them and pray, pray more, like harder than they normally do.”

Student J shared an event at Christmas that happens within her church. “At church, when it is Christmas, we have little lights and we ...sing songs and we have this little light to hold.” When asked if everyone got a light to hold, she replied, “Yes.” When asked what the lights are supposed to symbolize, she stated, “Jesus”.

One student could give an example of using light in a situation regarding a higher power, but did not know what the event meant. Student H explained, “In church, um, sometimes we use candles.” When asked what he thought they were for, he replied, “I’m not really 100% sure, but...I’ve done it before in church but I don’t...I was little and they never told me what it was for.”

Similarly, Student E had experienced light used to symbolize the interconnectedness with a higher power, but didn’t have a full explanation of the event.

Usually when me and Grandma and Grandpa and my sisters go to church, usually...I would...we would see that ...um....there was candles...like um...one of these things (candelabra)...that you can hold and walk around with it...Usually I would see it on a tray. It is so many (candles)! I couldn’t even count how many!

Another student shared a similar inability to express this idea. While trying to prompt discussion about the higher power during the interview with Student F, we came across Thomas Kinkaide’s image of a lighthouse, titled, *The Guiding Light*. We had used this image in our art criticism discussion and the student recognized it. The teacher/researcher shared that this artist was a Christian artist. The student interjected, “That’s what I want to be...a Christian artist.”

Student D was the only student who had a strong, personal experience for a time when light was used to show interconnectedness to a higher power. “I have seen the lights of heaven,” she stated. When asked when she had seen these lights, she replied, “So, like, when the clouds

come over the sun and they like...and the sun flashes over the clouds and there's itty bitty cracks and it comes out and makes these....so like fat and thinness lines". When I offered the words, rays from the sun, she agreed.

The final question asked if there was anything else they would like to share. One student was able to share prior knowledge about the Egyptian culture. Student C was able to recognize Ra, the Egyptian Sun God when shown an image of Ra. This prompted her to share

I think I told you this but the Egyptians are facing one way (in the image we were both looking at). That's the way to get out of the tomb, because the Egyptians believed that their spirits...so their spirits could get out of the tomb because the tomb stealers...steal important things out of the tomb.

In this section, students shared their knowledge about how light is used to represent the interconnectedness to a higher power. Student examples included two examples where light was used to represent interconnectedness to Jesus. Two other examples have a similar setting but the meaning of the event is lost to the students. Finally, a fifth student experienced the lights of heaven in a moment found in nature.

Unit Plan Procedures

The students from both schools experienced a similar, but not identical unit plan. Both schools began the unit with the experience of walking into a darkened, candle lit room. They participated in a group discussion about when they had experienced lit candles and discussed the purpose and setting of that experience. Several students from School A, in both third and fourth grade were reminded of using candles with the loss of power while another specifically shared that candles are used in their home to make the house smell better. Another third grade student

spoke of using candles for light if their electricity was turned off or to save money on their power bill. Lighting candles in church for others and using candles at their parent's wedding were additional experiences with candles.

At School B, since the teacher/researcher had already experienced the first day of the unit, specific notes were written as to what each particular student shared during the candlelit experience. Student A talked about how the candles remind her of when they dim the lights at her church until it is almost dark to remember and focus on the Last Supper. Student C shared that they use birthday candles for luck. She also stated that she had a candle from her baptism and that her family lights a candle to remember her grandma (see Teacher Observation School B Day 1).

The second half of the lesson was similar for all three classrooms. Each class participated in a teacher-led discussion with a Power Point. The discussion involved discussing why people, animals, and plants need light. Several cultures that use light as a symbol for a higher power were also shared. Images, inserted into a Power Point, were used to reinforce the discussion about light. Students finished the day making at least four sketches about light.

The second day of the unit for School A was delayed by a week as the teacher/researcher had to take a personal day. At School B, one of the students from the study was absent from school. For all three classes, we worked in small groups completing an art criticism worksheet looking at artwork that could be considered spiritual when considering our chosen definition. At School B, all students interpreted Thomas Kinkaide's *Guiding Light*. The painting is a landscape of a coastal view with a lit lighthouse, warmly lit home, on the rocky banks. The turbulent ocean is full of many protruding dangerous rocks. A sun, low on the horizon, peeks out from a cloudy

sky and scatters light over the waves and on the shore. This was the teacher's choice, thinking that discussing one artwork as a class would be most helpful.

At School A, a different approach was used. Third grade students interpreted an illustration from Paul Goble's book *The Girl Who Loved Wild Horses*, Amish Kapor's *Cloud Gate*, and Kinkaide's *Guiding Light*, while fourth grade students in School A looked at an image of Ra, the Egyptian Sun God along with Kinkaide's *Guiding Light*. *The Girl Who Loved Wild Horses* is an image of a Native American girl sitting on a horse with a giant sun, drawn symbolically, filling the background of the image. *Cloud Gate* is a photograph of a giant mirrored sculpture that is shaped like a giant jelly bean. The photograph was taken at night in the highly lit city of Chicago and the metallic surface of the sculpture reflects all the lights of the city. The scale of the sculpture is made clear in the photograph as people are seen standing underneath the curved surface of the sculpture. As mentioned earlier, the Art Criticism worksheet did not prove to be helpful in this research and was not used as data. The comments and answers from the art criticism form did not align with the three categories of spirituality as the sketches, final artwork, and interview responses did.

The final sketches about light for their Styrofoam prints were also created during the second day of the unit at both schools. A few students had enough time to transfer the drawing onto the Styrofoam plate, while others had to make a few final sketches before being content.

The second day varied at School A in that the day began with the students walking into a darkened room lit by a collection of flashlights and the LED candles from the first day. In an attempt to keep a sense of spiritual awe and wonder in the room and after being away for an extra week, the lights were used to get the students back into the mood of the lesson.

The flashlights worked well and sparked a memory of a moving picture puzzle of a lighthouse that Student E has at home. She explained that the puzzle is a lighthouse but when you look at it the other way, it is Jesus and He has lights coming from His eyes. Her eyes were lit with delight as she shared this. Her comment led cleanly into a reminder about Thomas Kinkaide's *Guiding Light*.

The third–fifth days of the lesson were similar for students at both schools. Students were given the chance to print 10 copies of their work, choosing the color of the ink and paper. One student from School A was absent on the day of printing and was not able to participate in this activity.

Summary

This chapter looked at the three part definition of spirituality used in the study and how it was addressed through the three forms of data collected. These included the teacher's observations, student artwork, and student interviews. Additionally, a comparison of the unit plan and how it was implemented at both schools was also found in this chapter.

CHAPTER V: SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Summary

This research has focused on ways that an elementary art teacher in a public school system could investigate the idea of spirituality within an art lesson. A second focus was to discover ways that elementary students respond to an art lesson that investigates spirituality. The first chapter of this paper introduced the subject of spirituality and its ties to both education and art education. It revealed the need for the study, stated the research questions, and defined the terms used. The first chapter included information regarding the teacher/researcher, students, schools, communities, and the limitations of the study.

Chapter Two was a literature review. Spirituality's vast definitions tied with, separate from, and encompassing religion that the teacher/researcher found it necessary to hone in on one particular definition of spirituality that would be acceptable in the public school system while serving the needs of this study. The areas focused on within the review were spirituality and its relationship to religion, measuring spirituality, cross-disciplinary research on spirituality, history of holistic art education, definition of holistic education, current practices in holistic education, benefits of holistic education, and spirituality in the classroom.

Methodology was the topic of Chapter Three. This chapter described two Central Illinois schools, their art rooms/spaces, and the surrounding community. Procedures used in the collection and management of data were explained. This chapter also discussed how the teacher/researcher and students created the data within the implementation of the unit plan. The methodology used to analyze the data and limitations such as teacher/researcher bias, time, student absences, number of students involved in the study were considered in this chapter.

Chapter Four looked at the two research questions and the three part definition of spirituality used in this study. This chapter considered how the definition was addressed in the daily teacher observations, the students' artwork, including preliminary and final sketches along with final artwork, and the student interviews conducted after the conclusion of the lesson. The unit plan procedure was also included.

This chapter will concentrate on a meaningful, interpretive analysis of the data from Chapter Four while considering knowledge gained from published work on spirituality. The research questions in Chapter One are stated:

1. In what ways can an elementary art teacher in the public school system investigate the idea of spirituality within an art lesson?
2. How do elementary students respond to an art lesson that investigates spirituality?

Discussion

The teacher/researcher made conclusions regarding the teacher observations, student work, and student interviews using an emergent strategy to determine themes based on the three part definition of spirituality (Charmaz, 2008). The responses and observations were analyzed for trends and categorized so that generalizations or theories could be made. Triangulation between observation notes, student work, and students' interviews were employed to analyze intersections among the data (Denzin & Lincoln, 2011).

The following discussion is broken into two components, teacher investigation and elementary students. Teacher investigation will discuss the importance of defining spirituality acceptably for a public school setting, finding a broad topic that would generate a variety of appropriate spiritual-related outcomes, and acknowledging the teacher's spiritual nature. The

component on elementary students will discuss the importance of the students' engagements including moments of awe, students reflecting on personal experiences within the lesson to make personally meaningful artwork, and students applying cross-curricular knowledge in the creation of the artwork and during the interviews. It will also discuss the importance of the students representing the three part definition of spirituality through their artwork and their interview responses, and exploring the act of creating as an artist/creator.

Teacher Investigation

Three factors were revealed in the research regarding the ways an elementary art teacher in the public school system could investigate the idea of spirituality within an art lesson. These factors included, defining spirituality for a public school setting, finding a broad topic that generated a variety of appropriate spiritual related outcomes, and acknowledging the teacher's spiritual nature.

Defining spirituality. This study approached spirituality as the whole, with religion as subset of spirituality. The definitions assigned to spirituality across all areas of study are so wide and varied that finding one that both the teacher/researcher and the public school system could accept was imperative. Helminiak (1996) defined spirituality as interchangeable with religion. Berryman (2001) and Tacey (2004) defined spirituality as a separate construct that incorporates religion, while Campbell (2003) and Hay & Nye (2006) viewed spirituality as a concept independent of religion.

Research in other disciplines led to the acceptable definition found in the research of Lui and Robertson. Their research focused on the creation of a reliable scale that could be used in a variety of work environments to measure spirituality in any individual. Their scale was based on a three-part definition that was adopted for this study. The researchers described spirituality as

interconnectedness with human beings, with nature and all living things, and with a higher power (Lui & Robertson, 2011). One of the most important aspects of this definition, making it acceptable in the public school system was that the only tie to any religious component (interconnectedness to a higher power) was under the larger umbrella of spirituality and allowed application and acceptance of any higher power. Religion was clearly not the focus within the study.

Broad spiritual related topics. Another step to investigating spirituality as a public school teacher was to find a subject for the lesson that generated a variety of ideas for spirituality-inspired artwork. Many of the published lessons on spirituality incorporate the creation of a spiritual object or art form from a specific culture as the topic. Hue (2010) wrote lessons exploring self through the spiritual practice of Chinese calligraphy. Bates (in press) created a manuscript that investigated spirituality-informed teaching for K-12 art education. She offered a variety of lesson ideas which included totems, mandalas, and other spiritual objects. The end products and process from both of these authors' lessons are considered spiritual because of how the spiritual object or activity was used by a group of people or culture.

Wittner (2004) focused on personal gargoyles for protection while La Perriere (2004) had students create portable personal sanctuaries. Moving toward a more open-ended project for middle school students, Wolf (2004) wrote about creating symbolic animal self-portraits while Ruopp (2004) taught a class on visual journaling. Castro (2004) used a holistic art education model through the exercise, "How are you like a tree?" In her classroom, elementary students used reflective questions and journaling with artwork to gain deeper meaning through art making.

The teacher/researcher was looking for something more tangible, more every day that students could easily relate to, had personal experience with, and which would produce a variety of outcomes for art making. By using a broad subject, such as light, the teacher/researcher was able to apply the idea of light to the three part definition of spirituality created by Lui and Robertson and generate a plethora of exemplars. Initially the focus of the lesson was the sun but then it was suggested by a colleague to broaden it to light.

The subject of light as a basic need to human beings, nature and all living things was a concept that many students experienced firsthand and had learned about in other subjects in school. Dissanayke (1980) advocated for looking at art in an ethological view, considering “what living creatures do in their normal, everyday existence” (p. 397). Anderson (1981) shared that a holistic education would approach a student’s life experiences with the knowledge of as many systems, constructs of culture which determine a person’s view of the world, as one can encompass.

Using light as the topic of this lesson revealed multiple approaches to the subject and allowed for life experiences to influence their art. Additionally, the introduction of bioluminescence and light symbolizing a higher power was possibly a new concept for many of the students.

Caranfa (2003) encouraged integrating silence or solitude into education to achieve the development of the whole person. She perceived silence or solitude as enabling a student to be seized with wonder, like a child. The initial day of the lesson achieved this wonder. On the first day, the teacher/researcher wanted to create a cozy atmosphere using a change in lighting, proximity, and quietness to heighten the students’ senses and to result in a different student

response. Students were unusually quiet and even a bit reverent during the experience of walking into the darkened classrooms to a lit LED candle.

The teacher/researcher also used this same technique at School B on the third day of the lesson. A second LED multicolored candle, an assortment of unique flashlights, two books on bioluminescence, and a collection of small bioluminescent toys were added. This occurred after a sub taught an alternative lesson due to the teacher/researcher's absence.

Prior to teaching any part of this lesson, the teacher/researcher located and printed 43 color images of light as it related to the interconnectedness to nature and all living things, to human beings, and to a higher power. Nineteen of the images related to our interconnectedness to nature and all living things and included images such as bioluminescent animals and insects, the sun, stars, moon, Northern Lights, lightning, and a campfire.

Light images relating to our interconnectedness to human beings made up 14 of the total images and included candles, time-lapse photography of car lights, a lantern, a light at the end of a tunnel, a lightbulb, the multicolored tunnel at O'Hare Airport in Chicago, fireworks, and strings of lights.

In regards to interconnectedness to a higher power, 10 images were included. These images included light symbols from many cultures. These images revealed how many cultures used a variety of forms of light, such as candles, lighthouses, the sun, and gods to represent a higher power. The Native American Sun Dance Pole, an illustration by a Native American artist of a girl on a horse encompassed by the sun and its rays, Ra, the Egyptian Sun God, and Rangoli from India for Diwali were some of the images included. A painting of a lighthouse by Christian artist Thomas Kinkadee was also included. Some images did not depict a specific culture or

religious group. Two images of a person holding a light in their hands and two images of a collection of candles lit for a religious ceremony were also included.

The artwork shown to the students were included in this packet of 43 images. Artwork from artists such as J. W. Turner, T. Kinkaide, the dance group Pilobolus, J. Turrell, E. Staller, and illustrator P. Gobel made up the 12 images in this group. Turner's painting was of a sun low on the horizon reflecting its warm colors over the water and through the sky with a boat in the distance. Kinkaide's painting included light from the sun and sky, lighthouse, and house. Pilobolus was an image from *Shadowland*, a show where dancers used a backlit stage and a variety of body positions to create shadows of an elephant and a dog. Turrell's work was a photograph of a space and walls he created using colored light, while Staller's image was that of a Volkswagen Beetle that he covered entirely with rows of lights like a marque sign. Gobel's work is a book illustration of a girl on a horse encompassed by the sun and its this variety of images created an open-ended printing project for the students. Walker (2001) advocated for constructing meaning in art making through the use of open-ended problems. These create opportunities for the students to search for and create deep meaning in their work.

Teacher's spiritual nature. The spiritual nature of the teacher in the teaching of a lesson is also important to recognize. Many researchers support the idea that a teacher's values, sensitivity, and expertise are present and influence their students, whether intentional or not. (Silver, 1976; Palmer, 1998; London, 2007). Palmer (1998) and Bates (in press) acknowledged the condition for spirituality in many facets of education already exist. Scherer (1999) acknowledged this view in her interview with Rabbi Harold Kushner. Kushner's values included truth, accuracy, responsibility, respect, and cooperation. Hay and Nye (2006) listed a responsibility of a teacher in the spiritual lives of children as helping children explore "ways of

seeing” (p.149). Post-modernist Slattery (2012) promoted giving time to students throughout the school day to “question, reflect, investigate, meditate, and ponder” (p. 264). He also suggested that the borders between a school and its surrounding community will dissolve as the school community becomes actively involved in environmental projects, health and social services, and ethnic preservation.

The post-modern view, in this example, embraces the interconnectedness to human beings and to nature and all living things. Similarly, Slattery (2012) supports our interconnectedness to a higher power, clearly urging all religions to be considered equally. He shared, “A constructive post-modern curriculum, however, integrates both theology and self-reflection” (p. 256).

Elementary Students

Several conclusions emerged when answering the question, “How do elementary students respond to an art lesson that investigates spirituality?” Students responded with awe, with artwork that related to personal experiences, by creating personally meaningful art, and by applying cross-curricular knowledge to the project. They also responded by creating sketches and artwork that represented the three-part definition of spirituality, by showing influence of the images and artwork shown in the lesson, and by exploring the process of printing.

Responding with awe. At the beginning of the lesson, when the students first walked into a candle-lit room, student response was observed. “As the students entered, I heard oohs and ahhs (Teacher Observation #1, School A). A simple LED candle strategically placed in a darkened room was all that was needed to bring this awe. Similarly, the first day of the lesson at School B yielded a similar, if not identical response. The awe continued as we looked at forty

three images that represented light and its interconnectedness to nature and all living things, to human beings, and to a higher power.

Berryman (2001) included quietness and stillness along with laughing and crying within the non-verbal communication system in which spirituality resides. Scherer (1999) interviewed Rabbi Harold Kushner who stated that children need a sense of wonder to nourish their souls. Caranfa (2003) also advocated for silence or solitude as a way to enable a student to be seized with wonder, like a child.

Personal experiences. The 11 students in this study responded to this lesson by creating personally meaningful artwork. The objective of the lesson was for students to create a print that uses imagery to represent a personal experience with an illuminating light. Some students depicted personal experiences with light. Student E created artwork about Cat Boy, an online superhero she enjoys watching. Student C drew the Empire State Building, complete with a lightning rod, stars, and a lightning bolt. She would like to visit the Empire State Building someday, which is why it is personal to her. Student F drew a picture of two deer, three birds, a campfire, and a sun. Student F shared in the student interview that he earned his hunter safety certification last year and hoped to go hunting in the fall. Student G created a print of a campfire. He shared, during the student interview, that he has a special memory of camping with his dad at his uncle's campsite and finding arrowheads. Student H made a print of Herman the Worm, a character from a song sung in art class when the student was younger. He also made Herman a glowing, bioluminescent worm. Student I made his work about a snake that was underwater. Although the snake did not seem to have personal significance, the personal experience of swimming up toward the light when underwater was clearly described during the student interview and the making of his print.

As children, these students made art that represented subjects important to them, while staying in the parameters of the assignment, which was to create images about light. London (2004) defined spiritual as anything we hold at the “core of our belief and value system” (p. 4). Although some could be wary to define the subjects depicted in the student work as at the core of a belief and value system, the teacher/researcher would argue that some of the student artwork does qualify. From a child’s point of view, to be able to have super powers, to be legally able to go deer hunting with your father, and to make art about a camping trip with your dad where you find arrowheads are all events of great personal value. Hyde (2006) listed weaving the threads of meaning as one of the four characteristics of children’s spirituality.

Cross-curricular knowledge. A third response the students had to the art lesson investigating spirituality was applying cross-curricular knowledge during the project. This was visible in some of the artwork but explained during the student interviews. The question from the interview looked at the importance of light for human beings. Student C knew that the sun provided Vitamin D for people. Student E shared that sunlight could lift a person’s mood. Student D made a point about the sun creating the heat that humans need to survive. Students H and L focused on the dark that would be created through the absence of light.

During the interview, when students were asked about what they remembered about plants and animals needing light, many responded with knowledge gained in other school subjects, specifically science. Student B explained the process of photosynthesis while Students A and C described the reliance of every living thing on the sun. Student G discussed the light needed for plants to grow and for animals to survive, to see, and catch food. Student J shared information about nocturnal animals and their need to have darkness to hunt for food.

Anderson (1981) stressed that the linear, linguistic approach to education needed to synthesize for understanding. These students were able to apply knowledge gained in science to better understand the art project and the role of light and its interconnectedness to animals and all living things and to human beings.

Three-part definition of spirituality. Students responded to this lesson with their ability to create sketches and artwork that represented the three-part definition of spirituality. Of the 55 preliminary sketches made, 16 related to human beings, 37 related to nature and all living things, one related to a higher power, and one did not fall into any of these categories. Of the 11 final sketches/artworks, six related to human beings, five to nature and all living things, and zero to a higher power. This strong lean toward interconnectedness to nature and all living things is understandable for this age group of artists. Children are naturally curious about nature and how it works. They strive to understand it and gain firsthand experience from it on a daily basis.

When looking at the data from the student interviews, there is no true gap between answers relating to our interconnectedness to nature and all living things and to human beings. Forty five percent of the students' responses pertained to light's interconnectedness to human beings while 43% pertained to light's interconnectedness to nature and all living things.

It is also understandable that only one student, Student A, chose to sketch an idea to represent light's interconnectedness to a higher power. The final artwork of Student E, who made a print of Cat Boy, a superhero, and Student B, who created a feeling orb, both made art that could be considered relating to some form of a higher or supernatural power. The teacher/researcher used the research of Lui and Robertson (2011) and the examples they used in their spirituality survey to indicate interconnectedness with a higher power. Additionally, the researcher considered how these two artworks did or did not relate to the higher power shown as

examples from other cultures. Due to these considerations, both of these works were placed in the category of interconnectedness to human beings instead.

During the interview process, 11% of the students' answers pertained to light and its interconnectedness to a higher power or a supernatural power. Student A shared her experience at church when they dim the lights for the Lord's Supper. Student J talked about everyone at church holding a candle at Christmas to symbolize Jesus. Two other students were not sure of what candles at church represented. Student D was one of the only students who could clearly discuss an example of light symbolizing light's interconnectedness to a higher power. She shared her experience of seeing the lights of heaven when the sun rays shine through a cloudy sky.

Students were able to speak openly about a firsthand experience while some had difficulty with abstract meaning commonly found in religious settings. This is discussed in the writings of Kohlberg (1984) and Piaget (1932). Kohlberg and Piaget maintain that children ages 8 to 10 are beginning to develop their abstract thinking skills and moral reasoning. To add the verbal ability to express what they are just starting to understand would be extremely challenging. Eisner (1972) considered the prime value of the arts in education is "the unique contributions it makes to the individual's experience with and understanding of the world" (p. 9).

The influence of the artwork and images shared in the lesson by the teacher/researcher was clearly visible in some of the students' artwork. Student J created a lightbulb for her final artwork and Student C included a lightning bolt in hers. Students A and D included birthday candles while Students F and G drew a campfire. Student H created a bioluminescent worm. The student artwork that was influenced by the artwork and images were still personally meaningful and unique works of art. No students copied the image or each other.

Artist as creator. The final way that students responded to an art lesson that investigated spirituality was by exploring the art process. For this lesson, the art process was Styrofoam prints. Although the art process does not clearly fit into any part of our three part definition of spirituality, the act of creating art puts an artist in the zone. Is there a possible connection with a higher power, when the artist becomes the creator and creates? The teacher/researcher thinks there is a connection. Kandinsky (1911/2011) wrote

It is very important for the artist to gauge his position alright, to realize he has a duty to his art and to himself, that he is not the king of the castle but rather a servant of nobler purpose. He must search deeply into his own soul, develop and tend it, so that his art has something to clothe, and does not remain a glove without a hand. The artist must have something to say, for master over form is not his goal but rather the adapting of form to its inner meaning (p. 107).

Recommendations for Further Research

This research led to several ideas for future studies. One recommendation is to have the teacher/researcher become more purposeful in creating quiet reflection and moments of awe throughout the lesson. Another recommendation would be the creation of a list of open-ended topics/lessons such as light, dark, ritual, etc., that are broad but fit the three-part definition of spirituality. Teaching this lesson to a wider age range, such as third through twelfth grades would be another possibility. Additionally, future research could focus on a broader survey of fine arts teachers and how they include spirituality in their lessons. Furthermore, a compare and contrast study between art education in religious private schools and public schools could generate helpful research in the field of spirituality. Lastly, a study that investigates spirituality

in the art of making art could test the three-part definition of spirituality on the other arts to check the definition's validity.

Conclusion

From the perspective of the teacher/researcher, it is imperative that a lesson on spirituality be open ended enough to allow students to explore all three aspects of spirituality: interconnectedness with human beings, interconnectedness with nature and all living things, and interconnectedness with a higher power. Without approaching the lesson with a full spectrum of the meaning for spirituality, the teacher may stifle or limit student response to the lesson, much as a lesson on multiplication would necessitate understanding how addition is an integral part of multiplication.

This research had many challenges. Time or lack thereof, was a common denominator through the whole process. The discussions on art history and aesthetics along with the lesson on signing a print were all omitted from the lesson due to lack of time. One school had to wait two weeks to continue the lesson. Neither school was able to participate in a print suite, an opportunity for students to exchange signed prints with other classmates as a way of sharing artwork and creating community.

Time created still another issue in this research. This lesson included all four areas of a Discipline-Based Art Education lesson: art production, art history, aesthetics, and art criticism. Typically the lessons taught by the teacher/researcher have two and sometimes three of the four components included due to length and frequency of art classes. This research did not begin until five weeks were left in school due to IRB approval. Since the classes don't typically complete all four components of the DBAE for any lesson, students have not had the opportunity to regularly think, speak, or write critically about artwork. Students at this age may find it

challenging to use critical analysis in all four areas of DBAE in a project at the end of the school year. Additionally, holding interviews that began after school had let out for the summer added even more challenge, causing the teacher/researcher to use some level of prompting to gain answers to the questions.

The student population used was young and most only on the verge of understanding abstract reasoning. Implementing this research earlier in a school year so that time does not become an issue and using an older age group could produce varied and possible more productive results. Using a class routine that includes class discussion within the four areas of DBAE over the school year would provide a better base for the students' ability to retain the conceptual material within each lesson.

This research revealed that spirituality can be successfully included within an elementary art program by using a definition acceptable for the public school system and using a broad spirituality-related topic. It also revealed that the teacher needs to create moments of awe and wonder within the lesson and consider their own spiritual nature and how it will influence their students. In response to spirituality in the lesson, students created personally-meaningful artwork that related to their own personal experiences. The students also applied cross-curricular knowledge to the lesson. Hopefully more research will be completed on spirituality in art education and in all areas of the fine arts.

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APPENDIX A: LETTER OF PERMISSION AND CONSENT OF PRINCIPAL(S)

Dear Principal _____,

As a graduate student under the direction of Assistant Professor of Art Education, Dr. Judith Briggs in the School of Art at Illinois State University, I am conducting a research study to investigate the relationship between the inclusion of spirituality in art lessons and the response of the students to the spiritual aspects of the lessons. I will be looking at spirituality in three distinct ways, which include interconnectedness with human beings, nature, and all living things, and a higher power. Spirituality in this research will not be affiliated with any particular religion.

I am requesting your permission for me to conduct this research, as the art educator, within your school's 3rd and 4th grade art class(es). I will be teaching a printing lesson about light that fulfills the district's curriculum requirements and covers some of the National Core Arts Standards. The lesson will be taught to all of the students in the class. The unit is no more than five weeks in length and specifically teaches to the three spiritual components mentioned. I plan to reflect on my own teaching practices, looking specifically at how I communicated these components within the lesson and at the reception/expression of these spiritual components within the artwork and any supplementary writing completed by the students. Only information gathered by the students who have parental permission and student assent will be used as data in the research.

I will be asking the school secretary to read a script about the study and distribute the parental permission and student assent forms via the 3rd and 4th grade classroom and collect them, until after the unit is completed and I have posted grades for the project. After I turn in unit grades I will ask only participants who have given assent and have parental permission to

participate in 20-minute interviews outside of class time about their artwork and allow me to photograph or copy their artwork and their writing. (The interview questions are included below.) I will conduct the interview at the school in a place where the student cannot be overheard. Students may decline to answer any or all questions and decline to have their work recorded. Risks to the students include saying something that they later regret. Students may redact what they have said by either notifying me or the school secretary. Students' participation in the study is voluntary and they may withdraw from the study at any time by notifying the school secretary; there will be no penalty for not participating in the study or withdrawing. Parents have been given the option to receive a copy of the finished thesis, if desired.

Your school's participation in this study is voluntary. If your school chooses not to participate or to withdraw from the study at any time, there will be no repercussion. The results of the research study may be published, but no names or the name of the school will be used. Although there may be no direct benefit to you as the Principal, the possible benefit to the students is that the interviews and discussions may allow them to reflect upon their artwork and their thought processes when making art. As the teacher, I will benefit from actively participating in the research and reflecting on my teaching practices. If you have any questions concerning the research study, please call me at (309) 846-3488 or Dr. Judith Briggs at (309)-438-5621.

Sincerely,

Kimberly A. McHenry

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Research Ethics & Compliance Office at Illinois State University at (309) 438-2529 and/or <rec@ilstu.edu>

Interview Questions

1. What do you enjoy about making art? Please tell me more about that.
2. What was your favorite part of making this project? Please tell me more about that.
3. What are some of the ideas you were trying to express in your artwork? Please tell me more about that.
4. In this project we talked about the importance of light for people, animals, plants and living things. In what ways do you think light is important? Please tell me more about that.
5. Plants and animals both need light. Some even make their own light. What do you remember about animals and plants needing light? Please tell me more about that.
6. We talked about how many different cultures or groups of people use light for celebrations with their family. Does your family use light from candles or fire for celebrations? Please tell me more about that.
7. Many also use light as a symbol for a higher power or a supernatural power. What are some ways that you have seen light symbolize a higher power or a supernatural power? Please tell me more about that.
8. Is there anything else you would like to share with me?

___Yes, I give consent for the Spirituality in Art Education study to be conducted in my school.

___No, I do not give consent for the Spirituality in Art Education study to be conducted in my school.

Name _____

Signature _____

Date _____

APPENDIX B: LETTER OF PERMISSION FOR PARENT/GUARDIAN

Dear Parent/Guardian,

As a graduate student under the direction of Assistant Professor of Art Education, Dr. Judith Briggs in the School of Art at Illinois State University, I am conducting a research study to investigate the relationship between the inclusion of spirituality in art lessons and the response of the students to the spiritual aspects of the lessons. I will be looking at spirituality in three distinct ways, which include interconnectedness with human beings, nature, and all living things, and a higher power. Spirituality in this research will not be affiliated with any particular religion.

I will be teaching a five-week unit to your child's art class about printmaking. The subject of the work will be light and how it relates specifically to the three spiritual components mentioned.

On the first day, discussions will focus on times when candles or fire is used for illumination or warmth (such as campfires, candlelight for loss of power or celebrations); sunlight for Vitamin D and brain function; and plants' need for light (photosynthesis), animals' need for light (diurnal, nocturnal, and bioluminescent animals and plants). Our last discussion will focus on how light is used in many cultures, both ancient and contemporary, have considered light or the sun as something to worship, often equating light as a symbol of a higher power and/or a god. We will be briefly mention the Plains Native Americans and their Sun Dance Ceremony, ancient Egyptians and their god Ra, and the Muslim and Christian faith which see light as Allah or God. Preliminary sketches will also be completed.

On the second day of the lesson, we will look at and discuss the works of several artists working with light, such as painter Thomas Kinkaide, illustrator Paul Goble, dancing group

Pilobolus, and installation artists James Turrell and Shih Chieh Huang. We are going to use the method of describing, analyzing, and interpreting artwork to better understand the work. Next, we will look at the process of printing. Our last activity of the day will be to create a final sketch.

In the remaining three days of the unit, we will be continuing to talk about the artists' work (mentioned in the previous paragraph) and printing.

In this unit, I will teach the students how to plan for, create, and make Styrofoam prints. I also plan to reflect on my own teaching practices, looking specifically at how I communicated the three components of spirituality within the lesson. All the third and fourth grade students will participate in this lesson. Only information gathered by the students who have parental permission and student assent will be used as data in the research.

I will be asking the school secretary(s) to read a script about the study and distribute the parental permission and student assent forms via the 3rd and 4th grade classroom and collect them, until after the unit is completed and I have posted grades for the project. After I turn in unit grades I will ONLY ask students who have granted assent and have parent permission to provide 20-minute interviews about their artwork outside of class time and allow me to photograph or copy their artwork and their writing. (Please see the interview questions at the end of this document.) I will conduct the interview at the school in a place where the student cannot be overheard. Students may decline to answer any or all questions and decline to have their work recorded. Risks to the students include saying something that they later regret. Students may redact what they have said by either notifying me or the school secretary. Students' participation in the study is voluntary, and they may withdraw from the study at any time by notifying the school secretary; there will be no penalty for not participating in the study or withdrawing.

The results of the research study may be published, but no names or the name of the school will be used. The possible benefit to the students is that the interviews and discussions may allow them to reflect upon their artwork and their thought processes when making art. As the teacher, I will benefit from actively participating in the research and reflecting on my teaching practices.

If you would like to have a copy of the results of this research emailed to you, please include your email in the space provided at the bottom of the form. I would be happy to send you a copy of the thesis.

If you have any questions concerning the research study, please call me at (309) 846-3488 or Dr. Judith Briggs at (309)-438-5621.

Sincerely,

Kimberly A. McHenry

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Research Ethics & Compliance Office at Illinois State University at (309) 438-2529 and/or <rec@ilstu.edu>

Interview Questions

1. What do you enjoy about making art? Please tell me more about that.
2. What was your favorite part of making this project? Please tell me more about that.

3. What are some of the ideas you were trying to express in your artwork? Please tell me more about that.
4. In this project we talked about the importance of light for people, animals, plants and living things. In what ways do you think light is important? Please tell me more about that.
5. Plants and animals both need light. Some even make their own light. What do you remember about animals and plants needing light? Please tell me more about that.
6. We talked about how many different cultures or groups of people use light for celebrations with their family. Does your family use light from candles or fire for celebrations? Please tell me more about that.
7. Many also use light as a symbol for a higher power or a supernatural power. What are some ways that you have seen light symbolize a higher power or a supernatural power? Please tell me more about that.
8. Is there anything else you would like to share with me?

I give permission for my child to participate in the Spirituality in Art Education study.

Child's Name _____

Parent's Name _____

Parent's Email (if a copy of the finished thesis is desired)

Parent's Signature _____ Date _____

APPENDIX C: PARTICIPANT LETTER OF ASSENT

Dear Student,

Hello. This is a letter from Mrs. McHenry, your art teacher. She is also a graduate student in Art Education at Illinois State University. Mrs. McHenry is studying how an art teacher includes spirituality in her art lessons and ways that might influence her students. She will be teaching a lesson about light and spirituality in your art class, and she wants to know what you think.

We are looking for students interested in volunteering to be a part of this study. You can only be involved if your parents give their permission and you give assent. First, your parent will need to sign the Parent Permission form and mark it for the type of permission they are giving. Then, if you want to be involved in the study, you will sign the form and mark how you want to be involved. You will need to return all of the forms to your school secretary.

It is your choice to be a part of the study and you may, at any time, choose to stop being involved by telling the school secretary. Your grade will not change if you choose not to be a part of the study or if you choose to stop being part of the study. You won't be in trouble or have your grade for art changed. Mrs. McHenry will not know if you are a part of the study until she has taught the lesson and put the grades in TeacherEase.

If you choose to be a part of the study, you will:

- Have a private conversation with Mrs. McHenry where she will ask you questions about your artwork and how you felt about it and the lesson. This will only take 20 minutes and Mrs. McHenry will use an audio recorder to tape what both you and she said during the conversation. This private lesson will happen outside of class time and no one else will hear your answers. You can decide not to answer any or all of the questions without

worrying about anything happening. There is a risk that you might say something that you want to take back. In that case you can tell either Mrs. McHenry or the school secretary, and what you said would not be used.

- Allow Mrs. McHenry to photograph or copy your artwork
- Allow Mrs. McHenry to make photographs or copies of any writings you make about your artwork

Everyone in your class will be making an art project. It doesn't matter if they decided to be involved in the study or not. Nothing about the study will change your grade in art.

Mrs. McHenry might publish the study but your name won't be used. She'll make a code for every student, such as Timmy is "Student A". Although she won't give you anything for helping her with her study, the conversation may help you think more about your art and what it means to you.

Mrs. McHenry may present what she found out at teacher conferences and may write a paper about it for other teachers to read. She will not use your name or the name of your school when she writes about what she studied.

If you have any questions concerning the study, please have your parent/guardian call Mrs. McHenry at (309) 846-3488 or Dr. Judith Briggs at (309) 438-5621.

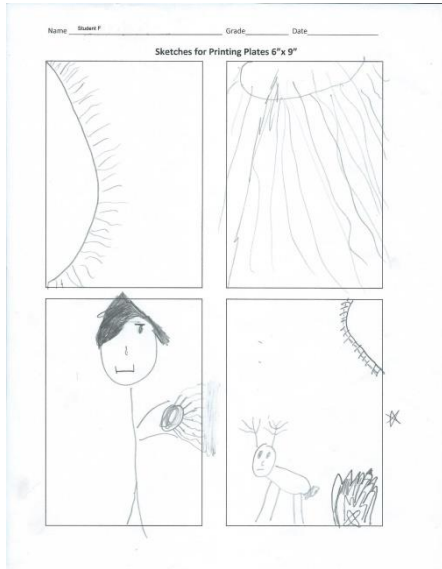
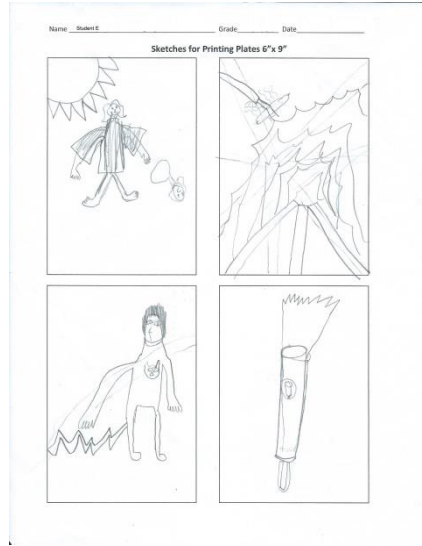
If you have any questions about your rights while being involved in this study, or if you feel you have been placed at risk, you can have your parent/guardian contact the Research Ethics & Compliance Office at Illinois State University at (309) 438-2529 or <rec@ilstu.edu>. Thank you!

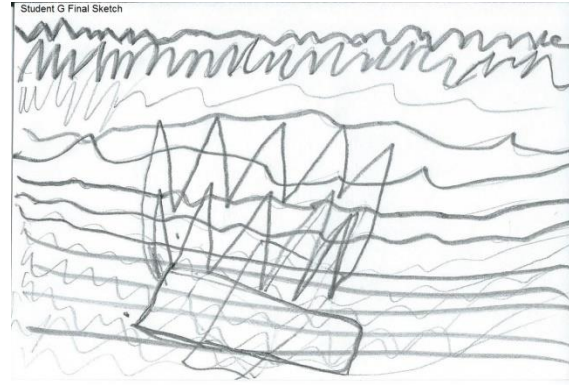
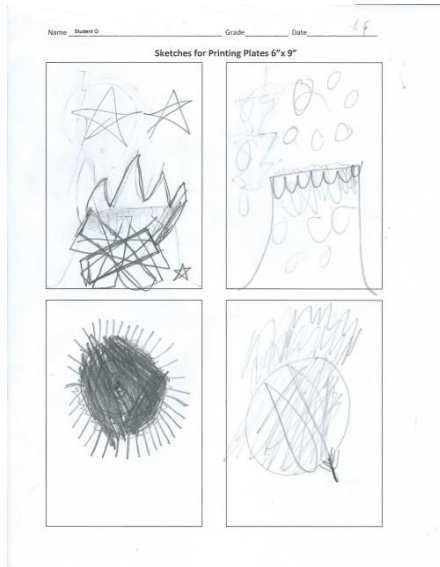
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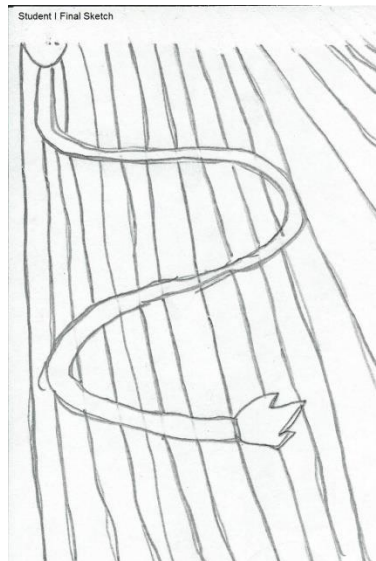
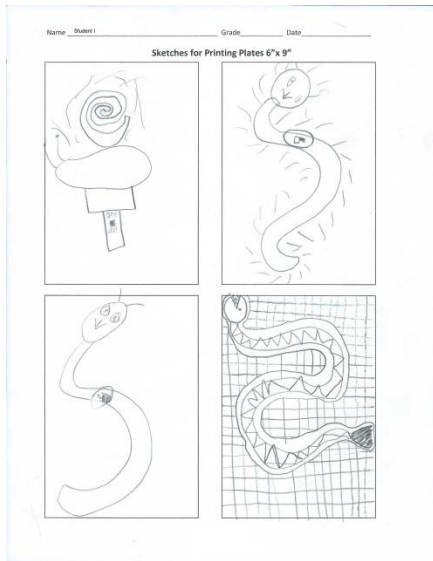
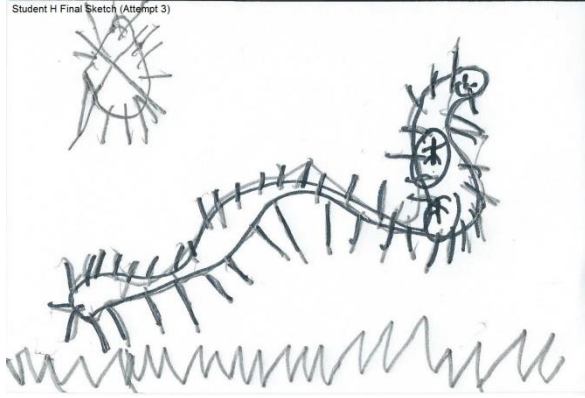
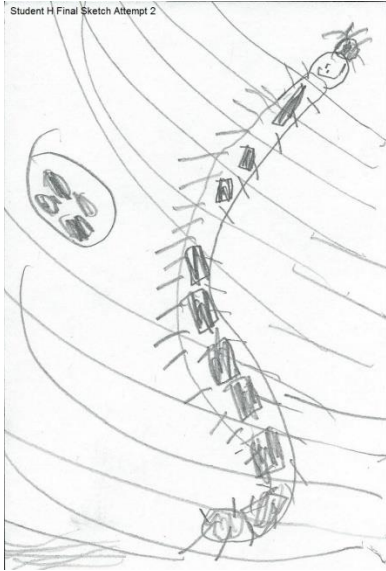
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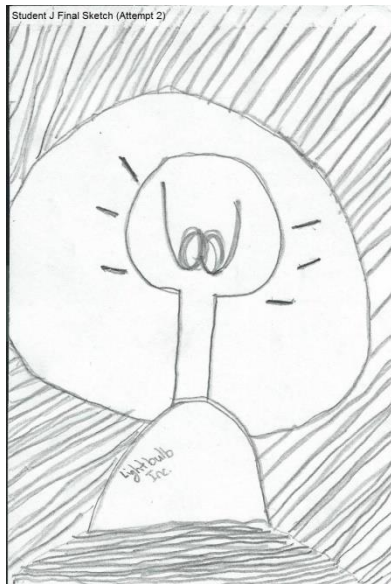
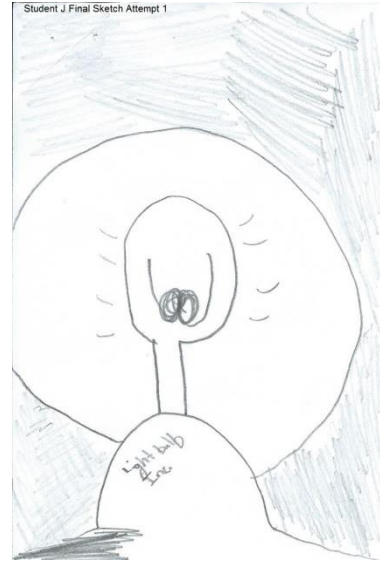
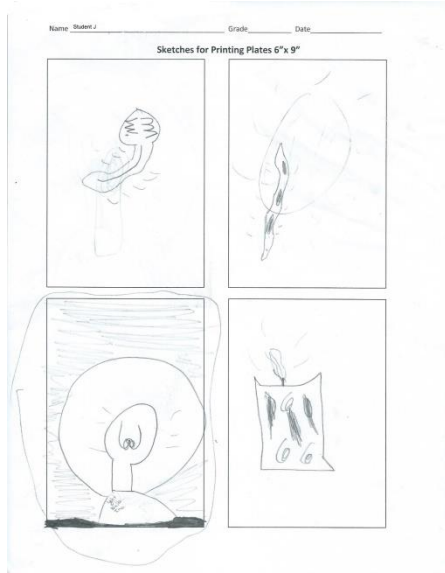
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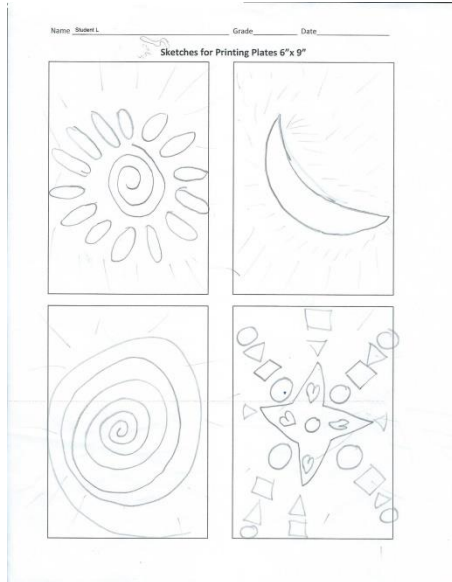
APPENDIX D: STUDENTS' SKETCHES SCHOOL A



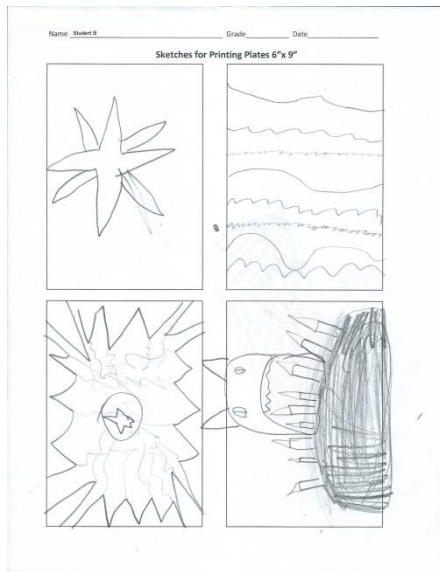
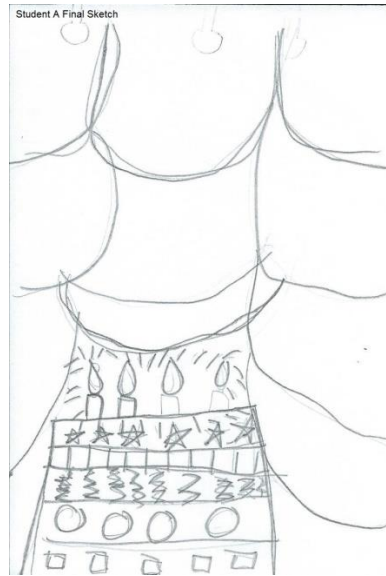
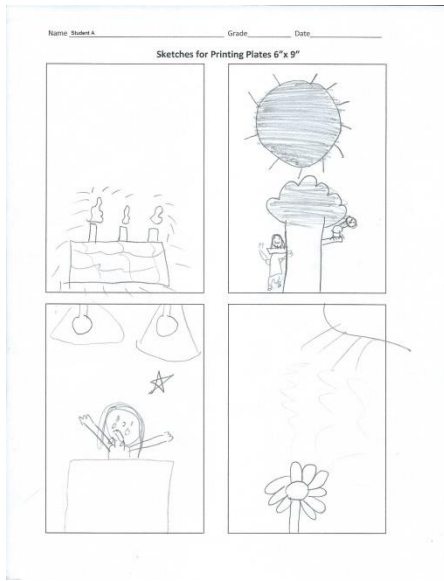


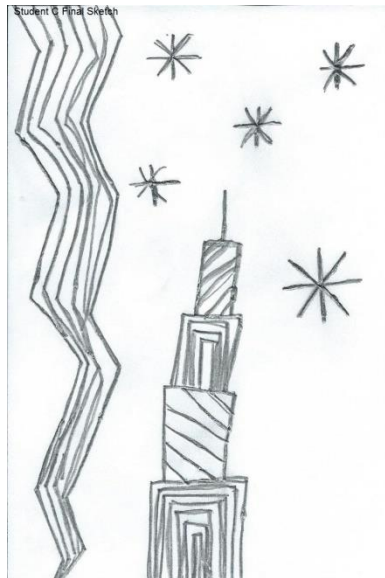
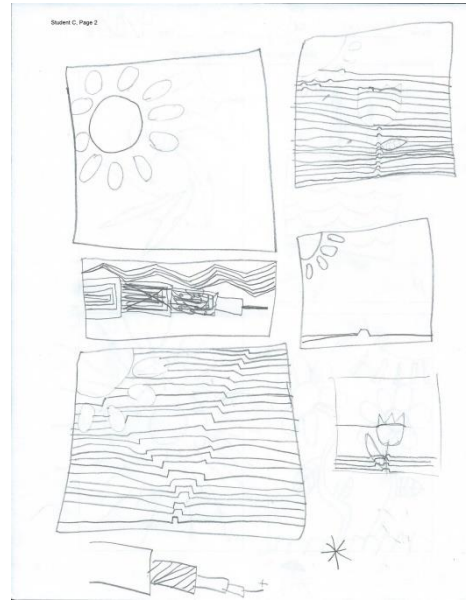
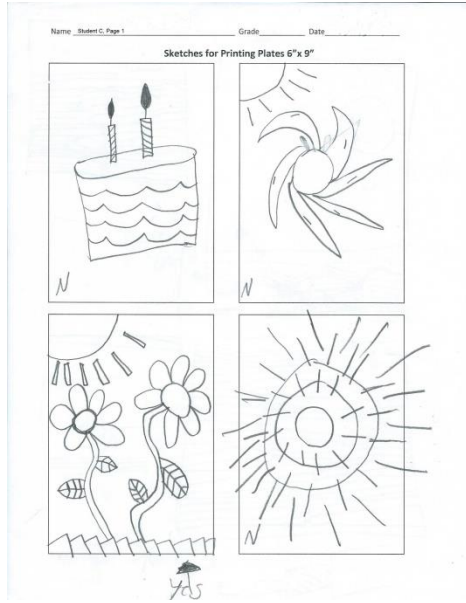


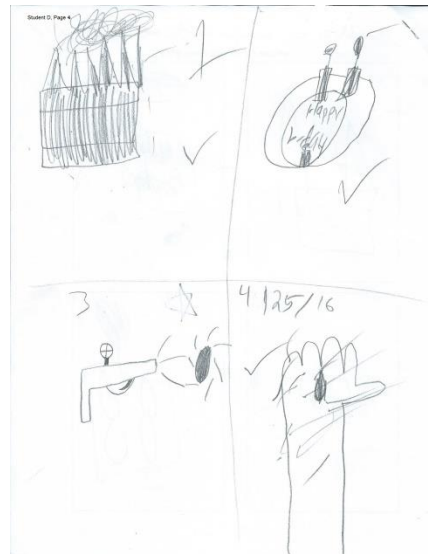
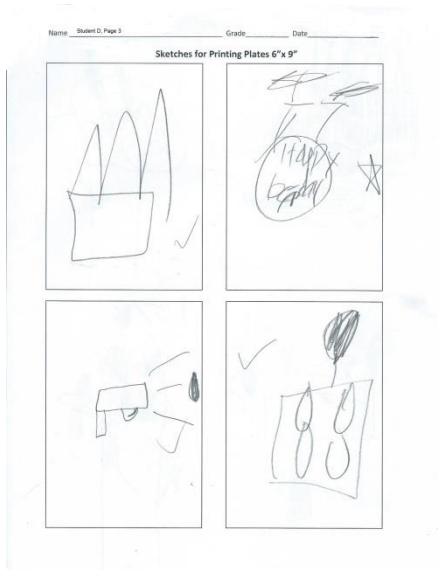
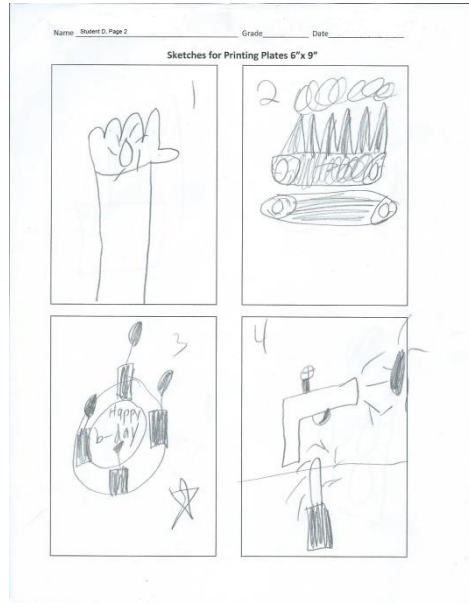
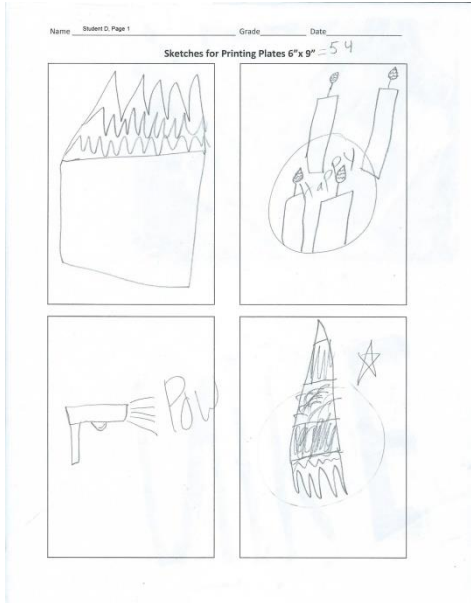


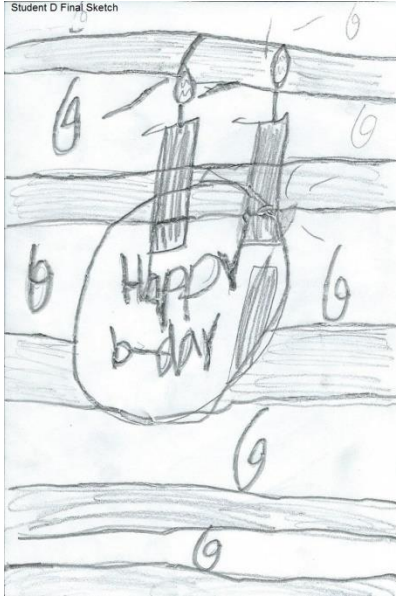


APPENDIX E: STUDENTS' SKETCHES SCHOOL B

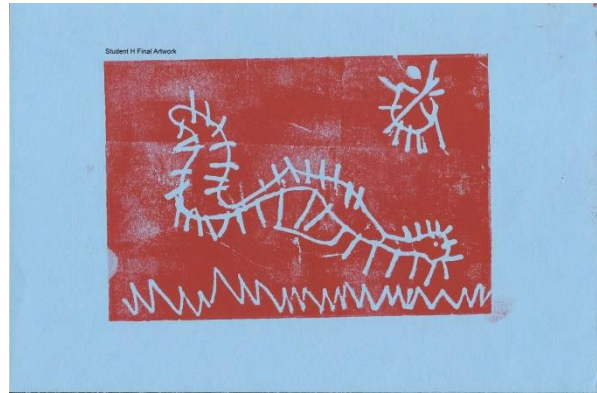
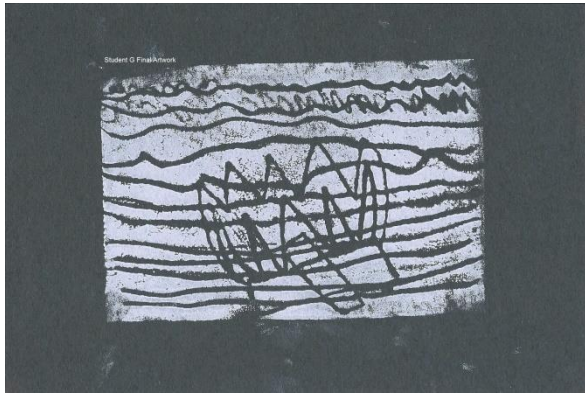
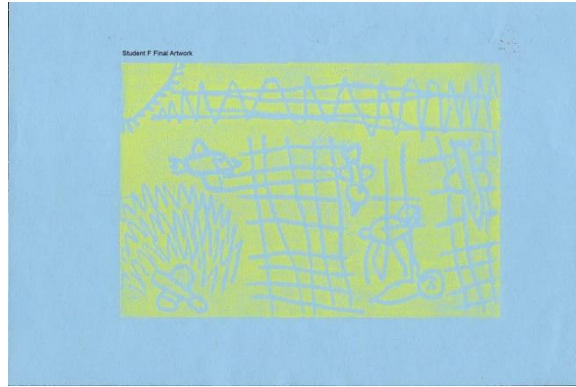
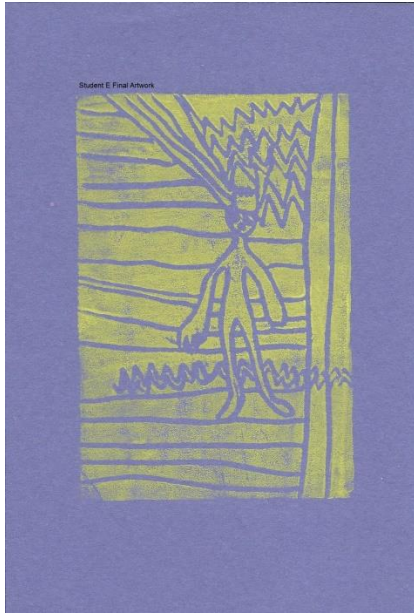


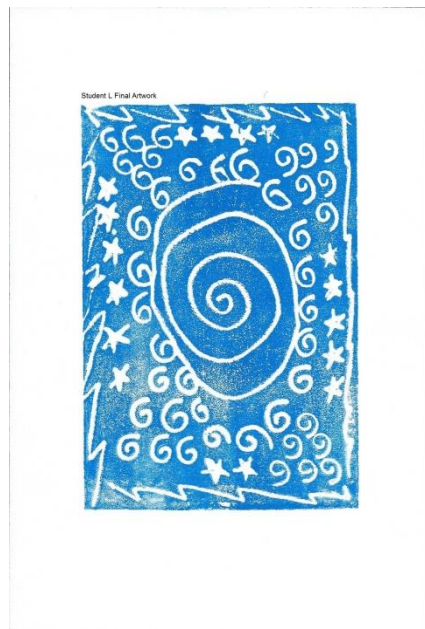
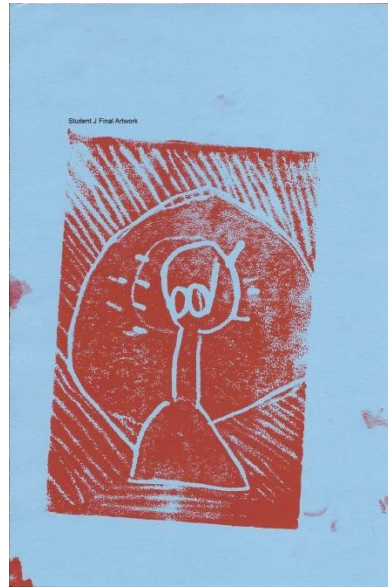
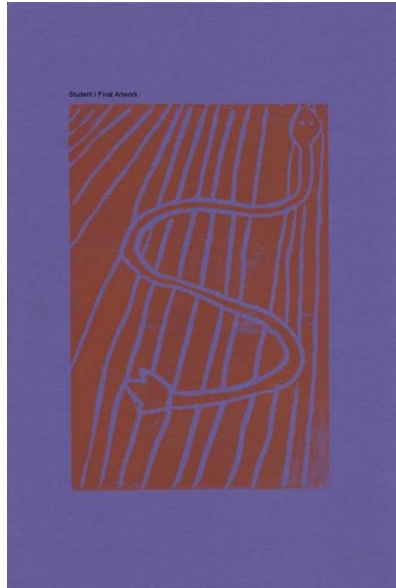




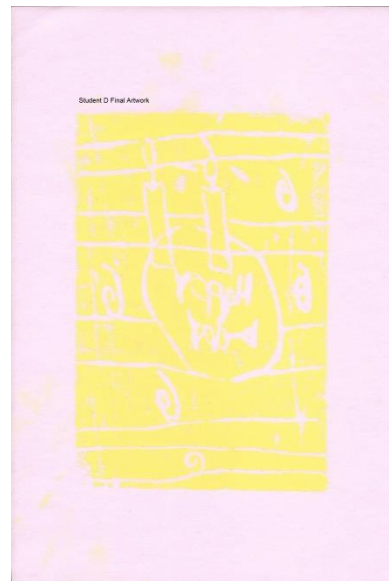
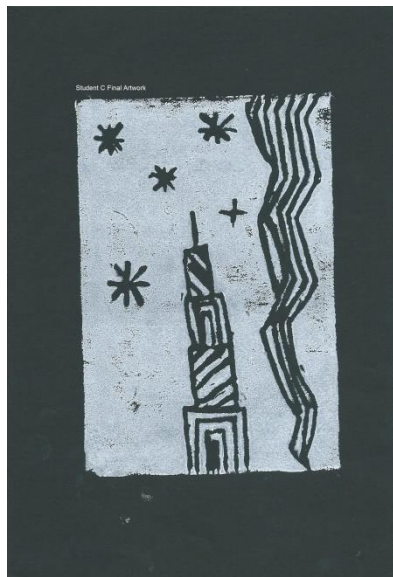
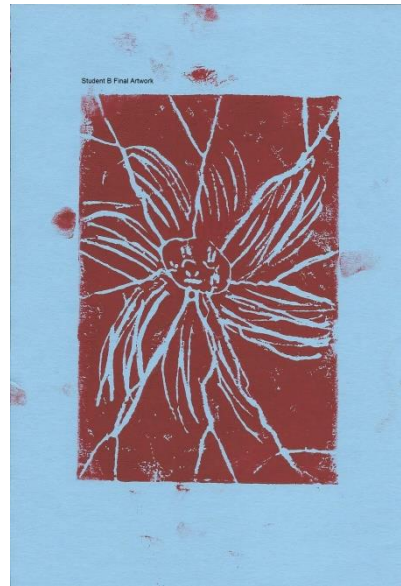


APPENDIX F: STUDENTS' ARTWORK SCHOOL A





APPENDIX G: STUDENTS' ARTWORK SCHOOL B



APPENDIX H: INTERVIEW QUESTIONS

Interview Questions

1. What do you enjoy about making art? Please tell me more about that.
2. What was your favorite part of making this project? Please tell me more about that.
3. What are some of the ideas you were trying to express in your artwork? Please tell me more about that.
4. In this project we talked about the importance of light for people, animals, plants and living things. In what ways do you think light is important? Please tell me more about that.
5. Plants and animals both need light. Some even make their own light. What do you remember about animals and plants needing light? Please tell me more about that.
6. We talked about how many different cultures or groups of people use light for celebrations with their family. Does your family use light from candles or fire for celebrations? Please tell me more about that.
7. Many also use light as a symbol for a higher power or a supernatural power. What are some ways that you have seen light symbolize a higher power or a supernatural power? Please tell me more about that.
8. Is there anything else you would like to share with me?

APPENDIX I: STUDENT INTERVIEWS SCHOOL A

Interview #5 Student E

K: So when you came in, when we first started....oh, look at my candle! It has not liked traveling! This is how they made it. Isn't that kind of cool!

E: Yeah!

K: But that's the light that lights up the candle and it goes inside that hole and it hadn't fallen apart until today. But I noticed it had fell apart today.

E: It looks like it broke up here.

K: Yeah. Well, I was carrying it around, so it probably wasn't meant to be carried around so much. You are probably supposed to put in your house and then leave it. So, on the first day of this project, we came in...uh oh...maybe it's tired.... Yeah, it broke and so I taped it...oh no, it's still working I guess.

E: Okay.

K: It's another fake candle, you know. We talked about light and we....

E: It's flashing!

K: Yes, it is flashing. It is supposed to be like a flickering flame, right, like a fire is...you know, how it doesn't just stay one way?

E: Yeah. One time when I went, like, under the table I accidentally bumped it, the flame went like this (student gestures and blows). It was so cool! I'm like (makes a whooshing sound) and it went like (makes a whooshing sound). It looks like a wave!

K: Yes, it does look like a wave. Do you ever notice that on a campfire outside, too?

E: Yeeahh!

K: How is does that? It's like the big ones and the small ones. That is really cool!

E: Yeah!

K: Really cool!

E: I went camping and this...I think this eye nearly got swollen. It was bit up and it was like swollen like this.

K: Did you get bit by something?

E: Yeah. Mosquitos.

K: Ah! Mosquitos will do it to you!

E: I went inside a tent, zipped up, all the way...nothing...I thought nothing could get in it!

K: Well, maybe it came in when you came in? They are pretty sneaky! Do you know what I mean? Maybe it came in on your pants and you didn't feel it or something and then it was IN the tent with you.

E: I had shorts on!

K: Okay. Well, it could be on your shorts!

E: Nope.

K: Could be....like if it was behind you! You wouldn't see it. I don't know....bugs love to be in tents too, just like kids!

E: Well...they think I am a little piece of candy to them.

K: Yes. (laughing) I was always like that too.

E: I still have bug bites on my back from like a week ago!

K: Uh huh.

E: Next week I am going to have to go in so they can check my toe!

K: Yep. I am sure it will be all better...or getting on its way to getting better by then, right?

E: Yeah. If not, we are probably going to have to get something else!

K: Yeah. But don't worry about that!

E: I know.

K: See what happens. It will probably work out just fine. Alright, so I am going to ask you a couple of questions. I just have 8. I know there are a lot of words on here, but I am just asking these 4 and then these 4 over here. Okay. So what do you enjoy about making art?

E: It's really fun!

K: What part is fun?

E: That you get to paint!

K: Oh, you like painting?

E: Yeah.

K: Awesome. Alright, what is your favorite part about making this project, the one we did here?

Did you have a favorite part?

E: Um...my favorite part is when I got to draw them on a piece of paper and I got to trace it on the piece of Styrofoam.

K: Okay. Awesome! Um...is there something that you...do you just really like drawing? Is that why?

E: Yes.

K: Okay. Alright. What are some of the ideas, like in your sketches and then in your final picture, what are some of the ideas that you were trying to express or tell us about?

E: Um, this would be a girl standing and she was on concrete with no shoes or socks on!

K: Okay!

E: And there's a sun and there's part of a shadow - I couldn't put her whole body. That is a roasting hot dog that reminded...I got... when I saw a fire on a show I remembered that..."oh

hey, I went camping when I was in second grade!” And then I remembered that we roasted hot dogs! And we ate s’mores!

K: Awww!

E: One got all the way up here!

K: Oh no! (both laughing) I love s’mores! They are delicious, aren’t they?

E: Yeah!

K: Yeah!

E: Um ...this would be cat boy from the show “PJ Max”. He’s a kid and he has super powers but he does it in the night not in the....day. And, it’s like, when he goes fast, it’s like...you see this flash of light going like (student makes a zig zag motion with her finger).

K: Oh! Okay!

E: So quick! I’m like....Woah! First he’s like all the way at that corner and then he’s all the way at that corner!

K: And all you see is a flash of light? For him to get there?

E: Yes!

K: Wow!

E: Zoomp!

K: (laughing) Well, that would be pretty cool!

E: Yeah!

K: And then he’s in the dark so it like glows, right?

E: Yeah, it glows! It’s like (student makes a hissing sound). And on the show I saw that...so there are two boys and one girl. One name is Amiah also known as Owlet. Gecko- Greg, and

Connor – Cat Boy. And it is so weird. One time, um, they all just glowed not even doing their powers, they just went “GLOW”! It was sooo weird!

K: I don't think I have ever seen that show. I might have to...what's it called again?

E: PJ Max.

K: PJ Max.

E: Masks!

K: Masks? M-A-S-K-S? Okay! Alright. PJ Masks.

E: And this is my flashlight. I put a little battery in there with a little thing with a little light on top...

K: Uh huh.

E: So it's like, the light on top of the battery is making the energy to go this. This is a piece of plastic - I made this. And there's the part that goes around on your wrist, so you can do this.

K: Uh huh.

E: There's plastic up here and then I did this to act like it looks like there's flames!

K: Cool! Flames or like flames of light?

E: Flames of light!

K: Ok. You know what? This one does not do it that exciting (showing student one of the regular flashlights on display) I don't see any flames, but it is on. But that's really cool! I like your idea! That's awesome! Alright so then your last one and then you picked....you picked....

E: Cat boy!

K: Cat boy! Alright!

E: And I did a little more back here because sometimes when he does...at bedtime, he will stand on his bed and do this on his watch...

K: Okay...

E: And sometimes I would see, like this, behind him and then he'll do a flip!

K: On his bed? Or onto the floor?

E: No! It's just like this....like this.... And then it has...so it is dark blue and it looks like a cat mask.

K: Oh, okay.

E: And then, but without the whiskers! And then he does and flip and says, "Cat Boy!"

K: Oh wow!

E: It is soo...

K: So that's what got you this idea with the zig zaggy line, right?

E: Yeah. And I did it up there, too!

K: Uh huh. What about these? Are these just awesome lines just to kind of use for your background or do they stand for something, too.

E: Um....sometimes in the background, you would see quick flashes of, like quick lines, and also I looked up there and it reminded me of, like right there, and it reminded me of PJ Mask.

Because they would go "whoosh!". It literally, that it...first, you see a kid hitting the watch, and then next thing you know, flash of light, it turns that color, like red, green or blue, and then you would see like a gecko...like a gecko face mask, an owl...an owl one, and a cat one. And then you'll see the kid as in an animal.

K: Um mmm. And it changes into an animal?

E: Yes.

K: Okay.

E: But it is actually...it's really the boy or the girl.

K: Because the girl is the owl and the boy is a cat and awhat's the other....

E: A gecko.

K: A gecko, that's right.

E: Yeah, he can have super strength and lift up..he can lift up this whole....school.

K: Oh my goodness! The gecko?

E: Yes!

K: Oh.

E: Just....he could do it with one hand! Like “vroom”!

K: Oh my goodness!

E: He has super gecko strength!

K: Yes, definitely! And then...so with these lines, are you talking about the side or on the air conditioner?

E: The air conditioner. ‘Cause when I blink sometimes it goes (student gestures a pulsating waving line). It makes me remember.

K: Makes sense. I can see that now. Alright, um, in this project we talked about the importance of light for people, animals, and plants and living things.

E: Plants need it because it's food to them. Because if they don't have sunlight, like what we....used...for Mother's Day I got my mom some flowers. We kind of put it on the cabinet, with a wall here and a wall here.

K: Okay.

E: But the window was all the way that way. And we forget to put it out in the light anymore, so it died.

K: Okay.

E: And humans need it because if you just stay inside...you just feel like...sometimes if outside is nice and cool and inside is hot and you're like, "I'm hot!" so if you go outside and it's cool like in the winter, put on some warm clothes and you can play and get happy! And then, animals need it the same way as humans, but if it is very...has very thick fur, like a goat or a sheep, I think you should shave off some of the fur and then let it..stay outside.

K: Like in the summer time so it can be cool?

E: Yeah. Sometimes when I go out in the summertime, I will literally tuck in my shirt and then I would do acrobatics on the ground.

K: Oh yeah!

E: I would put gloves on first because I don't want a stick to poke me. It hurts!

K: Yeah.

E: 'Cause, let's say, that was from a stick...HURTS! Yeah, this was all cat.

K: Oh, and the scratches too, on the back?

E: Oh yeah. I don't mess with her. Sometimes I'm just sleeping. She will literally get on my face and slap me in the face!

K: She wants you to wake up and play, right?

E: Yes! And I'm like, no Kenzie! So I grab her off my bed and drop her out of my room and close my door and get back to sleep.

K: So does she sit outside your door and "Meow, meow"?

E: No. She just goes (student gestures a waiting face) waiting for me to wake up.

K: (laughing)

E: She will literally go to Mom's door and just scratch at the door. She will literally just open the door and go squirt, squirt, squirt at her because it is so annoying. Usually we would put out a

paper towel and put stuff on it to test. First, we did lemons, lemonade, I mean lemon juice and vinegar...I mean like rosemary, lemonade..I mean lemon juice and...I don't remember the other one, but....

K: What's it for?

E: To keep cats away. A cat repellent. Yeah...but that didn't work.

K: (laughing)

E: She would literally grab it, like this, and turn it over and then....

K: go to the door anyway?

E: She will literally grab it on it on her claws and go (student gestures a clearing away movement). I'm like...really cat! And then I grab her away from the door right before she starts scratching, take her out front, turn on...you know the Hot Pursuit for the kitty...for like cats...I turned it on...on fast...she will literally go...(student gestures a round and round motion). Then she hides. She goes up on the tubs and waits. She will literally pounce on it and try to turn it off. She will like go like this (student gestures cat like motions and meows).

K: So it sounds like she likes to wake you up but she is also fun to have, though, right?

E: And very tiring!

K: Yes, well. (Laughing)

E: She's already one year old!

K: So she's a kitten. She'll calm down, though. When she gets a little bit older, she'll calm down.

E: Maybe.

K: Yeah.

E: You don't want to see her inside when she is chasing something! She will zoom around the house and we will have to stay in one place when she does it. She is one fast kitty! I can barely catch up with her when she is running inside!

K: I know. I have one too! Those kitties! She's a little older so she plays sometimes. She wakes me up, though. Plants and animals both need light. And some even make their own light. We talked a little bit about these...these creatures that live in the deep sea and their bioluminescent...yeah I brought some toys and there's some books about them....

E: Angler fish!

K: Yeah! Exactly! And all of these light up somewhere like probably his eyes, I'm guessing. I don't know on this one...maybe his whole body.

E: We can do this.

K: Yeah, you can. What kind of light is that?

E: The black light.

K: So these don't really glow but, you know, in this book...in this book here...um...this is a glow in the dark book. You can feel the ink right there on the page. So if you are in the dark, you can shine that on there and it will pick it up.

E: Awesome!

K: Maybe we could do that at the end? And go into the copy room and turn the light off so it is dark?

E: Yeah!

K: Yeah! We'll do that. That would be good. Um, so what do you remember about plants and animals needing light? We talked about your plant that you got for your mom.

E: Yeah....and they always need light, if not they will die.

K: Alright.

E: Always also give them water.

K: Yes, they do need water too. Plants. What about animals? Do they need light?

E: They need light and water, too! Because if they don't get enough light, they probably won't get....if it's cold they probably won't get warm. If they are kittens, yeah, Kenzie doesn't get that warm, she will literally hide under my blanket when I am sleeping 'cause she gets hold.

K: (Laughing) Yeah.

E: And....um... also if it's like...they need water because if they don't they'll get dehydrated and die.

K: Yes, it's true. Um, so we talked about also a lot of different cultures or groups of people and they celebrate with light and with their fam....

E: Firecrackers!

K: Families...yes, a good example of fireworks, yeah. Birthday candles is another one.

E: Yeah.

K: And there's a picture...there's a picture of someone at church lighting candles...

E: Christmas!

K: Christmas lights...yeah! Those are definitely lights that we are using to...celebrate with.

E: Ah! Hyperspace!

K: Yeah! Isn't that cool! Oh yeah, this picture of the lady lighting the candles at church. So do you have anything with your family where you use light for celebrations or special occasions?

E: Um, we would do it on Halloween.

K: What do you do with lights on Halloween?

E: Um, we would do that to remember Raelyn, one of our sisters who died.

K: Oh, okay.

E: Sometimes we would do it for our Mom and Dad's anniversary. We would turn off the lights put a candle on a tray and we'll light it.

K: Oh nice, very cool.

E: We would do it also...we would also do...um..we would do usually when we go to...when my grandma goes to...usually when me and Grandma and Grandpa and my sisters go to church, usually I would...we would see that...um...there was candles...like um....one of these things... that you can hold and walk around with it.

K: Okay.

E: Yeah. Usually I would see it on a tray.

K: I think you are talking about... not really a lantern... so the candle is on top of it and you are holding onto the base or the bottom of it...like...

E: Base...base...

K: the base of it. Like (teacher thumbs through images trying to find an example)

E: Like a chandelier---something usually also at places like I would see a chandelier on the ceiling.

K: Yeah, that's true.

E: It is so many! I couldn't even count how many!

K: Oh yes! (laughing) Those are pretty neat! Um, a lot of other people...a lot of people, a lot of cultures and groups of people use light as a symbol for a higher power or a supernatural power.

Have you...what are some ways that you have seen light symbolize a higher power or a supernatural power?

E: Um....um....

K: Do you know what I mean by that? No, okay. Well, you talked about it a little bit at, you said sometimes at church that they have candle they hold something that has a candle on it, right?

E: Yeah, like this.

K: Okay...so it's a candelabra.

E: Yeah!

K: But they hold it. SO it is on a big pole?

E: It's like on a tray. Like this. It is this tall...(student gestures). It's like that tall and that wide.

I would see it put on there and then usually we would...um....sometimes they would literally blow out the candles and...um... we would...um... sing.

K: Okay.

E: Sometimes.

K: Sometimes. Um is there anything else you want to share with me, about light or art or anything?

E: No.

K: Okay. Let's go check out that book!

Interview #4 Student F

K: So these are the bugs...no, these are the sea animals that we talked about...kind of like the ones there (referring to the books) and so some of the kids, I don't remember which one you picked, um, which the topic of your art was...but....let's see if I can find it here...oh, that's right! Yours is about hunting outside! Right?

F: Uh, huh.

K: And there's your print that you made...and then your sketches. Now, I am going to give you these things. I've just been holding on to them just so I can finish writing about my paper. Is that okay if I do that? Just hold on to them a little while longer?

F: (nods head)

K: Okay. So...um...when. ..when we started this project and on the first day we had these candles sitting out and we talked a little bit about light for candles and people equated it to different things like they think about candles maybe at home when the power goes off and those kinds of different things and remember I showed you some images, all kinds of images of light, ceremonies about the sun and candles, birthday candles and what they mean, there's some art about light- just all kinds of things like that. So we had all of that stuff going on. We were talking about light in terms of... I don't know...people and animals and plants and then symbolizing something that's bigger than us, like a higher power, such as a god or Allah or nature itself, I don't know...whatever it is to different people.

So my first question is, what do you enjoy about making art?

F: Everything.

K: Everything? You don't have one favorite thing?

F: (nods head no)

K: Just everything. Well, that's cool! That's awesome! Alright, what was your favorite part in this project that we made itself? We had sketches and then we had to transfer it to our plate and then we made our pictures themselves. Did you have a favorite part of that?

F: This one!

K: Did you like drawing into the plate or did you like the printing of it? Or both?

F: I wasn't here for the printing, so the plate.

K: Oh! That's right! Because you were....were you on vacation that day or sick?

F: None of that. Track meet.

K: Track meet! Oh!

F: JD's state.

K: That's right. That's right. Now I remember. So I printed it for you so we could have a picture because this is sometimes easier to see than....this is easier to see sometimes than that. So that IS what it is going to look like. Maybe what we could do is have you print it next year.

Would that be cool?

F: (nods head)

K: That would be cool. Then you could pick your own colors. I just picked a color then. Okay. Alright. So you never got to print it. Now at least you get to see what it looks like. I had to print it because I have to see what it looks like for my lesson, for my paper that I am writing I have to have a copy of it, so I printed everybody's so I had a copy of it.

F: We got to touch this on vacation. (referring to a picture of a squid from the book)

K: Did you really?

F: You have to do two fingers at the top.

K: Awesome!

F: Gently.

K: That's cool! And was it outside in the lake or were you at a special place like an aquarium?

F: It was like a museum.

K: Okay. That's really awesome!

F: Museum with sea animals and stuff like that.

K: And where was that? In Chicago or a different place?

F: In Myrtle Beach. Where we went for vacation.

K: Very nice. That's really cool! Alright, so your favorite part was making this because then you were gonna be able to make that but you didn't get to do that this time. But....we could....we'll do print making again. What are some of the ideas that you were trying to show us in your artwork? So like, tell me about these and then tell me about your final design and then tell me about some of these, if you would.

F: Well, I was trying to draw a sun here and a sun here like that and this is a girl here holding the sun like this...

K: Oh like when you pretend with a photograph? Okay.

F: And this is a deer by a campfire with the sun.

K: And that's the one that you chose, right? But then you added some more things, right, to... so what are these about? What are these awesome line and these designs.

F: I just felt like drawing lines in the sky.

K: Okay.

F: And I drew some birds.

K: So really it goes that way, right? (turning print landscape)

F: Nods head.

K: Awesome! So birds and a deer. What's this guy here?

F: It's a deer.

K: It's a deer too. Is he laying down?

F: Yeah.

K: Yeah. And you picked a deer...I remember we talked about it. You like deer a lot, but you also deer hunt? Is that right?

F: Well, I didn't last year but...'cause I got my hunter safety thing last year but I might be going this year.

K: Okay. Because you have to go during deer season?

F: Yeah.

K: Which isn't until?

F: I don't know.

K: You don't even know....yeah, I feel like it's later. I feel like it in the fall, or something, or late summer or early fall or something. Alright. Well, that's cool.

Alright, so in this project we talked about the importance for light...the importance of light for people, animals, plants and living things. Um, when you think about light, how do you think it's important? And you can pick any of those too. You don't have to come up with a brand new thing.

F: Like, this one. Deer have to see to look around and eat and stuff like that.

K: So they are like, daytime creatures. They are not nocturnal, right? They don't do a lot of stuff at night? Do they just sleep at night most of the time? Do you know?

F: They usually sleep and eat grass while they are laying down.

K: Oh really. That's cool. I didn't know that. Okay.

F: They are like goats and cows. They like to eat grass.

K: I guess I just didn't think about them doing while they lay down.

F: They do sometimes.

K: Yeah. I can see that. Alright, so plants and animals both need light and some, we talked about the...some that even make their own light, like all these kinds of deep water animals, the bioluminescent animals. And then also like fireflies –you know, they make their own light.

Um...what do you remember about plants and animals needing light? Anything else you want to share about that?

F: No.

K: Okay. And so the other thing we talked about is how many other cultures or groups of people use light for celebrations with their family. I am wondering, does your family use any kind of lights or candles for celebrations? And like, what are they?

F: Birthday parties and that's like it.

K: That's it? So what do you do for a birthday...at your family....like with your family?

F: Mine and Haley's, she's my cousin, and we're like a year...a day apart...mine's the 12th and hers is....mine's September 12 and hers is September 13. And she wasn't supposed to be older than me, but I am older than her and we have our birthdays on the same day.

K: Okay. Your birthday celebration. So what do you do for your birthday celebration, between you and Haley? What do you do? With light?

F: The candles.

K: Now do you put your number...your number of...like do you put the same number of candles as you are old? Does she have candles and do you have candles?

F: No. We...there's...there's this number...like the number candles that we put.

K: Okay. I see.

F: Like we have...

K: 12.

F: Like a 1 and a 2. And hers are a 9.

K: And do you blow at the same time?

F: Sort of.

K: (Laughing) But you are just trying to blow yours out and she's just trying to blow hers out.

F: Yeah.

K: Oh, that's really fun! I've never really had anyone close to my birthday like that so...that's kind of a neat thing. Do you like sharing a birthday party with her?

F: (nods head)

K: Yeah. You always have, right? You don't really know and better. But still, it sounds like fun. Sounds like fun to me. Um...let's see...many also use light, many people, different cultures, use light as a symbol for a higher power or a supernatural power. Do you know what I mean by that?

F: (shakes head no)

K: I've noticed that some of the kids I wasn't very clear with that, so like with Native Americans, that would be a culture, a group of people. Um, another common group of people that you see a lot, like we don't have a lot of Native Americans in Cornell, right?

F: Mmm huh.

K: But you do have a lot of people that go to church in Cornell. SO the Christian faith, um, they see...look, there's someone holding...fireflies, I love fireflies (flipping through pile of light images)...I'm looking for one or two pictures in particular...I can show you some cool light

pictures... Do you know which one I am looking for already? Maybe you could find one that shows that? So sometimes in cultures, like the Christian, look at this one, pull this one out...

F: Yeah, that one was mine.

K: this one was yours?! So what do you remember about that one? Ok. And we talked about this one.

F: Yeah.

K: And we talked about this...well, I don't know if we talked about this. We talked about that one...

F: Yeah.

K: And here is a lady who is lighting candles in a church. And so a lot of times you'll light candles to...to say a prayer.

F: She lit a candle and then she lit the rest of the candles with the candle.

K: Yeah, exactly. (thumbing through images again) And that's a piece of art. Wouldn't that be cool to drive around in a car with lights all over it? (laughing) So here, here you know, Native Americans, they worshiped the sun, and the moon, and the stars – all the things in nature because they thought was their higher power. It was like, bigger than them, and if you made that higher power happy, then good things would happen to you. You know, they would do a buffalo dance hoping that the buffalo would come through and they could get dinner. You know, so they saw nature as their higher power. A Christian faith, they see God and Jesus as the higher power. And so for like this artist, which...Thomas Kinkadee is the artist. We talked about this picture a little bit. He is a Christian artist and so he is using this light of the sun and the light from the....

F: That's what I want to be...a Christian artist.

K: You want to be a Christian artist? What is that thing called again?

F: A lighthouse.

K: Lighthouse! The lighthouse...

F: We've seen one. On the...

K: Did you really? I bet that was pretty cool. Did you get to see the big light going around it?

F: It wasn't on because we seen it at daytime.

K: Oh, okay.

F: We seen a whole bunch of fish because we were over there and we were by the food thing to feed the fish but we didn't have any money. Because we used the tickets off of Mom's phone 'cause we have an app and we went over there and looked around and there was a whole pile of fish. A whole group coming up.

K: Oh my goodness. Uh huh. Oh that's cool. That's really cool.

F: They all had their mouth open.

K: Waiting to eat?

F: Yeah. (makes chomping gesture)

K: (laughing) Yep! Pretty funny! And then , like, this is another culture. This is, do you know what country that is from?

F: No.

K: No? See that? Egyptians...

F: Oh yeah.

K: See, and this is actually a picture of their sun god. They had lots and lots of gods in Egypt and this was the god of the sun. His name was Ra and then he had the head of a bird and then he would have the sun on top of his head. And so you would pray to....

F: That's cool!

K: Yeah, it is cool! It is kind a cool. You would pray to Ra to try and have....like if you needed the sun to make the plants grow or something like that. Then you would pray to that god...in that culture you would. So...my question again was, Have you ever been, like so have you ever seen, besides these examples, or including these examples, have you ever seen how light can symbolize a higher power?

F: (nods head yes)

K: In what way?

F: I don't know.

K: Don't really know. Okay. That's okay. I was just wondering. Is there anything else you want to talk about with all of this stuff here?

F: No.

K: No, Okay. Well thank you so much for coming and giving me your time. And good luck with your baseball game tonight!

Interview #7 Student G

K: I am using for the same thing...taking notes....okay? So I just have a couple of questions to ask you. You know, we had talked about this whole project was about light and so when you came in the first day I forgot to bring my candles today but you know the very first day of this project we had a candle sitting here and I kind of had it dark and we talked about when do you use a candle...when do you use a candle as a family as a person, when do you ever get to use a candle? We talked about lots of different things like that. Um...and then I brought some...I think I brought some lights to your school a couple of times and we also talked about bioluminescent animals, so animals obviously need light and these are the ones that make their own light because there isn't any in the dark ocean. So just kind of reminding you about where we were with this project. Um...but now I am going to ask you some questions. So the first one is what do you enjoy about making art?

G: Uh...

K: Just in general.

G: I like making art because sometimes it's fun to do the project.

K: Okay! Awesome! So for this project in particular, what was your favorite part of making this project in particular?

G: Um...you get to draw what you wanted to do for light, like you do a volcano or fire and other stuff like light bulbs.

K: So the fact that you can choose your own subject. Okay. Awesome! So what else...can you tell me about some of the ideas you have in these sketches here and then in your final sketch? So what's the idea here?

G: I was going...I was making a campfire and I think I put a little too much of the logs!

K: (Laughing) Alright. And that's kinda the one you chose to do, right? You ended up with a campfire? Alright. What about this one?

G: Well, the volcano is what I was thinking of doing, but first it was a lightning bolt.

K: Okay. And then this one?

G: That one, I think, supposed to be a lightbulb.

K: Okay.

G: Then that one was supposed to be the sun.

K: Okay. But you chose on the campfire. Do you have some special memories of being by a campfire?

G: Yeah, when me and my dad went camping at my uncle's campsite, um, there was a snake by the campsite and we didn't get bitten.

K: Awesome! That sounds like a fun time! So your uncle has a campsite all the time?

G: Yeah.

K: Oh that's nice! Is it around here?

G: It's....when you go into (a nearby town) and you go up to 23, I think it's like the second slow down you turn and then you turn that way then you keep going then you turn that way and there'll be a bridge you cross over then and you see the giant lane. That's where you drive through.

K: So it's close, close enough. It's near (an nearby town). Alright. That's neat!

G: And that's where I find a bunch of arrow heads because there's a field right next to it.

K: Oh, neat! That's awesome! I have never found an arrowhead. I have always tried, but...

G: I found 6....5 I think.

K: 5! Wow! That's awesome! Um...in this project we also talked about the importance of light for people and animals, plants and living things. In what way do you think light is important?

G: Um...light is important so that trees can grow and so we can get oxygen and plants and all the other stuff. (student sounds a bit choked up)

K: Okay. I think you are right. Does this feel a little bit like school?

G: (student nods head yes)

K: (laughing...) I'm sorry! Of course, you are sitting in a school, right? But it's not. Just don't worry about it at all. Plants and animals both need light and some even make their own light. We talked about those animals. What do you remember about animals and plants needing light?

G: Plants would need light to grow and animals would need light to...survive?...I think....

K: In what ways do you think they would need light to survive?

G: Like, if they couldn't see in the dark that good, light could help them see where they could go and they can catch food.

K: That's true! That's true. I was just wondering. Um...so we talked about many different cultures or groups of people that use light to celebrate things...maybe like families that do it too. And I am wondering...does your family use light from candles or fire for any kind of celebration?

G: Sometimes, uh wait...no, not really. No.

K: So birthdays?

G: Oh, birthdays we use candles and stuff. Then for Christmas we light some candles and we put them on the table when we open presents.

K: Oh nice. Okay. I bet you have Christmas lights on your Christmas tree?

G: Yeah.

K: Okay. And then, what about 4th of July? Do you do anything special on the 4th of July?

G: Um...we are going to Wisconsin the 4th of July so we are going to buy some fireworks up there and then we're going to bring them home and then we are going to set them off. We are going to be on the boat and then we are going to watch the fireworks go off.

K: Oh, that will be cool! And you'll be very careful, right?

G: Uh mmm.

K: (Laughing) Yeah! That's awesome! That will be fun! So those are definitely some ways that we use fire or light, you know. Alright, so many people also...many cultures and groups of people also use light as a symbol to stand for a higher power or supernatural power. You know, we had talked about the Indians and this was a picture from a storybook drawn by a gentleman who is a Native American, a current day Native American and so she's definitely...um...honoring the sun there and the sun is really large in that picture to show its importance, also. We talked about...did your table talk about this picture at all?

G: (student nods no)

K: No. Did you talk about this one?

G: Uh mmm, about that one.

K: That one? Okay. Well, this one.... I think we had talked about as group maybe a little bit, but this is Thomas Kinkadee and he is definitely known as a Christian artist and so he is showing the sun and the lighthouse, both of which, light and the lighthouse, are symbols of Jesus or God. They can like guide you. And then....I don't know if we got to touch on Ra, from Egypt, the sun god and this is Ra, here, with the sun on his head and then he has the head of a raven. And so you can see a lot of....and then I think I have a Rangoli from India and that's another symbolic thing with light that they use for Allah, their god. And then, I had this picture at the very beginning,

but I don't know how much we got to talk about these things, but this was, you know, a Native American Sun Dance pole and so they used this pole to do a sun dance... a dance to honor the sun. Probably ask the sun to help them with crops or animals, hunting...whatever they need. So, when you are looking at these kinds of things, have you ever seen light symbolize something like a higher power, a god, a...you know...or a supernatural power? Does your family ever do that? Does a candle ever stand for something? Or...I was just wondering...

G: No, not really.

K: Is there anything else you want to share with me?

G: No.

K: Okay! Alright, well thank you so much for coming in and I promise I will give all of this stuff back to you. I will give you all of this...this whole folder back to you at the beginning of the year. Thank you for letting me borrow it and thank you for coming in on your summer time and talking with me about this! Alright! Thank you so much. (whispers: Don't forget to make some art!)

Interview #8 Student H

K: Record our conversation so that I can listen to it later and type it up.

H: Uh mmm.

K: Okay, and then use it for my paper.

H: Yep.

K: So here's your artwork and...um...I am just going to ask you a few questions about...um...our project and that's all. That's all you have to do.

H: Okay.

K: So can you tell me, what do you enjoy about making art?

H: That you can pretty much make whatever you want and stuff like that.

K: Awesome! Um...what was your favorite part of this whole project?

H: Doing this..like doing the stamping part.

K: Okay, so rolling it out and actually printing the pictures?

H: Yeah. Actually putting the ink on.

K: Putting the ink on? Okay. You probably never used a brayer before, did you? One of those roller things?

H: No.

K: I do like printmaking, too. Um..what were some of the ideas...so when we look at this...when we look at your sketches here and you can definitely tell these are three awesome Herman the worms, did you have anything else going on in these pictures or are these all different ways to try to come up with how Herman the worm is going to look?...Like that is Herman the worm. I can even see Herman the worm...

H: Yeah, this is the one I wanted.

K: Okay. What happened here? Do you know?

H: I don't know. I don't remember drawing that one. That looks like a kangaroo kind of.

K: (Laughing) Yes, sometimes my drawings....

H: If you look at it like (turns page)...this.

K: Yeah, I can see that. Yeah! You are right! I can see that! Alright! Okay, so...um... you took Herman the worm, that song we like to sing sometimes in art class...and tell me about Herman the worm.. How did he get....did he...what happened? What are these squares? And what is happening in these pictures here?

H: Well, it is light out and then those are flashlights inside of him so he can see at night, when the stars are out.

K: Okay. And what's this?

H: That's a moon.

K: And that's the moon. And then this one has the...

H: And that's like the long grass.

K: And, I wonder, do you think this one was first..or was this one first?

H: It's this one.

K: This one was first?

H: That one....

K: And is this still the moon here or did it change to a sun?

H: Um....that's.....I think one of them was a sun and one was a moon, because I didn't know what I wanted to use.

K: Uh mmm. And so then your final one, which ended up being your print...tell me about your print. So you've got Herman the worm...

H: Uh mmm.

K: And did you still have a light source in them?

H: Um...

K: You just can't see it....like he's just all glowing, right? He's like one big glowing worm?

H: Yeah.

K: And then did you decide on the sun or the moon here? (long pause) Do you know?

H: I think it was the sun that time.

K: Yeah, I feel like that's the sun.

H: But, uh, these were him glowing – you know how stuff glows?

K: Oh yeah! Like to put these lines here are symbolizing the fact that he is glowing. Okay! Cool! And then he's in grass again.

H: Uh huh.

K: Awesome! So we definitely can see that you were trying to figure things out through your sketches which is perfect. That is what is supposed to happen during sketches. And then I really like how you made it final.

H: Yeah.

K: That is very nice! Okay! Alright...so in this project, we talked about the importance of light for people, animals, plants and living things. What ways do you think light is important?

H: Um...like if there was no light you probably couldn't see and if it was dark you'd probably run into everything.

K: Yeah, that's true.

H: It's like....sometimes when there's no moon out it's like..and no stars out...it's not light. You can't see, though.

K: Yep. Good answer. Plants and animals both need light. And some even make their own light. And we talked about these bioluminescent animals and didn't I show you, I think, these books. Did you ever get to look at these books, too, animals and plants that make their own light?

H: Yeah.

K: Well. Mostly animals.

H: This one has a light glowing on it.

K: Uh huh. Alright, so they both need light and some even make their own light. What do you remember about animals and plants needing light? Is there anything else you can tell me about those two things needing light?

H: Well, plants needs light so they can grow and animals need light so they can find food pretty much.

K: That's true. That's true. Um..we also talked about different cultures or groups of people that also use light for celebrations with their family. I am wondering, does your family use light from candles or fire or just little lights at all for any kind of celebrations throughout the year.

H: Fireworks!

K: You do fireworks in your family?

H: Yeah! And usually in Missouri because it is not legal here.

K: (Laughing) You're right! So fireworks. Do you do birthday candles too?

H: Oh yeah.

K: What about these? (pointing to an image of a string of lights)

H: For Christmas.

K: For Christmas you put up lights on your Christmas tree?

H: We put them on our porch roof like on the...like on the roof kind of....like on the siding on the porch.

K: Do you put any of those single lights in the windows at all? Those single candles....sometimes people have like, the non-flame candles and they put them in the windows....

H: I know what those are but we usually don't use...we use those for pumpkins, usually, so then we don't have....so it doesn't like start the whole pumpkin on fire.

K: Oh, that's a good idea. That's a good idea. But, another time...

H: Yeah...

K: Using light for Halloween.

H: Well, we had the one for the pumpkins that it looks like a fire because it's kind of going off and on you know.

K: Oh. Nice. It flickers.

H: Yeah.

K: I think I have one that is like....like this for a pumpkin and when you turn it on it changes colors and it is supposed to be inside the pumpkin.

H: Yeah.

K: This is supposed to be like a regular flashlight but...yeap. Um....let's see...many...also....people or groups of people or cultures also use light as a symbol for a higher power or a supernatural power. Do you know what I mean by that?

H: (student nods no)

K: Like in their celebrations...um...whether that be when they are thinking about spiritual things, so like the Native Americans, a lot of their culture, looked to nature as a higher power than them. So if they pray or if they ask things from nature like this is a Sun Dance Pole so if they did a special dance then maybe the sun would shine and help their plants grow.

H: Yeah.

K: Or if maybe they did a rain dance the rains would come.

H: Yeah.

K: And so they definitely celebrated the sun as a power and then this is a...I think we looked at this picture as a class...

H: Yeah.

K: You know here's a Native American artist who drew this picture showing that big powerful sun as definitely, one of the powers they looked to help them live their days.

H: Uh mmm.

K: We also talked about this one, Thomas Kinkaide, and he's a well-known Christian artist and he painted this picture of the sun and the lighthouse. Both things, light and lighthouses, are used to symbolize Jesus.

H: Yeah.

K: Alright, and we also talked about this picture, I think, we got to this one. But this one is Ra, the Egyptian sun god and this is Ra right here. In the Egyptian culture, which was a long time ago, but they had many different gods and one of their gods was Ra, and he was the god of the sun and if you needed the sun to do something you would pray to Ra.

H: Uh mmm.

K: And so, you know, these are all different ways that we use light or symbolizing different higher powers or something beyond what people are...

H: Yeah...

K: Do you ever...have you ever seen light symbolize...

H: What does that mean?

K: Have you ever seen light stand for something besides just - that's a candle and that's a flashlight? Like did you ever use a candle to symbolize something...like...

H: Well...

K: Like a lot of times in families around here, you might use a candle or you might burn a candle to remember somebody...

H: Well, we usually go on the boat to see the fireworks, for... because we have a pontoon, you know.

K: Uh, huh.

H: We usually go on the river on the weekends, but...and then when it's the fourth of July, we'll usually see them and the fireworks, I think, represent, like people who died in the war, or something like that.

K: Yeah. Okay! Yeah!

H: But in church, um, sometimes we use candles. Yeah.

K: And what do you think they are for?

H: I'm not really 100% sure, but....

K: Okay... so you just noticed that.

H: Yeah, I've....I've done it before in church but I don't...I was little and they never told me what it was for.

K: Okay. Alright. Just wondering.

H: Yeah.

K: Is there anything else you want to tell me about or share...or talk y.

K: Okay. I SO appreciate you coming in. I know it was hard for your dad to make it all happen.

Interview #6 Student I

K: This is a recorder. All it does is just record our conversation and then I am just going to sit at my computer and type it like it is a story. So, your artwork... and then a print you made...and then you have sketches. We are going to talk about this stuff just a little bit. Here's your final sketch. Alright. Let me find my questions. I have questions in here somewhere. I am just going to ask you about 8 questions. We are going to sit and talk a little bit and that's it. I am going to record it and you're done! What are you going to do today?

I: Probably play in the sprinkler with (sister's) friend.

K: Awesome. That sounds like a good plan! Alright!

I: I go to work with my mom.

K: Do you? Where does she work?

I: Illinois Central School Bus.

K: Okay. Awesome! You help her out there then?

I: Yeah.

K: Okay. Those are some pictures.

I: I remember we did a thing on this one- the lighthouse.

K: Did you talk about that one at your table?

I: Yeah.

K: Yeah. We also did a paper on it. You mean we filled one out?

I: (student nods head)

K: Alright, so can you tell me what you enjoy about making art?

I: Um...that I get to see what I improved after the year is done.

K: Okay. Cool! Did you look through the artwork that you took home?

I: (student nods yes)

K: Awesome! And you weren't even here the whole year, right? Didn't you come in the middle?

I: I came near the end.

K: Near the end..okay. Like April or...

I: February 26.

K: You even remember the date! Is there a reason why you remember that date?

I: Cause the...like about three months ago my parents were telling us we would have to move back to Illinois and then in February he said we were going to be moving back....we would be leaving February 26.

K: Okay. I was just wondering. It's interesting. You know, what I remember when I moved to Illinois, because I moved here when I was, not here, but into Illinois when I was 6 and my first....I don't remember the date but I remember the first day of school was Lincoln's birthday. And in Texas, you go to school on Lincoln's birthday. In Illinois, you do now, but before you didn't. When I was little you didn't have...ever have school on Lincoln's birthday. So we were ready to go to school and we got to the door and it was closed! And there was no school on our first day, that we thought we were coming to school. So I do remember that, so I can see how things like that remind you of certain things, so anyway... Um, what was your favorite part of making this particular art project?

I: Uh, my favorite part about it, was when you had to do the put the ink into the foam and the stamping, the printing. That was my favorite part.

K: That is pretty fun! Um, what are some of the ideas you were trying to, yeah, you had told me a couple of times but I want to get this down on this machine....what was the idea of your artwork?

I: Um, the....it was a snake that was underwater and its tail was fire and it was going up from the bottom of the ocean to the top and the lines are from where the sun was shining because if you ever have to look underwater from.....you turn around and above water, not...from underwater, it shows the rays of the sun so that is what I thought of doing.

K: Awesome! And I really liked...I really liked it about...how you put the light from the sun and then you also have light on his tail as a fire, as a light on his tail.

I: He can put it out and put it back on.

K: Awesome! Um...let's see. In this project, we talked about the importance of light for people, animals, plants and living things. What ways do you think light is important?

I: What?

K: What ways do you think light is important?

I: Um....light is important because if we didn't have any light we wouldn't be able to see stuff because it would all be black!

K: Yeah, that's true.

I: And we would probably run into stuff or something or not see what we were doing. It would be hard to live.

K: It would. Like that place....is it Alaska...where there's like the whole month or so where the sun doesn't even come up. It's night time all the time. Ever heard of that? That would be awful. I wouldn't like it. Although I do like night time, but not all the time. Alright, so plants and animals both need light. And then some, we even talked about these bioluminescent animals,

they even make their own light. What do you remember about animals and plants needing light? Like why do you think they need light or...what can you tell me about that?

I: Uh...plants need light because they need the water and sunlight to grow and if we don't have plants we can't make any...we can't get any food and stuff because we can't get any food from the plants and we can't give any of the plants to the animals which give us food.

K: Yes, that's true. What about animals and light?

I: Animals need light because, um, if they didn't have light they would always be cold because the sun would give them heat.

K: Yes, that's true. Good job! Um, we talked about different cultures or groups of people that use light for celebrations. So remember on that first day, you came in...I think you were here that day...you came in and I had this LED candle....

I: And you had this....

K: And I had that flashlight too. SO we, you know...you guys came in a dark room and the candle was just going and maybe a light, too, and we talked a little bit about when you have a candle, what does that remind you of in your own experiences? Like when it happened to you. Like when do you guys get to use candles?

I: When the power goes out, we always light...well when it is thundering and storming out, we always put on candles just in case it goes out so it is not pitch black and we have to try and find it.

K: Good idea.

I: And then we....and we...I forgot the question.

K: Is there any other times when you use candles besides when the light goes out or when the power might go out?

I: Um...sometimes we don't always turn on the lights because the electric bill is really high so we just put the candles on so I think yesterday we had a candle in the middle of the table.

K: Oh, okay. Good idea. Um, does your family use lights or candles or fire for celebrations of any kind?

I: Sometimes we on a celebration, on our old house, it was in Illinois, we would always have a big bonfire or we...for like a birthday, everyone does the candle stuff...that's when you have to use light.

K: Okay. Awesome! So when you have the bonfire, so does just your immediate family come or do you have other families that come and visit too?

I: Um, well we always have...whenever we do it, we set up extra chairs just in case our friends want to come.

K: Oh nice! Nice! Ok, so then many people or cultures also use light to symbolize a higher power. SO we kind of talked about that a little in this painting. But you know, there's others that being that culture or that religious group being a Christian religious group but do you remember seeing this guy at all? So that's Ra, the god from Egypt and he's the sun god so he's holding the sun on top of his head and then, of course, his head is a raven, a bird, so there's another culture that's using light to symbolize something bigger than them. A god usually helps answer questions that we can't find the answers to or gives us somebody to... a higher power gives us somebody to..um...kind of rely on when we are not sure what to do, right? So then, this one, we talked about, I think I showed you this one as a group. This is from an artist...an illustrator who is from a Native American culture and she (image in the illustration) is definitely worshipping, enjoying that sun behind her and that sun is definitely big and powerful behind her. And I don't

know if we talked about the sun....there is a sun dance that Native Americans do to honor the sun. Yeah...when they want more sun.

I: And there's that jellyfish that has light under it.

K: Has light within it, right? It's bioluminescent? That's a hard word. And then I think we did touch on this one...this Rangoli, from the Hindu religion. So you can see that there's several. Do you have...have you ever seen light symbolized...a higher power or a god or....

I: No.

K: No not really. Is there anything else you want to share with me?

I: No.

K: Well thank you so much for coming in. That's all we had to do. Just talk a little bit, look at your pictures and I promise I will give those back to you at the beginning of the year when I finish this and thank you so much. I appreciate it!

I: Thanks!

K: Are you going to run back?

I: Yes!

K: (laughing) Of course you are! Don't forget your sunglasses though. You'd miss those!

Thank you!

Interview #1 Student J

K: Can you tell me? I'm so used to writing something down but I am not going to write anything down. What do you enjoy about making art?

J: Drawing it.

K: You like drawing it the most? So did you...So you enjoyed the sketch part of here... and then this...now did you like printmaking as a...as a way of making art, too?

J: Yea.

K: Yea...but you still like the drawing part the better?

J: (Child gestures affirmative but does not speak)

K: And do you like drawing with pencils?

J: Yea...

K: Yea, the best?

J: Yes.

K: Just wondering. In this whole project, when we made this project and including talking about all these things... and remember we looked at these pictures, these too, and remember looking at all of these things in the very beginning – there's some cool things – um, What was your favorite part? And then if you can tell me why, that would be great.

What was your favorite part of doing this particular project?

J: When you took the paint and then rolled it on the paper.

K: Oh yeah.

J: I liked it because you could like...I don't know...because you got to do it on multiple sheets and things.

K: Yeah, 'cause we made like, we made a whole bunch of copies. I don't know if I sent any of the copies home with you, but I have more copies in here and if we would have had more time we could have done even more, but yeah, I think that is the cool thing, too, about printmaking is that you can make lots of copies. I mean, this is your drawing and then you can like, have a thousand of them, even though you drew it one time, right?

J: Yea.

K: It's kind of fun. Um, what are some of the ideas that you were trying to express in your artwork?

J: A light bulb.

K: A light bulb. So you thought about light through your light bulb and um, what else, in your sketches, what did you go through here? Tell me what some of these other ones are? I know you picked your light bulb one, but tell me about this one and this one and this one.

J: That's...a fish...I made it up, like an "engineering" fish, and that's the light.

K: Ok.

J: And then this is a worm that's glowing.

K: Ooo!

J: And this is a candle with designs and then light. And it is on fire.

K: Awesome! When we talked about candles in the beginning, like when you walked in and we talked about candles, do you remember...what do candles remind you of? Like, you know,'cause we were talking about, we had a candlelight going, and it was kinda dark in the room and you came in and talked about candles and different times, maybe in your family or in your own situation, when you use candles. Do you remember what you chose for that? (pause) Or when you see candles now, do you think about birthdays or think about...

J: Like when the power goes out and then you have to use candles or a flashlight.

K: Yea. Is that the most time you use candles? For you?

J: Yea.

K: I remember that too. When I was growing up, it was like that too.

In this project we talked about the importance of light, for people, animals, plants, and living things. Um, in what ways do you think light is important?

J: For like, animals that come out at night, it needs to go past for them to come out and get food.

K: So the sun has to go down and set before they can come out - like the nocturnal animals?

J: Yea.

K: What about um...so we talked about animals there. So what about plants...do you think about light for plants at all?

J: Yea, 'cause they need 'em to grow. And get vitamins.

K: You're right. And what about us?

J: It makes us be in a good mood.

K: You think it makes you be in a good mood, too. Do you like it when it is sunny? Do you like to go outside when it's all sunny?

J: Yea.

K: What about at night? Do you like to be outside at night, too?

J: No, it kind of scares me.

K: No, it kind of scares you? Even when there is a full moon, does that scare you?

J: (Affirmative answer without speaking)

K: Yeah, I was just wondering. Sometimes I love going out when there's stars up in the sky. I love it, when it is really dark.

J: I only like that if I am camping.

K: Aaah! Have you been camping?

J: yea.

K: Yea.

J: And when we are having a fire.

K: Like a bonfire outside?

J: Yea.

K: And that's definitely another kind of light. I love bonfires. Do you have s'mores?

J: Yea.

K: Do you like to burn the marshmallows or toast them?

J: toast

K: Yes, me, too! It's the best way!

J: And we put peanut butter cups in them.

K: Oooh, really! Instead of the chocolate?

J: Yea.

K: That sounds really good. I've never tried that! I'll have to try that. Like the little mini ones or the big ones?

J: The big ones.

K: Oh my goodness! I don't think my daughter can eat those anymore 'cause she's a vegan.

Mmmm. But that sounds good. I might have to try that. My husband might still like those.

Um, and living things. Ok. I think we did that one well.

Plants and animals both need light, it says. Some even make their own light. What do you remember about plants and animals needing light. We talked about that....You made this...you made an imaginary...it is a snake?

J: Fish.

K: Fish. It has the light. This is his head.

J: Yes.

K: Cool. And this is his head?

J: Yes.

K: And we talked about...(teacher picks up a toy deep sea bioluminescent snake) we showed some and we talked about it. I would love to see this guy in real life. Wouldn't he be kind of cool?

J: Yea.

K: Yea, he would. Um...uh, let's see. We talked about how many different cultures or groups of people use light for celebrations with their family. Does your family use light from candles or fire for celebrations?

J: Yes.

K: Can you tell me more about that?

J: For your birthday.....or....I can't think of anything else of when we use candles.

K: What about a wedding?

J: Yea.

K: Have you been to a wedding where they use candles? They do it in a church? Sometimes they do that

J: Yea.

K: So when you went to bonfires, was that for your whole family or was with, like, someone else's house?

J: That was my whole family.

K: Whole family. I love bonfires. They're fun.

Alright. Is, um, oh. Many also use light as a symbol for a higher power or a supernatural power. What are some ways that you have seen light symbolize a higher power or a supernatural power?

J: What does that mean?

K: Well, we had talked a little bit in our lesson about...so you know, (referring to images shown at the start of the lesson) here's just some natural light things, ah, um, this, we talked about this a little bit, um, or we looked at this picture, Rangoli, it's a design where they use light and it symbolizes Allah for them in the Indian culture – not Native Americans but Indians. Um, let's see, but we had also talked about, specifically...I am trying to find one I am looking forsome art.. so we had talked aboutwe looked at this picture specifically and we looked at this picture specifically...maybe these too. And then, this is an example of at church, at some kind of a church...um, at the Bethlehem church, probably a Christian church, um, and lighted candles, tea light candles. Sometimes you just have those in your house, but sometimes they'll light candles, you know, symbolizing people who have passed. You light the candle and you think about the person who had died. Um, but like this picture here, is made by a Christian artist named Thomas Kinkaide, and he, um, he uses the lighthouse, which is sometimes a symbol of Jesus, because He is our guide, and then he uses the light from the sun. So this picture is not only about just a lighthouse and a sun setting or a sun rising, but also symbolizing Jesus as like the guiding light that you can find your way. Um, this is the Egyptian culture, and this is Ra, the

sun god. So we talked about this picture. Do you remember talking about this picture at all? Do you remember seeing this one?

J: (Cannot hear a response and the answer is not clear from the recording. Go back and check her attendance that day.)

K: We also had a picture from a Native American...(flipping through images)...

J: Oh, that looks really cool.

K: Yes, that's another print. But they would have had to...remember how we had to use a pencil and so we had to carve in the lines? They would have had to carve those lines with a tool into wood. This (pointing to printing block) was made out of wood instead of Styrofoam. I think that would be kind of hard.

We had talked about this Native American image a little bit. We showed that picture...oh this one. And that's from a book by a gentleman whose heritage is from the Native Americans and so here's the sun, symbolizing the power, the...in the Native American culture a lot of times nature itself is their god and you could equate a Christian god with the sun as being a power...Mother Nature as a power. So, those are just some of the things we had talked about, previously, at the very beginning of the lesson. We didn't have a lot of time to talk, honestly, in our lesson. But, when you look at some of those pictures, um, have you ever noticed that, has it ever happened with you before, where, where maybe you are at church, or maybe you are even in your family doing something, like at Thanksgiving...I don't know when it might happen, but where someone uses light and it was supposed to stand in for...um... um....something religious.. or a higher power like God or Jesus or something meaning something beyond, like Allah or Mother Nature or I don't know.

J: yea.

K: So, which...which.... how has that happened? Can you explain it. Tell me more about that.

J: At church, when it is Christmas, we have little lights and we get, we sing songs and we have this light to hold.

K: Oooh. Does everyone get a light to hold then?

J: Yes.

K: And what are those lights supposed to be symbolizing, then?

J: Jesus.

K: Oh. Okay. SO that's cool. SO yes, you did use light to symbolize a higher power. A higher power, meaning, 'cause not every... like the church you go to is a Christian church and that is a certain faith. Um, and there are other ones out there besides Christian. A lot of times, um, you may have just heard of Christian churches, but there's a lot of other beliefs and other cultures and so that's why I call it a higher power so that everyone doesn't think it's Jesus and God.

Sometimes people equate that higher power with Allah, which is, um, like the Hindu god...or actually the Hindus have lots of gods. The Native Americans, I believe, have lots of gods.

Certainly the Egyptians did to, so, I am trying to be inclusive of all the gods that people might think about, um, so, yeah. Alright. Is there anything else you want to share with me?

Huhh. That was my first time of trying to ask these questions. I hope it wasn't too confusing.

J: um....nope.

K: This... is something I really wanted to show you more. We didn't get to talk about this a lot in our lesson, but this is an artist, he's one of my favorite artists, and his name is James Turrell. So his last name is Turrell. And I took this picture...it's in the bottom of a museum and I think it is in Washington, D.C. and this artist made these walls. So these are two walls but they are not actually walls. It's just light. And when you are in the middle, this is a walkway....like a big

sidewalk, and you are walking from one museum... like in the basement you're walking in this hallway and you are walking from one museum to the other but you are walking along this sidewalk kind of thing, this pathway, and you feel like if you touch those walls of light that there would be something there but there isn't. It's just purple light and that light changes sometimes. Sometimes it's purple, sometimes it's blue, sometimes it's pink, sometimes it's green.

J: So you can move your hand inside of that...

K: You can move your hand inside of it and you feel like you are going to touch something, but you don't. And they don't want you to do that very much so usually a guard – I can't see – that might be the guard right here. She was a lady and she was like, she watches, like, she walks behind you because she doesn't want you to fall, because actually there's a little lip here and the floor is down far a little farther over here. That's how he creates this wall of light and you just want to like... "what?"...you know...But there's nothing there and it's really cool. But doesn't it look like there's two walls. It's like there's two walls...

J: It looks like glass.

K: Yea. It does. It is really, really cool. He does a lot of things where he uses light to make it look like something but it is not. And I just think that is very fascinating.

J: Looks like purple stained glass.

K: Yeah. And like I said it changes colors and that's why I think it's really neat. If you have a room that is black and then you have this purple light glowing and then sometimes it changes to like a green light and a blue light. It's really fun. I just find him very interesting.

J: When we were at a car show and there was this car and it's headlights changed colors.

K: Really! That would be so cool!

J: And it was never white. It was always rainbow colors.

K: That's awesome! That's very fun! I'd like a car like that. Wouldn't you?

J: Yea.

K: Well, it's probably about time for us to go back. Thanks for giving me some time and answering the questions.

Interview #3 Student L

K: And later I'll just type it up like a story. Just the conversation that you and I have, that's all.

Okay?

L: Yea.

K: Um...so remember when you came in and we had this awesome candle and we talked a little bit about when you use candles and that brought up this idea of light, right? And so we made our project about light...um...so that's just what I want to talk about with you just a little bit today. I have some questions to ask that will hopefully give you some ideas of things you want to share with me and then it will be over. That's all. Okay?

L: Okay.

K: Really easy. Um...what do you enjoy about making art?

L: Um...the part when we like get to be creative and like do whatever we want.

K: Come up with your own ideas?

L: Yeah.

K: Can we look at some of your ideas that you made up for this one, because you had quite a few. Okay.

L: This one?

K: Yeah, put your sketch over here so we can see. So, I know you have lots of sketches, don't you. You have these two and then this big page. So when you were thinking about light. Can you tell me about each one of these sketches?

L: That's the sun, the moon...um...like they're glowing, like, shapes. And this is one, is I saw, when you once showed us this artist's picture a long time ago. I don't remember his name that drew something like that and it glowed.

K: Okay. Awesome! And then that became part of your idea then, didn't it.

L: Yeah.

K: Awesome. Then when you finished your...when you made your sketch, like this one. SO you drew this one first, and then you drew that one (discussing rough drafts and final copy of chosen work for printing). Now this one, you actually drew right on the foam, didn't you? You didn't have a sketch...like some people copied over.

L: Yeah.

K: You just drew it right on the foam and it looks really nice. And you did a nice job too. If I remember right, on the back, if I had to go back over and make your lines deeper, I wrote TA for teacher assistance, and I didn't even have to do that on yours. You made it nice and deep and so it showed up really well on your print. That's a really clean print that you made. What was your favorite part about making this whole project?

L: The painting it on here part.

K: With the roller, where you inked the roller?

L: Yeah.

K: Yeah that is pretty fun.

L: 'Cause my hands got really dirty.

K: (Laughing) So you liked your hands to get dirty in art?

L: Yeah.

K: Awesome! Um...what are some of the ideas you were trying to express in your artwork?

L: What does "express" mean?

K: Um...like, like trying to say in your artwork. Some of the things you were trying to....you know, every time you look at a piece of work, every time you look at, even a picture, because a

picture is a photograph which is a piece of artwork, okay. Every time when I look at these, or any of these or the cover of a book that some artist picked to put on a cover, or an illustration that somebody drew, there's an idea there that someone is trying to tell me about. So if we look at this, what kind of idea do you think they are trying to tell us about in that one?

L: Light.

K: I think it is definitely light. But then, I mean, why? Why is there a girl on a horse? What's about that?

L: It just could be a decoration.

K: Well it could be a decoration, yeah, but I know that that is from a book about Native Americans.

L: Indians?

K: Indians. Yeah. And so I think Native Americans had a very special relationship. DO you think that she looks happy with her horse, or not happy with her horse?

L: Happy?

K: So honestly, Native Americans and their horses...they were very important. They were like, connected in a special way. She doesn't even have a saddle, she just has a blanket on.

L: Like family.

K: Like family. Exactly! And I get that closeness feel because her hair is flying, the horse's hair is flying, and the tail. And then they are both together...look how close they are together they are in that picture, their heads are close together and they are looking towards that sun. To me, that's like a "Wow!" or a "I love this moment"...you know, like a sunset or a sunrise. So when you are looking at your artwork, even the final one that you made, what kind of feelings are you trying to express, or ideas?

L: Um...light mostly. Like....

K: Well you told me before that this was a design that you saw another artist use.

L: Yeah, like in a book.

K: SO you were trying to use that too.

L: Yeah.

K: And what about these? These lines here?

L: Um...those were for decoration... Like fire on the end of it.

K: Nice, and then you have some stars in there too?

L: Yeah.

K: Yeah. Alright. So

L: And the sky.

K: For the sky. Awesome! Ok, let me pick up this one before I forget it and step on it and then it won't look like quite as pretty. (Laughing) I am sure it won't. Um...in this project we talked about the importance of light for people, animals, and all living things, like plants too, right?

L: yeah.

K: Um...in what ways do you think light is important?

L: Like if a storm's here, you need candles to see. You need light to see through the night if there could be, like, a person after you and you didn't know they were and you didn't know they were right in front of you because it was dark.

K: Yes, that's true. That's true. So definitely we need it...

L: Or when someone scares you.

K: Yeah, that's true. I like to have a flashlight then.

L: Brothers do that a lot!

K: (Laughing) They do?!

L: Like here's the wall that, depends, like you have to turn here. My brother's right here and I'm walking, they scream, they drive me crazy with that since, now two of my cousins are here and now my sister is coming. So there's going to be seven children.

K: Oh my goodness! Well, you won't be bored, will you?

L: Yeah. But I will have to be stuffed in a bed.

K: Oh, you have to share your bed with somebody now?

L: Yeah.

K: Well that's kind of a cool thing now. You could always remember that. "Remember that summer when you came and we had to share the bed?"...no....

L: Hey that looks like an "E".

K: It does kind of look like an "E" but....

L: Backwards.

K: Yes, backwards. Right. Yeah. And you have some going this way...wait, are they all going the same way?

L: No, some of are....like this part is pointing up, that part is pointing down, that part is pointing sideways.

K: Yeah, you are right. You switched it all around. That's awesome! Alright, plants and animals both need light. Some even make their own light. We had talked about these animals, you know, these underwater creatures, like....

L: Yeah, this one....wait...I don't think that's the right one...that one. It's like his thing glows in the night to see 'cause I've been playing this video game that you have to work together with your other player to not die and you cannot be eating. These things help you by their light to get

through the dark of the sea and there's these...you know, the animals...the things...it flies through the forest, like they chomp like a beautiful flower but when they...

K: Oh yeah, a venus flytrap.

L: Yeah, and then they go through. They're in the dark and if you don't see them...they snap you and then they get you.

K: (Laughing)So you have to be careful so you can use this light but you can't...

L: You have to stay by them but you can't be super close or they'll eat you.

K: Yeah. I don't think I would want to see one of those under the water. (laughing)

L: I don't know what they might do! I don't even know how big they are.

K: And then do you ever do anything fun with fireflies in the summer time?

L: Um...we saw... I think once at our house...at our old house...that we used to catch 'em and like things and use them as light? Like the flashlight?

K: Have you seen them any this year?

L: Mm...not many... at night time.

K: Yeah. There was one on my front door...um...yesterday when I came home, but, yeah, I haven't seen that many. Okay, so we also talked about different cultures, like different groups of people, that...um...use light for celebrations with their family or with other...

L: Like Christmas?

K: Yes, like Christmas or...

L: July...July 4th

K: Mmm...yeah.

L: With the fireworks.

K: So you are thinking of some ways that your family uses lights for celebrations?

L: Um...birthdays...like at night we play board games and that and we use light to play them.

K: Uh huh.

L: And like my brothers in the morning and they'll like wake me up just early just to play a certain light game.

K: Really?! They'll wake you up early in the morning when it's still dark?

L: 5 o'clock.

K: (Laughing) So if you had...

L: Or 3.

K: Or 3. So if you could sleep in, what time would you want to get up in the morning?

L: I usually wake up 9, 10, 11, 12.

K: Oh, you are a late sleeper.

L: My mom is.

K: Your mom is so you are, too.

L: My dad. He works everyday. Except for Sunday and Wednesday.

K: I bet when your family comes, when all your cousins come, you'll be getting up early, huh.

L: What is this thing?

K: So that is another one of those animals that creates its own light. It is supposed to be a replica of a bug that you would see in the deep ocean. All of these are deep ocean creatures that all make their own light. Can you imagine this squid? Yeah, this squid...there's some in this book.

L: No it was like, this thing that would eat you in that game.

K: Are you sure?

L: Yeah. They would be crawled up in the corner and just pop out!

K: Oh, okay. This is the whole book of different things that you see...I don't know if....that's a hatchet fish. No, he's not big enough.

L: This? No! This one is that.

K: The dragon fish? That definitely could be. Fireflies, click beetles. That's the angler fish, the one with the little light above him. A jelly fish...

L: Plankton.

K: Is this supposed to be this....no...?

L: Where's its head?

K: Right there and right there. He's almost too skinny. He's like, more skinny and long...look at his tail is different.

L: I know, but he might...might not be able to draw the whole thing and might not be able to copy everything.

K: Or maybe it's like a different kind of....

L: Yeah.

K: So here's the squid. Yeah. Can you see it? (Laughing) Kept doing that to you. So you know they are not exactly....

L: What is that?

K: Whoa, that's cool! It's a glowing ocean. So waves breaking on the beach cause liquid light...

L: Oh, so when it on the sea and two and when you step...

K: Yeah...then it leaves like a print. "The Indian Ocean is famous for its bulky seas which glow with light as ships cut through the waves."

L: Or that could also be good for crimes...this glowing sea.

K: Yeah, you are right.

L: They would be able to mark...use flashlights to mark the steps and see whoever did it.

K: I am going to see if I can find that one flashlight fish...(turning pages in the book)...ohh look at that one!

L: More jelly.

K: Ooh, krill.

L: Can we eat that?

K: I feel like people do! Shrimp-like creatures. But I think these are like, different because these are the ones that are...they have their own light.

L: Yeah.

K: An octopus. That one...how about that grey one?

L: Yeah. Vapor fish.

K: Yeah. Big ole teeth, though.

L: Or its this one. Or its that one.

K: Yeah. It could be because look at that...look at that big long teeth.

L: Yeah.

K: I don't know.

L: It's one of them.

K: One of them. Look, he squirts out light. That's weird.

L: That's weird.

K: Cock-eyed squid.

L: Yeah, that one looks weird. Ahtolo Jellyfish. I think that one....no...

K: I can't quite find this guy.

L: I think it was the one we thought first.

K: It might be. It might be.

L: But it was a little bit longer.

K: They are pretty cool that they glow in the dark by themselves. That's pretty awesome.

Alright, um...let's see...so we talked about many different cultures or groups of people that use light for celebrations with their family.

L: Uh huh.

K: Did we talk about this already?

L: Yeah.

K: Yeah, we did. Okay, the last one...almost last one. It says, "Many use light as a symbol for a higher power or a supernatural power. So these are called...like groups of people...."

L: Like light...like...

K: SO for example, one thing you might be familiar with is sometimes they'll...like a Christian.... a Christian faith, people who are Christians believe that Jesus is the light of the world. So Jesus and light are the same thing. Like we equate them together. So if I have a candle at church, I don't just have a candle so that I can see, I have a candle because it is symbolizing God's power or Jesus, okay. That kind of thing. And so there's a lot of cultures that look to light for symbols, like this is the Egyptian culture and they look to....

L: I saw that on...we showed... you showed this on the computer.

K: Mmm mm. And so this is Ra, their sun god. They had a god...they had lots of different gods...um...and so this was the sun...the god of the sun and he's carrying the sun on his head, but his head was like a raven and he had a human body.

L: Yeah.

K: So that was just, you know, that was their version of the sun god and then this is the Rangoli. This is a design they would make with candles and with patterns, repeated patterns, and so that's a holy design for the Hindu faith. So there's just lots of...and then we talked about this one...Native Americans...um...you know,when they would do some artwork, sometimes they would have a sun and they saw the earth and everything about Mother Earth as sacred. It was kind of like their god was Earth, the sun, the moon, the stars.

L: Like Mother Nature is the mother and father of the animals that live in the forest.

K: Right. The animals and the people. They are all connected and related. So...yeah. So a lot of cultures use that...is there....what are some ways that you have seen light, besides like these, or maybe along with these, that you've seen light to symbolize something higher or bigger than you?

L: Um.....

K: Whether that be something at church or....something somewhere else? I don't know.

L: (long pause)

K: Because I know the other thing we talked about is that sometimes Christian artists will use a lighthouse will symbolize Jesus or a light....they say Jesus is a light to the world. So that maybe something that you are familiar with to...I don't know. Um...any ideas....or no. It's okay if you don't have any ideas. Okay, no problem. Is there anything else you would like to share with me about this, or anything else?

L: No.

K: No. Okay. Well thank you so much. That was really helpful to me. So what is going to happen is that I am going to listen to this later and I am going to type it up, like make it a story. And then I am going to use the stories from all the different kids that I get to talk to about this

lesson and then I am going to write a paper about it, like, almost like a little mini book. Its' going to be a lot of writing that I have to do this summer.

L: Oh my.

K: Yes.

L: Did you record all of this?

K: Yeah, I did. See it is still recording and if I press this it will stop.

APPENDIX J: STUDENT INTERVIEWS SCHOOL B

Interview #2 Student A

K: So, I have brought the lights, because when you first came in to do that project, we had the candle out, at least one of them and we were talking a little about candle as a light and then I think the next time...did I ever bring the flashlights to your school?

A: No.

K: No, you never saw the flashlights before? So I had some funky little flashlights. Because then we talked about...a lot of the kids at some of the schools, at least, talked about these candles....I remember one your conversations was the candle reminded you of...church...um, when they take communion, they turn the lights off, but some of the kids had talked about candles also remind them of when the power goes off...and that's their only light source. But anyway, I brought different things, you remember these animals....we talked....I THINK I brought these animals.....Did you ever see these animals?

A: No.

K: No?! Oh my goodness, well you know, it was really crazy. This is a really cool tube of animals because these are all animals that supply their own light, like, they have the bioluminescent animals. I know we did talk about them, but I may not have had these. And maybe I used these books...just trying to get you back in the mood of what we were doing. Do you remember seeing these books?

A: No.

K: Oh my gosh! Poor Graymont! Well, you have heard of these kinds of animals before, like fireflies. They make their own light, right? Well, there's a lot of the deep sea animals, like this squid, this worm, um...this fish...you probably have seen this fish in movies before...even the

angler fish, it has a little light and there's one of those in this tube...if they would only come out. So we talked about animals that need their own light, we talked about lights being a symbol for a higher power, um... and for many different cultures, and then we also talked about plants and animals needing lights. Right? And people...people needing light. So I am just going to ask you a couple of questions about those kinds of things.

I really like this outfit. I love your skirt.

A: Thank you.

K: You're welcome. Ah, you got one out. I wonder what this guy does? Turn the lights on along his back...that would be cool. There he is, there's that angler fish. I just think he looks so wild. We had a lot of kids do a snake-kind- of animal like that, too, that lights up on his tail and he's got like green eyes. I would not want to be swimming with him, I don't think. He would scare me. Okay. So anyway. I am going to ask you just a couple of questions. I have just like 7 or 8 and you are just going to tell me some answers, we'll talk a little bit, and that will be it.

Sounds good?

A: Yea.

K: Okay. Alright, so (child's name) what do you enjoy about making art?

A: Um... the drawing.

K: Uh huh.

A: I can draw whatever I want.

K: Nice. So what did you draw for this project?

A: I drew...um...a cake because you put candles on the cake. When you blow out the cake, the candles go away and you wish on something.

K: Awesome. Did you ever find those wishes to come true?

A: No.

K: No. (Laughs) But it is fun to do, though, isn't it. What other sketches/ideas did you have?

A; And I had one with plants needing animals....the plants needing the light.

K: Mm huh.

A: And the people and animals needing the light. And then also one of the church.

K: This is the one from the church, here?

A: Yes.

K: Awesome! So then this a plant one...the flower needing some light. Tell me more about this one.

A: That one was with...um....all the people and animals who need light and the plants.

K: Awesome! That's really cool! But you picked the birthday cake?

A: Yep!

K: I like it. It is a very nice design that you made. Um...what was your favorite part of this whole project? What was your favorite part? Tell me why.

A: Um...The drawing it because you could figure out what you wanted to do....like what you wanted to draw for this project.

K: Did you find that is was easy to do from the drawing to making the printing plate? Was that was easy, too?

A: Yeah.

K: Alright, awesome! And I like how our drawings turned out as a print too. That is always kind of cool... it's like the opposite. What are some of the ideas that you were trying to express in your artwork...if you haven't told me already. What's happening with these? What were you thinking about with those?

A: Um....I just wanted a cool background.

K: Ok.

A: And thought that circles would be cool.

K: Yeah. I think so too! That does fill in the background very nicely too! Um...in this project, we talked about the importance of light for people, animals, plants and living things. Um...in what ways do you think light is important?

A: I think it is important because....um....because every living thing needs light or some sort of light to see or just get...um....energy from.

K: That's a good point. Good job! Good answer! Alright, so the next thing I was going to tell you or just remind you... plants and animals both need light and some even make their own light. Right, we talked about those too. What do you remember about plants and animals needing light?

A: Um...

K: Like, what stuck out in your mind?

A: ... I don't know.

K: You don't know. When you think about animals or insects or those types of things, like these bioluminescent animals, but, you know another one is just even a....do you love fireflies? 'Cause like fireflies are something we deal with here a lot more in Illinois here. I have never seen these for real (referring to the bioluminescent deep sea animals). Like I have only seen them on a video or on a YouTube video or maybe in a movie and now I have seen it in these books that I have but other than that I really haven't ...but I HAVE seen fireflies. Do you do anything special when it is the firefly season, like right now...with fireflies.

A: Sometimes we go out and get a jar and we collect the fireflies.

K: And then what do you do with a jar of fireflies?

A: At the very end, we let them go.

K: Oh nice. And they just kind of make your own lantern?

A: Yes.

K: I mean, they are just so cool how they glow. Yeah, okay. I think that is the most similar thing to what, for these kind of animals that make their own light. Fireflies are probably the common thing in Illinois. Um..we talked about many different cultures or groups of people that use light for celebrations with their family. Does your family use light from fire or candles for celebrations?

A: Um.....yeah.

K: Okay. Can you tell me more about that?

A: Um...we use some for Thanksgiving and we use some for the 4th of July when we set off fireworks-we see the fireworks. And we also use it on Christmas to decorate the tree.

K: Awesome! Okay. Um....many people use light as a symbol for a higher power or a supernatural power. So do you know what I mean by that?

A: No.

K: We were talking about cultures before. I realized when I was talking to one of my students at the other school that that really didn't make sense to the student (pronoun removed to protect the student). So this part of the lesson was when we talked about...so I am going to go through these pictures again so we can kind of remember. We didn't get to talk about a lot of these things, but I showed you these were pictures of artists that used light in their work. And this is another....I really wanted to show you that video, but maybe this next year I can show you that video. That's kind of cool. It's all shadow. These are all shadow of people....like, that is

somebody's arm. But they make this whole play out of their shadows. And I do think we stopped and talked about this one a little bit. Did we talk about this lighthouse one?

A: Um....yeah.

K: Maybe not your table. Yeah. Okay. Um...so this is a good example of an artist who uses light to symbolize a higher power because, although this is a picture of the ocean and a light house, this is also a....we know to be a Christian artist, and so he is symbolizing the lighthouse and the sun as a symbol of Jesus....as the guiding light. So that's one example. So supernatural power or a higher power just means something other than a person that people tend to look up to or they worship or they...um...give honor to. SO in the Christian faith, it's Jesus and God, but a lot of cultures have a different or similar....gotta find one (flipping through images)...an example....I almost have too many pictures. In some....um....religious beliefs is, you know, the light is in you and so all your energy that you can live your life through is through you, but there are a lot of other cultures, that maybe have several gods, not just one. Um...here's your birthday candle...and so Native Americans kind of believe....their belief system was based on nature....Nature as Mother Earth, as god, and so here's an illustration from a book where the sun is your higher power. The things around you...nature itself...um..sometimes the Christian faith is sort of similar in that way. Um... and so, in the Native American they had a sun ceremony so they would be dancing and worshipping the sun, you know.

A: Yes.

K: And we talked a little bit about Egyptian. They had different gods for different things and so this was Ra, their sun god. Um... I had one more, but I can't find it right now. So that's what I was talking about. So if you think about that. I hope that explains it a little bit better. What are

some ways that you have seen light symbolize a higher power, so something other than people, something that maybe you worship, um...or a supernatural power?

A: Um....I've seen...

K: Now if it helps, when we were talking about this lesson and talking about this part of light, symbolizing a higher power in many cultures, you had brought up that you remembered at communion that sometimes your church turns OFF the lights..or makes the lights go dim?

A: Yes....um....yeah.

K: And do you feel like that is somehow symbolizing...

A: Yea.

K: Could you tell me more about that? What you think about that?

A: I think it's like...I think that you do that to show how thankful they are and take a time to sit down and see them and pray, pray more, like harder than they normally do.

K: Okay. Yeah. Okay like focus in a little bit. Yeah. Okay. Do you have any....Is there anything else you want to share with me?

A: No.

K: No, you're pretty good. Thank you so much for coming in and talking about this. What happens is that I am going to take this recording...oh I need to stop it....(turns off, but explains the process of typing up the conversation recorded and then use the transcription to write a paper.)

Interview #10 Student B

K: But your voice is most important to me, okay? So...yeah...you can do whatever you need to do to make it work. So, remember the first day, when we started this project you came in and I had a candle and we all sat around my little office area in the garage and we talked about, you know, when do you use a candle in your family and when do you use a candle for different things before? So this project was definitely trying to be about light. First of all, tell me what you enjoy about making art?

B: Everything, really! You get to use your imagination and you get to just make something that makes sense to you. It doesn't have to make sense to anyone else. It just has to make sense to you!

K: Yeah. You are right. Very nice! Okay...um...what was your favorite part about making this particular project?

B: That I could make anything that includes light.

K: Okay! Awesome! Um... what are some of the ideas....so if we look at your sketches, can we talk about your sketches a little bit? What are some of the ideas that you were trying to do. Can I pull this over here? So in this sketch, what was that idea about?

B: That was a star and stars are made out of fires, fires like candle light.

K: Uh mmm. Exactly.

B: This is the same thing as this (pointing to final print)...a feeling orb.

K: What?

B: Feeling orb.

K: Okay.

B: Then this was my birthday cake and cat.

K: (laughing) The cat's getting ready to eat it!

B: No, the cat wasn't eating it. The head is supposed to be on the cake!

K: Oh I see, it is decorated that way. Okay. Awesome!

B: And this was a Northern Lights.

K: Oh, okay.

B: I have a whole bunch of little patterns and designs.

K: So this is....you chose the feeling orb.

B: Because that was the most interesting.

K: Okay. Is the feeling orb from a movie or a video game or...

B: No!

K: Just something you thought of?

B: Just something I thought of.

K: Awesome! Okay! So then I noticed like...so this was your first sketch to move it on to here but then it changed a little bit because like this guy has a clearer face.

B: Yeah, because I filled this one in.

K: Okay.

B: And this one I did not have to fill it in.

K: Okay, yeah you are right. And so this feeling orb has a lot of different....different...

B: Happy, sad, mad. That one's mad, that one's sad, that one's happy, that one's also happy!

K: Okay.

B: And all of this is generating the feelings and these are the ice crystals and then this is the light.

K: Okay.

B: That's the light part generating into the orb to do the feelings.

K: Awesome!

B: For everyone to have feelings.

K: Awesome! Well that's really cool! I am so glad I got to talk to you about that piece of art because I didn't understand all of that. There are a lot of things going on in that picture that are really awesome and cool! So, alright, I am going to keep asking you a few more questions about this. I have...um....so in this project we talked about the importance of light for people, animals, living things, and plants. In what ways do you think light is important?

B: Well, Abraham Lincoln lived in a tiny house with four windows. They needed candles for light. How else...it would be so dark in his house without light or candles that you wouldn't need a window because the sun generates light. So you wouldn't need a window to bring light in.

K: Yeah, that's true.

B: Without light, it would just be dark and people need sunlight to live. So without light, there would be no humans, no animals, no nothing. It would just be a plain, old, dark Earth!

K: That would be pretty awful! Alright, good answer. Plants and animals both need light. Some even make their own light. We talked a little bit...I think we showed some pictures. I remember that first day, we had these pictures all over the tables and everything. But I have some books and these are representing the animals that live in the deep ocean that make their own light. So like this is that squid. See, he has...this represents the light that he makes, like when he's in the deep oceans, because it is so dark down there they have to make their own light. And the glow worm does it. And you know, the only thing we have to really in Illinois are fireflies. You know, they make their own light to kind of talk to each other.

B: (student pretends one of the deep water creatures is eating his finger)

K: (laughing) I am kind glad he's not for real eating your finger! I think that would be the end of your finger! Look at this guy! Someone thought he looked like a piranha. Look at those teeth!

B: It is a piranha.

K: You think it is a piranha? I don't know. These are all supposed to be deep ocean. I don't know if there's any piranha down there but there are probably a lot of fish that are scary like that.

B: Yeah, like this one. This one, this thing is the light.

K: What does it do?

B: So, it is so dark down there that the light attracts the fish and it looks so beautiful but they don't see him! This is what it looks like...Light...so they come to the light right here...chomp! I think this is the light and he uses the same thing for like, this. Probably puts this by his mouth, they come towards it, then he chomps!

K: Kind of like their own fishing lures, huh? This guy, I think he...I think this pink along his back is what glows.

B: Oh....

K: But I am not sure if it like a firefly so that other ones like him come to him and then he finds a mate or what, but...

B: Just like....these two are the same.

K: Yeah, those two are very similar. Of course, look at that big old jaw he has. I bet he can eat a lot bigger things that this guy can.

B: Yeah, he can eat this, but it would be hard because they both have the light. He probably won't be attracted to it, but he won't either because he already has his own light.

K: Yeah, that's true.

B: What about this guy?

K: Look at his jaw! It almost looks like it comes unhinged so he could eat something really big, like a snake.

B: I don't know where his light is.

K: Yeah, I am not sure either. Maybe his whole body glows. Kind of hard to tell from that toy.

But anyway, so, plants and animals both need light. Some even make their own light. There's also, like, glow in the dark mushrooms, so some plants do it too, just like a firefly. And what can you tell me about...what do you remember about animals and plants needing light? Whether you learned it in art class or science class or whatever.

B: So, without light or water, they can't produce photosynthesis. And if they can't produce photosynthesis, then they can't make sugar. If they can't make sugar, they cannot eat.

K: Then what happens to them?

B: They die!

K: Exactly! They totally need that light, don't they. Yeah. That would be for the plants and the animals or just the plants?

B: Just the plants.

K: So what do you think about animals and light?

B: They...well...they need somehow to get warm. So they would just be bitter and cold and die!

K: Yeah, you are right. Especially those cold-blooded ones, right. They don't make their own heat.

B: There would be definitely no snakes!

K: (laughing) Yeah, definitely. We talked about how different cultures or groups of people also use light for celebrations. Like we had some pictures of...I made some examples of what we do...you know birthday candles and...

B: Yeah.

K: We talked about firecrackers are lights, basically. If you put up a Christmas tree...and then those are...look there's that fish. There's that scary angler fish with his light. Look at that guy. He might come and eat him after all.

B: (laughing)

K: (laughing) But anyway, um...

B: I can't tell if it's him in the background 'cause it looks exactly like it.

K: You're right. It does look a lot like it, doesn't it.

B: Or, it's this guy.

K: Yeah, but I don't feel like I see this. I don't see this fin on top.

B: I do. Right here.

K: No, I mean in the picture. In this guy, I mean. I don't see that fin on the top of his...it looks like his back is...

B: Oh! Cause there's no....

K: Now, this one's not quite as pronounced, but like up here there's no fin on top. So that could just be like his head part. I don't know. It could be. He's pretty scary looking.

B: Yeah!

K: I don't know what this is. I feel like that's a light right there.

B: That's a light, yeah.

K: Maybe it's just another one of him!

B: No.

K: No. I am not thinking so, either.

B: Now these, are definitely him.

K: That's definitely him.

B: These....no. Because he's no. That...is this but there's no that on here.

K: Well, we can't really tell what happens back there because he's like hidden. He's coming right at you. It is hard to tell.

B: Well, right here, you can see that's the back.

K: So you feel like that's a fin, like this kind of a fin?

B: Yeah.

K: Okay. Alright.

B: Well, I can't tell.

K: Well, let me see that fin on top. I don't know. So anyway, um...people...uh...groups of people or different cultures that use light for celebrations with their family. Does your family use light from candles or fire or firecrackers.....or whatever for celebrations?

B: Yes!

K: Give me some examples!

B: Firecrackers. My dad did something very funny once with firecrackers. So the cat was milking kittens and he told us all to look at Lily 'cause Lily was right next to them so then he lit the firecracker and threw it and so the kittens were milking and Calico, the mother cat...well it wasn't the mother cat because there were two mothers...

K: Okay...

B: And they both milk them...

K: Okay....

B: So then Calico ran away as the firecracker went off and all of the kittens were in a position for a nipple!

K: Oh! (laughing) Oh my goodness! And they weren't scared?

B: No!

K: Or they just didn't run away!

B: Well they could run...

K: But they chose to stay there.

B: They chose to stay there because.....well, I didn't get to see it.

K: Oh.

B: But Lily did.

K: Lily did. Okay. Cats are funny! Any other time besides 4th of July and fireworks that you use any kind of candle or a light?

B: Birthdays.

K: Birthdays. Do you...do you ever use like a string of lights like that?

B: Yeah, Christmas.

K: Do you ever put those little candles in the windows at Christmas time? Sometimes they're kind of like a single candle but usually it's a fake flame on top.

B: (student nods his head no)

K: No...

B: Maybe....uhh...well, I have two sets of grandmas and I can't remember...one of them probably does. Because they are used to doing all of that stuff back in the old days.

K: Okay....alright....

B: Because those candles are pretty old.

K: Yeah, you are right. Um...so one more thing is...we have two more questions but really just one. So lots of groups of people or cultures also use light to symbolize something bigger than

them. A higher power, a supernatural power, something that they can't explain, alright. So some examples that we looked at before was the Native American culture...

B: Yeah.

K: You know, how they use...this is a light...I'm sorry... a sun dance pole ceremony so they used this whole thing and they do a special sun dance.

B: Yeah, they like circle it and they go (students gestures dancing).

K: And they are trying...they are doing that because they are actually trying to talk to...

B: The gods...

K: The gods of the sun to try and give them what they need. If they are worried about something...maybe if their crops aren't growing....

B: the Greek gods...

K: Well, actually this is a Native American. In the Native American culture, their god was Mother Nature itself, so they would do a rain dance if they wanted it to rain, they would maybe do a sun dance at the beginning of the harvest so they would have good food for the fall and the winter. Um...and another example of a Native American artist. This is a book illustration and the book illustration...the artist who did this is a Native American and you can see how important that sun is. How big it is on the page, it has three rows or rays...

B: Yeah.

K: And it is very powerful. And so, that's one culture and another culture we could talk about is the Egyptian culture.

B: Yes.

K: Do you remember seeing that before?

B: Yes.

K: Do you know which one is Ra, the sun god?

B: Ra, the sun god is that one.

K: Uh mmm. Because his head is always like a raven and then he has the sun on his head. But he looks a lot like a person even though...but then he has the head of a raven, so you know that these are Egyptian, probably pharaohs and then that's the sun god. So, in Egypt, they also had many gods, besides just the sun god. They had a god for all of these different things so if you needed something in particular, you would pray to that god to get what you need. Right?

B (student nods yes)

K: Okay, I am probably not telling you much new stuff. And then...just trying to review a little bit. Did we look at this picture in your class?

B: Yes, I remember this.

K: So this is an artist named Thomas Kinkadee, and he is a known Christian artist and so when he painted this picture of the sun and the lighthouse, do you remember what he was trying to symbolize in those two things?

B: (student does not answer)

K: That's okay. In the Christian faith, the light, they'll say Jesus is the light of the world and they'll also compare Jesus to a lighthouse because a lighthouse is safety for people who are out in the ocean. If you see the light, you know where the land is, you know how to get to safety. So Jesus commonly symbolized with these two things and so this artist put them together. And look at the rocky waves...there's the boat, here's the rocks and so you have to be really careful. The lighthouse shows you where the rocks are so you can carefully guide your boat to land without ruining your boat.

B: (student makes a crashing noise)

K: Yeah, without crashing and dying. Yeah, especially in storm. Yeah it's a saving thing.

Um...so have you ever seen....do you have any examples where you have seen light symbolizing a higher power at all or supernatural power or something?

B: (student nods no)

K: No, okay. Um...is there anything else you want to share with me?

B: Not really.

K: Not really...okay, well thank you so much for coming in! I really appreciate that!

B: (student offers a hug)

K: (teacher reciprocates) aw! Thanks buddy!

B: Now I am going to go have the time of my life with my sister (name)!

K: Woo hoo! Is she just visiting?

B: She's staying for a week.

Interview #9 Student C

K: Alright...so we talked about...we don't need that out...we talked about light and we made this awesome project.

C: Uh mmm

K: And...that is what I am here to talk with you a little bit about. So I held on to these things but I promise you will get them back at the beginning of the year. These are some of your sketches that you came up with, too. Um...

C: And all of these.

K: Oh that's right. I forgot the back side too. And you were trying to do that line thing with the...

C: Yeah, but I didn't end up doing one.

K: Yeah, but it still looks really cool. Alright, so on that first day of the lesson we, I think we sat over by the...teacher area in the garage and we had a candle and we talked a little bit about light in terms of a candle. A lot of people had experiences at home or when the power's out or at church – different places where they had experiences with candles, right?

C: Uh huh.

K: And then I just brought that up as the first kind of light. But you know, there's natural light, there's sun light, there's moon light, there's star light, there's like, you know, stars in the sky...

C: Lightning.

K: And lightning, yes. You know, certainly flashlights that we use. All kinds of light things. So, when...I am going to ask you about 8 questions...these 8 questions here, four here and four there and that's it, and then you are just going to help me understand how you think about light. So what do you enjoy about making art?

C: Um...I don't really know.

K: Don't really know? Can't find the words?

C: I really just love it!

K: Okay. What was your favorite part of making this project?

C: Um...probably getting my hands and things dirty with the ink.

K: Yeah, the inking part. That is pretty awesome. And you don't get to do that in most projects. Like I've never..until I did this kind of printing, I never really got to work with a brayer and all of that stuff.

C: Uh huh.

K: Can you talk a little bit about your ideas? Let's look at these and then we'll talk about your final idea in just a minute. Just go through them and you were thinking about....you know, how it related to light.

C: Candles are light.

K: Candles are light so that is a birthday cake?

C: Uh huh. And that's a sun and I think that is a flower. And I think that is a flower and I got this one from another idea from the example ones that you showed us just like the _____ flowers.

K: Uh mmm

C: And that's the sun, the big out... that is the sun and another circle and the lines. It's like suns overlapping.

K: And you were still coming up with more ideas on the back.

C: And I wanted to do like that... like I don't know...

K: I guess to make it look 3D?

C: Yeah, like that zebra thing. I got that from the zebra out there. (referring to a Vasarely-inspired project)

K: We did our hands that way, too. We did the 3D hands... Yeah, that was your class.

C: And I was like, this is pretty much my final copy except I traded sides...

K: Uh huh.

C: No I didn't! It prints on the other side. I wanted to make a design on the tower.

K: I really like how you ended up with a very interesting and very complex things going on with these 2 areas but then the rest of it is calmer so it just looks...a nice balance in your composition. Very nice. And is this a certain building?

C: I was thinking of the Empire State Building.

K: Okay.

C: And we had just learned about lightning rods in science so I put that over there.

K: (laughing) Smart girl, because they always put those at the top of really tall buildings because they need 'em! That's awesome! Um... but sometimes I don't get to sit there and ask everybody when they make their art. I would love to be able to do that. I need to do that more, I think.

Well, anyway, in this project, we talked about the importance of light for people, animals, plants, and living things. In what ways do you think light is important?

C: Um...the sun gives you vitamin.....D?

K: Vitamin D. Good job!

C: Vitamin D. And...um...animals need....they use the sun. Like some are cold blooded animals I think use the sun to warm up.

K: Uh huh.

C: Because they can't warm themselves up.

K: Yeah.

C: What else did you say?

K: So you talked about people and you talked about animals. What about plants and other living things?

C: Plants...um...without sun there would be no plants and without no plants there would be no animals and without animals there wouldn't be us.

K: Good point. Alright. Alright so my next question says plants and animals both need light. Some even make their own light. And I don't think I got to bring these to this school but I did...did I not talk about these bioluminescent animals? I think maybe I showed you some pictures.

C: Maybe a little bit.

K: Some...maybe a little bit of these animals. They make their own light, so they are like...most of them are underwater ocean but like a firefly. The same thing makes its own light. And there are mushrooms that make their own light. So bioluminescent animals, that's all that's in this tube so I thought that was pretty awesome when I found it I was doing my thesis. I guess he....the whole thing lights up.

C: Umm.

K: And this guy, his tail. And they all have different lights.

C: Electric eels also light up.

K: Yeah.

C: When they zap things.

K: And this guy inspired a couple of different pieces of art. Love this squid guy!

C: (laughing)

K: I could be a little scared....I'd be a little scared to run into this guy! Look at this guy! I'm guessing his eyes must glow.

C: Ugh! These are piranhas.

K: He does look like a piranha because he...

C: I think he's a piranha because he has....his front teeth are in front of his back....his back teeth are in front of his front teeth!

K: I am not exactly sure. I think his eyes probably glow just because of what color they are. Maybe not. I don't know. These are all supposed to be deep water ocean creatures.

C: I want to know where he glows! Maybe he glows....

K: Yeah. Maybe his back.

C: That's pretty cool!

K: Yeah! He's scary!

C: (student gestures like a scary fish)

K: (laughing) Yeah! Look at how wide his jaw can be! I wouldn't want to meet him in the ocean.

C: I wonder if he can unhinge his jaw like a snake?

K: It kind of looks like he can, doesn't it?

C: Uh mmm

K: That's pretty wide. Um....alright, so, do you remember anything else about animals and plants needing light? You already talked about a couple of things, but...

C: Um...

K: Do you have a favorite animal or plant that uses light in a certain way?

C: Um...uh...raccoon...it's not my favorite animal but it is an animal. Raccoons wash their food before they eat it always.

K: And when you see them at night, did you ever notice their eyes?

C: Glow....yeah, all animals eyes glow at night sometimes. We see them in our yard. Their eyes are glowing. Kristy goes crazy!

K: Kristy is your dog?

C: Uh mmm.

K: Um, so we also talked about different cultures or groups of people that use light to celebrate with their family or with their people in their culture. Does your family use any kind of light, or a fire or a candle, you know, strings of lights, for any kind of celebration?

C: Christmas. Around the tree and people that celebrate Hannakuh they have these little holders and they have candles and they light one candle every day and then when they light all the candles, they have a big celebration.

K: Okay. Do you do fireworks, too, at the 4th of July?

C: Yes.

K: Yes. And what do you do about birthdays? What happens to people on their birthdays?

C: You light candles and then you make a wish and blow them out.

K: So do you guys usually get the single candles or do you get the number candles?

C: This year I got numbers but usually it's single.

K: It's single...okay...I just wondered. Did you ever get those candles where you keep blowing and they don't go out?

C: No!

K: (laughing) Smart mom!

C: Yeah, but I have seen ‘em.

K: Yeah! Those trick candles.

C: (student imitates repeatedly blowing out candles as if she had trick candles to blow out)

K: (laughing)

C: Yeah.

K: I think we used them when my little sisters were like growing up and so I was older so I knew that they didn’t go out.

C: (Laughing mildly)

K: Anyway...so many people, groups of people or cultures also use light to symbolize something like a higher power or a supernatural power. Something bigger than them, so it might be, like, for Native Americans....we’ve looked at some artwork the very first day...

C: Uh, like that...

K: Like that one, where she is definitely...you know, the sun in that picture is very big, very powerful looking because in the Native American culture, you know, everything in nature was part of the great, the Great Mother? I mean, they, they would have a rain dance to try and get the rains to come. They would...this is a Sun Dance Pole so they would dance a certain dance to have the sun...

C: Dance around the Sun Pole.

K: Yeah. Exactly! So they certainly celebrated light that way.

C: Yeah! The light house picture...

K: Yes, by Thomas Kinkaide and he is known to be a Christian artist so when you are looking at his work, the meaningful light...

C: Lighthouse...

K: And the lighthouse both are symbols for...

C: God

K: God or Jesus, yeah. And then we talked.....did we talk about Egyptian at all?

C: We talked about Egyptian and...

K: Do you know which one is the sun god?

C: It's him, because he has it on his head.

K: He has it on his head. Yeah. And his head is some kind of raven. These are people but then probably pharaohs. They are important people but this is Ra the sun god. And they had different gods for different....so whatever your need was, you would pray to that particular god.

C: Uh mmm

K: And then I think I showed this one.

C: Yeah. You did.

K: This is a Rangoli from Dwahli. So an Indian, not a Native American...

C: It looks more Indian.

K: Certainly using light.

C: And he is bioluminescent.

K: Yes, he is a bioluminescent star fish. Okay, so what are some ways that you have seen light symbolize, like a higher power or, um, supernatural power?

C: Fire, when we go camping.

K: Okay. What does it symbolize for you?

C: Fun and friends and family.

K: Okay! Awesome!

C: To me.

K: Alright. Is there anything else you want to share with me? Or anything else that makes you think about this or...

C: I think I told you this but the Egyptians are facing one way. That's the way to get out of the tomb, because the Egyptians believed that their spirits....so their spirits could get out of the tomb because it is amazing because the tomb stealers...

K: The robbers....yeah....

C: Steal important things out of the tomb.

K: Well, that's cool! I never knew that! Good thing to know! If I am ever in an Egyptian tomb! And stuck! I hope not!

C: You just got to follow...

K: Which ever direction they are facing....

C: (pointing to the image) They are facing that way, they're facing that way and the bird's facing that way!

K: Yeah, you're right.

C: They are almost all facing that way, except for this side. And that side.

K: Of course, that is their alphabet, so maybe the alphabet. Just like, you know, an "a" is this...we don't make an "a" like this (gesturing a backwards "a"). I can't even do that!

C: Yeah! That's hard.

K: You probably wouldn't change the orientation of the alphabet, but you would change everything else.

C: Yeah.

K: Alright, see you're done! Are you going to have lunch, too? Do you get to go to lunch with your mom?

C: Yeah.

K: Awesome!

Interview #11 Student D

K: Alright. So, I just have about 8 questions to ask you and a lot of it is concerning your artwork and then just the whole subject of light.

(small interruption of parent wanting to know how long the interview would take)

D: Angler fish.

K: Did you get to see these before?

D: Nope, never seen them.

K: No...okay. So, anyway, um...I was going to ask you what you like about art.

D: Thumbs up! I love it!

K: Yay! Is there something that you enjoy most about making art?

D: Painting and sketching, because my brother loves sketching.

K: Uh huh. Is your brother older?

D: He's 11 and I'm 9.

K: Oh yeah, that true. Silly me! Um...so when you are looking at this particular project what was your favorite part of it?

D: What was my favorite part? Um...my favorite part was...like um...making the... this.

K: The prints?

D: Yeah.

K: So you liked rolling it out and making them?

D: Uh mmm.

K Yeah, that was pretty neat!

D: It looked like I was painting something and then I got to stick it on a piece of paper so that I can, like, hang it up on a wall for decoration, for like a happy birthday party!

K: Awesome! Well that would be perfect. You could use them to decorate then, can't you!

Alright, so...what were some ideas....we talk about...you have so many sketches! Did you see all of these awesome sketches? You have like three pages of the sketches!

D: Uh huh!

K: Can you tell me a little bit about each one of them, because there's like one attached here, I think.

D: Yeah.

K: Yeah. Look at that! You just had all kinds of ideas brewing! Okay so what happens in this one?

D: Uh, this is a fire.

K: Okay, so you are thinking, like, in terms of a fire, alright.

D: This is a birthday cake.

K: Uh mmm.

D: With some candles...you know this from August. August made this...I forgot what it was supposed to...

K: Like a flare gun, I think.

D: Yeah. And this is a rocket!

K: That's right. And you had a star on that one. Were you thinking about doing a rocket for a while?

D: Yeah.

K: So that was your favorite on this page. Alright, let's look at this page, over here.

D: Um...a hand with fire.

K: Yeah.

D: Another fire.

K: Well there's so many different ways you can draw it, right?

D: This is a lighter, and that's the fire gun again, and that's the birthday cake!

K: (laughing) And you have another star by that birthday cake so I am thinking you must really like that birthday cake idea now. Right?

D: Because we had cake today!

K: Oh! Is your birthday today?

D: No! My birthday is on January, my brother's is on May.

K: Oh. Okay.

D: Um... a fire again, a birthday cake, a flare gun, and a candle.

K: And a candle...okay.

D: And a birthday cake star again (giggling).

K: (laughing) Yep, there it is. And so then when you went to your final sketch...let's look at your sketch that you did to put it onto the plate. Yeah, so you picked the birthday cake...

D: But this ripped when I was doing this.

K: Yeah, that happens sometimes.

D: And these little lines are like...do you know, like, those ribbons that come down ...

K: Spiral down like that?

D: Yeah.

K: Awesome! So like decorations....I don't know what they call this.

D: Yeah...I forgot it too.

K: Streamer?

D: Yeah! Streamers!

K: Okay.

D: Because they have...because we had Mario Bros, Marios Brothers of these at my brother's birthday party between my cousins because they are sharing...because they share the birthday party.

K: Oh okay. That's part of it too. Now is there a reason why there's three candles?

D: Because it is someone's third birthday?

K: Oh, okay. (laughing) I didn't know three was your favorite number or...

D: No.

K: No. Maybe it just worked good for the comp....

D: Yeah...this is going to be my babysitter's son's age soon in September! He's going to be four. And this is his age right now!

K: That's true!

D: I only made two on this one.

K: Oh, yeah! You did, didn't you.

D: Yeah, I didn't have enough room on the bottom, because, you know this is almost about not close to the edge of it, but this part of it is.

K: Right.

D: And this part I was not going to have enough room because this part is a little bit closer and the candle is tall and if I made it, it would probably go on the Y?

K: Uh mmm. That's a good choice that you made, I think. You have to make a lot of choices in art and that was a good one. You are right, it would have fallen off.

D: (student makes a noise of being scared)

K: Isn't that cool how he has that light up there. All of these animals here, they all are animals that live in the deep ocean and they make their own light.

D: Oh, I forgot what this is. Giant octopus?

K: Uh, squid, I think.

D: I don't know what this is. I have never seen this before.

K: Yeah, I have not seen that before and I'm assuming that the way he glows is his back glows.

D: Yeah.

K: But I am not sure. I

D: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 – 12 legs!

K: That's weird!

D: Uh huh.

K: That's almost like a...

D: And uh, this probably glows by his tail.

K: Uh mmm. That would be my guess. The only one I am not clear about is this guy. Does his whole body glow or something?

D: Yeah, he...

K: Do you think?

D: Yeah, because I have seen this animal before, in a picture and this glows. That animal from its eyes.

K: Yeah, I kind of feel like his eyes on this one, too.

D: Yeah, he glows on this one his whole body glows. This one, now what is this animal's name?

His eyes glow and his tail glows and he's very sharp like an electric eel. I think that's...because yeah, this one my brother knows he can unlock his jaw.

K: It looks like he does. It looks like he can open his jaw really wide.

D: Yeah, true. Yeah.

K: Eat big things.

D: Uh mmm. And this one is probably an angler fish. Wait no, that's an angler fish!

K: Yeah, that's an angler fish. I know, maybe we will look at these later because these are books that talk a lot about bioluminescent animals.

D: Yeah, that's an angler fish...

K: And there's the....

D: Squid. Do you know there's like this yellow and navy blue squid and it's poisonous?

K: Oh! Yellow and navy blue. Stay away from the yellow and navy blue squids. I'll have to remember that. Luckily I am not around a lot of squid in my life.

D: Yep!

K: I'm glad.

D: Well, at least I don't even eat fish.

K: No, I don't either.

D: Like squid, but I eat fish, but do not eat turtle soup.

K: Don't like that, huh.

D: And it ripped right here too. I just remembered.

K: It will be alright, though. Because it did what it was supposed to do, right?

D: Yeah.

K: Yeah. We'll just move it over onto that foam. Um....okay so in this project we talked about the importance of light for people, animals, plants and living things. What ways do you think light is important?

D: Um...to keep us alive from the heat, from the sun, because if the sun does not like, glow, all of us wouldn't have any heat and all of us would die.

K: Yeah, you are right.

D: It would be misery.

K: It would be pretty miserable, wouldn't it.

D: Yeah.

K: So plants and animals both need light and these are...we just talked about all of these animals here that make their own light like a firefly.

D: Yeah, this is probably another type of firefly, because I bet this hides the wings.

K: Yeah, I feel like it's kind of like a centipede...

D: Yeah, because at the end...usually when...um...the bug stops flying it has the back of its wings tucked in and it looks like...sort of like that. I think this animal has thick wings.

K: Could be. So...what do you remember about animals and plants needing light?

D: Um...well...to....like in the summertime, uh lots of animals that live on land, they usually eat like daisies or dandelions or like...um...grass. They eat leaves and if it was winter, they don't have any leaves to eat. Or any grass because the ground is filled with snow.

K: Yeah, that's true.

D: And then how are they going to eat their food?

K: There won't be anything for them to eat, will there?

D: Uh mmm.

K: So we also talked about different cultures or groups of people that use light for celebrations.

Maybe like your family does that with certain...

D: Fireworks.

K: You do fireworks for the fourth of July?

D: And...um...we do...um...like we have a celebration...a cook out like we usually have a celebration for a cook out for like birthdays or stuff and um...so we had a cookout and we had a fire and we cooked the marshmallows!

K: Oh...did you have s'mores too?

D: Yes.

K: Oh I love s'mores. Yum yum.

D: Me too!

K: (laughing) What about....do you do anything in the winter time or for using lights for any kind of celebration?

D: Um...no not usually. But when it is a power outage we can't...like we use um...like we get a lighter that we light us so that we can see around. I use my phone or my tablet to see. And of course, my little buddy he can't see in the dark.

K: Who's your little buddy?

D: Uh, he's a rat. And we got a cat.

K: Oh, that's right. You have a stuffed animal rat, right?

D: Yeah. And his name is Dutch.

K: Dutch! Oh cool!

D: I call him Duchess and Dutchers. (laughing)

K: (laughing) Oh fun! Alright. So you do have some things you use light for celebrations. And then the last thing is... we talked about how people, groups of people might use light to symbolize a higher power or something bigger than them, like something they can't really explain. For instance, Egyptian...you've seen Egyptian stuff before, right?

D: (student nods yes)

K: And then you know this is Ra the sun god and he has the sun on top of his head and then these are some Egyptians and Ra had the bird of...head of a bird, a raven, so you know that's going to be Ra then because he is holding the sun and he's got the head of a raven. But you know, when you were an Egyptian and you needed something that the sun could provide like maybe you need more sun and it needs to stop raining and you need sun so you could get your plants to grow so you could make food later, then you might pray to Ra and say, "Ra, bring us some more..." you know, to help the plants grow. So they would...they have lots of different gods they would pray to but one of them was Ra, the sun god. And then like the Native American culture, this was a picture, I think I brought to your um...to your classroom. Maybe I just had it out at the table...whether your table got to see it or not, I don't know, but this is made by a Native American artist, an illustrator, a person who drew the pictures for books. But this girl and the horse is what the story's about. But then here she is, standing right on the horse before the sun and look how big that sun is.

D: Uh huh.

K: Big and bold. The Native Americans believed that all the different parts of Mother Nature were like spirits. So there's a Great Spirit for everything and then they also...you know they would do special dances for rain or special dances...this is a sun pole, so they would do a sun dance around this special pole to honor or ask favor from the sun.

D: So the sun is.....this guy?

K: Well this is for Egypt so Egyptians, a long, long time ago. This is a different culture...they are a different group of people and they are worshipped Mother...like the whole Nature as one so you know, when they worshipped the sun they...or when they would ask or like do rain dances

or say... you could say prayers they would talk to the forces of Nature to try and get things to happen. And then this is another culture, in India.

D: Indians culture.

K: Not like Indians. Not Native Americans but in India this is something that they would use to...it's called a Rangoli with light and shadow. And they would light these candles and then they might say some quiet prayers to their god whose name is Allah.

D: And there's a tiny jellyfish!

K: And there's a bioluminescent jellyfish. Yeah. One that glows by itself. And then this last one, this is a Christian artist and that's probably the culture, or group of people you are most familiar with. But in the Christian faith, um...this artist, who...he is a Christian artist, and so when he painted this picture, it is called, "The Guiding Light" because sometimes in the Bible, Jesus or God is referred to as the light. And, um...and then the um....

D: Lighthouse?

K: The lighthouse is commonly referred to as a thing compared to Jesus because the lighthouse helps you find your way back to the shore when you are in a boat, when there's rocks and stuff and it is dark. Because it is dark on the ocean at night but a lighthouse can light the way so people can find their way back.

D: Because then they won't have crashes in the water without knowing.

K: Exactly, so you know people who are in the Christian faith they believe that Jesus acts that same way for them and so they can pray to Jesus and find that safety. So, there are some different examples of how different cultures use light to symbolize their god or their higher power. Have you ever seen light being used to kind of stand for a higher power or God or.....

D: I've seen the lights of heaven.

K: The lights of heaven? When did you see the lights of heaven?

D: So like, the clouds come over the sun and they like...and the sun flashes over the clouds and there's itty bitty cracks and it comes out and makes these...so like fat and thinness lines...

K: Like these rays from the...

D: Yeah!

K: Cool! And you call these the lights of heaven? Nice! Alright. Um...is there anything else you want to share with me?

D: Um....I don't know.

K: It's okay. So what we could do since your dad is going to come in a little while...we could look at this, if you want to. This is from the cool book...so let me pick up some of this junk.

D: Oh, what's this?

K: Isn't that weird. That's a flashlight. Kind of reminds me of a Weeble.

D: Oh look. It turns off and it turns back on.

K: Uh huh. If you push the button all the way in, it should turn on...push it all the way...sometimes the button gets stuck.

D: There you go.

K: It wobbles like that...so it will never fall over, will it. And then this is just like a kind of a cool thing. It is pretty bright when it is dark outside but I like it too because you can like hang it.

D: Oh yeah.

K: And hang in on things or whatever or point it. Or you can just have it sit which is what I normally do. Well, I usually carry it like this when I'm like walking at work sometimes.

D: When it's night?

K: Yep. Sometimes...Are you familiar with that kind of a light?

D: Aw! It's my favorite color!

K: Well that's a black light and if you look at that black light with this book...I'm trying to pick these up....there are some pages in here where you can feel...like this one you can feel the ink on it. This is glow in the dark ink so if you shine your black light on that it will kind of glow and maybe if I turn off the lights in here we can see a little bit of the glowing.

D: Yeah, it glows a little bit.

K: Yeah, you can see it glowing.

D: But when you do this, it can glow more. Oh! It really is glowing!

K: Isn't it cool!

D: Uh huh!

K: Look, if you did this. If you even just put it down here. Now do it. Now put your light on it and then move it away. Yeah!

D: Cool!

K: So then, it's almost like every other one. Now the white areas in the page they'll kind of glow with the black light because if you have white socks on it will kind of glow. You know what would be really cool with the black light is that shirt you have. Yeah...it makes white usually look like it's...um....

D: It makes it look like its neon paint.

K: Like a neon

D: And like a neon pink, blue...that's cool!

K: Since the light is kind of purple when the light shines on white, it looks like that same kind of purplish blue. Well, I see some white. Wow! Look at that! (laughing)

D: (Laughing)

K: Hey, let's go in here. It's dark but we won't close the door. Isn't that kind of a cool shirt! - especially in the black light. That's awesome. Alright. Let's go back to the table...there's more...there's a whole book of it...there's a bunch of these...

D: Ooh! My mom had one of these lights, but it's blue...

K: On the outside, you mean?

D: Yeah. That looks familiar too. My friend has this too.

APPENDIX K: TEACHER OBSERVATIONS SCHOOL A

Observation #1 School A Day 1

4-15-2016

At School A, the art room shares the basement area with the Jr High Science program. We don't have any door to divide our room, but the teacher workroom sits in the middle to create a wall and I have a partition that covers part of my wall to create an opening to the art room.

There are two windows along one wall and three along another, but there are light diminishing window shades that I pulled along with turning off the lights to create a dark room.

As the students entered I heard oohs and ahhs. I had to stifle the talking to achieve the quietness of the moment I was looking for. This class comes directly from lunch recess and is always revved up at art. This room uses cafeteria-style tables but we were able to create coziness through light and proximity to share about our experiences with candlelight.

Many answers regarding the candle had to do with using candlelight when the power goes out due to bad weather. My personal experience of growing up in the country included a lot of days with the power out and using candles. At times we would not have power for a few days if a bad storm came. It was neat making this personal connection with the students' responses. Living in more urban areas since growing up, I rarely have the opportunity to deal with power outages.

Using candles for power outages was something I had not even considered, although it is a big part of my childhood experience.

One student shared that they use candles all the time to make the house smell better. Some even use it for light, if their electricity is turned off or if their bill is getting too high.

Another student shared that they got to light the candles in church for others.

Student E shared how a candle was used at their parents' wedding. Student E shared that one candle had a B on it, while the other had an S. Both matches were lit at the same time from a flame. They lit the two candles together and then blew out the matches together.

As a group, we also talked about using candles and tea lights for festivals, funerals, weddings, birthdays, and church.

I finished off talking about light with many reflective questions interjected within the discussion, but the students were starting to phase out from too much lecture. The sketches were a welcome relief from the lecturing. The students created their 4 sketches before class ended.

My 4th grade class ran similarly to 3rd grade. There was no time in between classes to write down any reflections, but more than one student talked about using a candle when the power goes out at home.

The 4th grade class was also able to finish their sketches during class.

For closing, I fielded questions from the lecture. Correct answers allowed that table group to line up at the door.

Observation #3 School A Day 2a

4-22-2016

I was absent from school on April 22 and had a sub, who led them to create art independent from the light print project.

Observation #5 School A Day 2b

4-29-2016

I am very concerned about the short time I have to teach this lesson. Missing last week at School A had just evened out the two schools giving each 5 weeks for the 7 week lesson. I have to cut out major sections of the IRB approved lesson so that we have time to make the prints before

school lets out. I don't know what the repercussions are to that but I know that I still need to have a final project no matter what.

Other than the time crunch, the lesson is going well. Last week, I feel we lost some ground on the higher power component of this lesson. On the first day, even if a student equated light with anything related to a higher power or religious, they often did not know why a light could represent a higher power. In order to keep our attention on the awe of light in our world, I tried to reproduce the same quietness when they entered the classroom today. Using a variety of flashlights, students came into a darkened room with an odd assortment of flashlights along with the LED candle.

I love flashlights and I am not sure there isn't a child who doesn't love a flashlight. The thing I took away from this was that in order to keep a spiritual sense or wonder in the lesson, you have to create a moment for the students to be in awe or wonder. The structure of school doesn't lend itself to state of wonder because wonder happens in a timeless state, not a structured, first this and then this pattern of school. You have to move the students outside of the boxed in structure of school and lead them to a state of wonder. Having the lights off in a classroom with an odd assortment of unique lights does this trick pretty well. We talked about flashlights and when you might use them and how light is magical before getting to work on this particular day.

We discussed how light illuminates a room and how some of the students think about light for church. Student E shared that at home, they have a moving picture puzzle of a lighthouse. When you look at it the other way, it is Jesus and He has lights coming from His eyes. Her eyes were sparkling with delight as she shared this. We also discussed the lighthouse, reflecting on the artwork used when we completed the art criticism paperwork, and how the lighthouse

symbolizes safety and Jesus as the savoir in the work by Kinkaide. I am afraid I won't have time to bring in these moments of awe anymore during this lesson. Moments of awe...mindfulness. Most were able to finish their final sketches and get them transferred to the foam plate today. Student L often struggles with perfection and did not complete the task. Another student chose to re-create one of my teacher examples for his plate which required a lot of careful drawing. This student did not finish today, either.

Most of the students managed the plate pretty well. Both grades have never used the Styrofoam plates before and had limited printing experience. Many will need to go over their lines again next week before printing. I plan on letting them see a print, comparing successful prints they made with less successful ones, and then discussing why this happened. I would love for some to realize they need a deeper indentation in their printing plate without me telling them!

To close, each table group shared a large paper and drew some images of light. I had the students sign their work so that I could use the images of those students who would be involved in the study.

After the day was over, I realized I had made some great discussion questions that I haven't even used yet! Ugh! Running through this lesson stinks! I am going to try to interject them during the next few classes at both schools.

It is all about survival now. I am very concerned about the short time we have to complete this project well. I continue to cut out important parts of the lesson to accommodate the time we have remaining.

Student L continued to rework and rework the project. It is a very common practice and if I ride it out the student will become satisfied eventually. Despite the momentary frustration, I am happy for the strong interest that Student L has in the project.

For both the third and fourth grade classes, students needed to transfer the final sketch onto the Styrofoam plate. They are all pretty focused on the task, but some have deep lines while others will need to experience print making before realizing their lines need to be deeper. I had taken the time at the end of the last class to check over sketches and place final sketches over a Styrofoam plate if they were ready to transfer. That has been such a blessing. Students that were ready were able to start working right away at transferring, while others had time to finish their final sketches, get approval, and have my assistance in setting up the Styrofoam plate with the final sketch for transfer. Early finishers were given a chance for some free art, which is never received negatively by any student. Once the transfers were completed and approved by me, I gave the students in each class a demonstration on printing and allowed them to try printing with old linoleum blocks made by previous art students. There were some small, stamp size blocks at School A. The students enjoyed their first experience with printmaking and were able to take care of the cleaning responsibility themselves. School A has a large utility sink in the room.

There are even more students at School A that are process over product oriented. I am so happy they are enjoying printing but the prints are missing a lot of important detail.

I set up enough stations so that no more than 2 people were sharing a station. The limited workspace was more of a problem at School A. We have a 6 foot drying rack with both sides available, but some students were just printing one after another and just stacking the wet prints on top of each other.

Often these issues are a lack of focus on the students' part as I go over instruction but then also a lack of clarity on my part to ensure that I teach to each student in a way to guarantee success.

There is a higher level of assistance needed for success at School A than at School B, especially concerning 3rd and 4th grade. The problem lies in that I can't create any more time. We have one class left to finish printing, signing, and self-assess. So many important parts of this lesson have been omitted due to time restraints.

My desire to have the students discover the need to have deeper indentations will not be able to happen as planned. I also need to finish grading and place the grades in the online gradebook before I can find out who is in the study. Then those students will need to have all of their work copied or photographed before sending it home at the end of the school year, which is next week!

Ugh! Not to mention the private interviews outside of art time that I am supposed to have with each one of them.

Student F was not at school today and never got a chance to print.

The 4th quarter closes next Friday and I still need to interview all of the students and they deserved another day to print. I decided to intervene in a way that I normally would not with the students' art just to ensure success and to ensure I have a print for those interested in being a part

of the study. At the end of the day, I looked at each print and each plate, deciding which would need a deeper indentation. I went ahead and made deeper indentations and printed a few copies of each plate so that I would have reproducible copies for the study. I maintained the character of the lines used in the printing block, but just deepened them, since I wouldn't have time to teach this to the students. I also maintained the same ink and paper color.

Concerning the interviews, I realized there is no way for me to complete these before the end of school. I plan to come back during the early summer and set up interviews with those who have agreed to be in the study at a time that is most convenient for them. In an attempt to stay as close to protocol as possible, I plan to interview the children in the art room. No one will overhear them, but the school secretary, Superintendent and/or maintenance staff will still be present at the school and it will simulate the closest environment to the originally planned method.

In regards to the artwork, once I complete the grading and post them, I will find out who is involved in the study and hold onto their artwork until the fall. Then I can refer to their work during the interview and complete the steps I need before returning the work to the students.

Observation #11 School A Day 5

5-20-2016

I followed a similar pattern to this last day of art at School A. Students who needed to print, printed. They also made their art portfolio and self-assessed.

Student L was able to finish the plate and print. The student really never reached satisfaction but realized it was now or never.

I usually have a print suite with the students where we each give each other a copy of our print so that everyone has a whole class full of work at the end. We did not get to accomplish this, either,

as I held on to the work of those enrolled in the study and we didn't have time to make enough prints.

Time was definitely the biggest hurdle to overcome concerning this lesson.

APPENDIX L: TEACHER OBSERVATIONS SCHOOL B

Observation #2 School B Day 1

4-18-2016

Realizing after the first day that trying to remember specific student comments would be difficult enough and that I may not be able to use most of those specific student comments for my thesis, I started looking more for general patterns in the students' response.

Being in a bus garage, light just streams in since there are 3 glass panels in each of the three doors for the garage. I really wanted to mimic the candlelight beginning I had used at Cornell, so I chose to turn off the lights and create a circle with chairs in my makeshift office area off to the side of the garage, instead of meeting at the cafeteria –type tables near the garage door windows. The change was successful as the students entered and noted the specialness of the moment. The students usually come in loud and boisterous, excited from lunch recess, but they were remarkably quieter and aware of a need for different behavior. The consideration of location and proximity was very important to this successful opening of this lesson. I realize that I will need to create other initial situations with light for future days of this lesson.

The candle was lit and “flickering”. We had to make some chair adjustments and shuffled around a bit. Once we were settled, I made sure everyone was seated and everyone could see each other and the candle that was on a chair in the center of us.

I stated, “Describe a time when you remember having a candle lit?” One by one we shared.

Student A talked about the Last Supper. I asked her to explain that further. She shared that it was an event that happens at her church. She explained that they dim the lights so it is almost dark. When I asked her why they do this, she shared that it helps everyone focus on the Last Supper and not think about other things. Students B and D shared but I didn't catch the specifics.

Student C shared that they use birthday candles for luck. She also shared that she has a candle from when she was baptized and that they light a candle to remember her grandma.

This opening was very successful and was by far the most talking the students were able to do for this lesson. Once we were done with sharing, we put up our folding chairs, turned on the lights and moved to main area of the garage. I had printed images about light in plants, animals, people, and in a spiritual context.

From my teaching experience, I have learned that although digital images are fascinating to watch whether in a PowerPoint or slide show, they are gone once you put the digital projector away. Printed images allow teachers and students to return to them anytime within the project and allow for 1:1 interaction.

Although I did use reflective questions within the lesson, there was a lot of information to cover about light that had to get done with a shortened time frame to teach the overall lesson. With the end of school approaching, I would have at most 5 days to teach this planned 7 week lesson.

The rest of the introduction to the lesson went well. They all had the glossed over eyes of too much listening by the time I was done. They lit up when I handed out sketch papers for them to come up with 4 different ideas for their print. Some of the students made more than 4 sketches for their print. If students were not done, I asked them to take the sketches home to finish and bring back. I offered up the option of bringing it back sooner than next week, leaving it on the art

office desk, putting it in my mailbox, or giving it to their teacher to place in my mailbox.

Student D needed to take the sketches home to finish.

For closing, I fielded questions about light from the lecture. Correct answers allowed that table group to line up at the door.

Observation #4 School B Day 2

4-25-2016

Today we started off class filling out the form, Looking At and Understanding Art.

As a teacher I try to stay clear of filling out a lot of forms that resemble paperwork they do in their classes. I have had many students balk at filling out papers, reminding me that this is art class. Older students are more apt to verbalize this disappointment. Many of the students who struggle filling out left brain-based paperwork do not struggle in art drawing or painting. When the same kind of work is introduced in art class, they balk. Not sure I blame them.

This particular group did well on this paperwork and did not balk. Some needed more help than others and the small group work did well to keep all involved and helping each other understand as I worked individually with students. Student A was absent from school.

We looked together at Thomas Kinkaide's "Guiding Light" and completed the form with both teacher led and independent or small group student work. It was a two page worksheet that covered art criticism on a single piece of work, including describing, analyzing, interpreting, and evaluating.

Next, we began creating our final sketch, choosing one image from our sketches and drawing a final copy onto a 4"x6" white paper. Many students had to be reminded to fill the page and almost everyone had to add a background. I used my teacher examples to give them some

choices and reminded them that printing deals with line. I cut out extra papers for do-overs as some grasped this concept easier than others. Many have drawn their final sketch but have not yet transferred it to the Styrofoam plate.

To close, each table group shared a large paper and drew some images of light. I had the students sign their work so that I could use the images of those students who would be involved in the study.

Observation #6 School B Day 3

5-2-2016

We reviewed the steps we needed to take to print and then looked at our plates. I showed them my teacher example and how deep the indentations would need to be. There is also a point where the Styrofoam will tear if the indentations are too deep. Most of the students are not going deep enough for fear of ripping the foam. I am going to let the prints happen as they are, and then talk with the students afterwards about who needs to stop and rework their plate.

Once I completed the demo on printing, it was over. All they want to do is try it themselves. I pulled out some old linoleum blocks done before my reign as the art teacher and allowed the students to print with those. We had limited time, so we only had 2 printing stations, each with a color and their choice of printing block. I just had them put their ink-covered brayer, inking plate, and linoleum block into a tub at the end of class. They loved the process and were very excited about printing their own work next week.

Observation #8 School B Day 4

5-9-2016

Oh my goodness! Printing was organized chaos. Luckily we have lots of open floor space in the garage, as my drying rack was not going to be enough to hold everyone's prints as they worked.

I limited my ink colors to white, black, yellow, red, or blue so that I wouldn't run out before the project is over. The students chose their own ink and paper colors, but as we started printing, some realized the contrast was too low. I did allow people to change their paper color to better suit their ink color. We are printing on half sheets of 9"x12" so that a nice mat of paper surrounds their print. They are centering them as best they can.

Many students were printing for the first time and so there was either hesitancy or hurry. Student D was just powering through the printing process, whether the ink was covering or not. Many of the prints were barely visible, yet 12 of the 16 prints total were completed. Student D clearly was more interested in the process of printing over the product. Comparatively, Student C was noting that the color choice for paper was not creating the high contrast desired. Only 4 prints were created today by Student C. Student C's focus was definitely on the product.

We placed long sheets of butcher block paper along the edges of the garage, near each group, so that the students could print and then place their print out to dry. I instructed the students to leave the prints there until the end of the day when I would put them away.

The organized chaos continued until the students left the garage to go back to class. Cleaning off the tables, brayers, hands, etc. left no time for recap of the lesson. We have no water source in the garage so the students walked halfway down the short hall to the only girls and boys bathrooms in the whole school to wash their hands. We did discuss the need to clean up the sinks afterwards leaving no ink on handles, on the two doors to enter the bathroom or in the sink.

Luckily the group is pretty responsible and does this job fairly well. We also have a lot of mother hens so peer pressure takes care of the rest.

Whew! Crazy! Luckily many had a lot of prints completed. I did allow those who needed a few more to print, but if they were done, they were done. This was our last day of art so we also had to make a personal portfolio to take home all of the artwork they had made all year. Students that were done printing were able to decorate their take-home portfolio while the others finished.

We also took the time to pick out our best print and had the students self-assess.

I held onto the artwork so that I could grade it and will return it to the students not involved in the study next week before school lets out.

Despite the time crunch and omitting important parts from the lesson, I still feel that overall we had success with this project. The students really enjoyed it.

Concerning the spiritual component, a focused effort has to continue throughout the lesson to keep it present. I believe that my strong interest in spirituality comes out in my everyday teaching, but I need to create more moments to pause and consider for the students to help them grow their attention to spirituality in art and in their everyday lives. Repeated and varied pauses, to focus over connectedness to nature, people, and a higher power crossing cultural boundaries, would be beneficial to continue to nurture spirituality in the art room.

APPENDIX M: LIGHT LESSON PLAN

Title: Styrofoam Prints Inspired by Light **Unit:** Movement **Grades:** 3 & 4

Digital Resources

*Description: Light Painting Photographers

URL: <http://www.tripwiremagazine.com/2011/04/light-painting-photography-18-of-the-worlds-best-artists-painting-with-light.html>

*Description: Eric Staller - Light painting photography

URL: lightpaintingphotography.com/light-painting-artist/featured-artist-2/eric-staller/

*Description: Bioluminescent Examples from Scientific American

URL: <http://www.scientificamerican.com/slideshow/bioluminescent-avatar/>

*Description: When Art Meets Science: Exhibition Inspired by Bioluminescence URL:

<http://ocean.si.edu/ocean-news/when-art-meets-science-exhibition-inspired-bioluminescence>

Goals:

When given examples about numerous interactions a person has with light on a daily basis, students will consider the affect that light, or the lack of it, has on them. By creating a styrofoam print with a broad subject matter, students will understand how personal experiences and feelings can be expressed through artwork. By looking at artwork in a variety of mediums that focus on the subject of light, students will become aware of how artwork can be made about our connectedness to nature and living things, people, and a higher power.

Objectives:

Art Production: Students will create a one color 6"x9" styrofoam print that uses imagery to represent a personal experience with an illuminating light. (VA:Cr1.2.3, C6)

Grade 3 VA:Cr1.2.3

Apply knowledge of available resources, tools, and technologies to investigate personal ideas through the art-making process.

Art Criticism: As a table group, students will verbally compare and contrast the artists' use of an illuminating light in James Turrell's "Wilson Tunnel" with "Summer in the City" performance by Pilobolus, citing at least one similarity and one difference. (VA:Re8.1.3, C5)

Grade 3 VA:Re8.1.3

Interpret art by analyzing use of media to create subject matter, characteristics of form, and mood.

Art History: As a table group, students will verbally share at least two observations about the cultures depicted in Thomas Kinkaide's "Guiding Light", an illustration from the book, "The Girl Who Loved Horses" by Paul Goble, "Brisbane, Australia" an installation by Shih Chieh Huang, or James Turrell's "Wilson Tunnel", giving a reason for each observation. (VA:Pr6.1.3, C4)

Grade 3 VA:Pr6.1.3

Identify and explain how and where different cultures record and illustrate stories and history of life through art.

Aesthetics: As a table group, students will verbally decide if Eric Staller's "Synergy II" light painting photograph is less/more/equally valuable as James Turrell's "Wilson Tunnel", giving at least two reasons for their opinion. (VA:Re9.1.3, C6)

Grade 3 VA:Re9.1.3

Evaluate an artwork based on given criteria.

Step by Step Procedures:

DAY ONE:

Materials: Digital projector, computer, dry erase board, dry erase marker, battery-operated candle, 4 large sheets of butcher block paper, 4 tubs markers, masking tape, 4 images of bioluminescent plants/animals, 4 images of cultural references to light as a higher power, variety of stamps, assorted papers folded into cards, bookmarks, etc.

1. Students enter into a darkened classroom with paper covering the windows and the lights off.

Teacher will remind students to please come in quietly.

2. A battery-operated candle is the only light source. "Describe a time when you remember having a candle lit". Teacher will field answers and ask questions to prompt a richer answer from the students.

3. "Today we are going to start a project that focuses on light. Today when you walked into class, the light from the candle was used to illuminate the room - to give light so we could see."

[Teacher writes illuminate on board.]

4. "What if light comes from a fire? Does that kind of light provide something else besides illumination or light?" [Once answered, teacher writes "heat" on the board.]

5. "Where else do you see candles used?" [Teacher is looking for birthday cakes, memorial, altar, church, wedding.] "Why are they used? It can't be because it is dark!" {Teacher fields answers and writes on board.]

6. What other benefits can a candle or fire give besides light? [Teacher is looking for heat or warmth or heat.]

7. “Do you think people need light? Raise your hand if you think ‘Yes’. [Teacher counts raised hands.] “Raise your hand if you think ‘No’.” [Teacher counts raised hands.] “Why do we need light?” [Teacher is looking for needing light to see.] “Actually people do need light. We need light to see. Did you know our bodies need Vitamin D and the easiest way to get Vitamin D is to allow the sun to shine on your skin. You may have noticed that a lot of milk has Vitamin D in it, but you would have to drink 10 tall glasses of milk a day to get the minimum amount of Vitamin D your body needs. Even though we have to be careful with how much sun we get, we still need it!” (Adams, 2005).

8. “Scientists have proven that our brains need light to function well. Light also helps us with our inner biological clock, the part of our brain that understands when it is light outside it is time to be awake and when it is dark, it is time to sleep. Light also add to our alertness and thinking. It improves our performance when we are doing things” (University of Liège, 2014).

9. “Does anyone know the name of the illness that has to do with not having enough light?” [Teacher is looking for SAD or Seasonal Affective Disorder.]

10. So people need light to see, to know when to be awake and asleep, and to be alert and think better, and to be healthy. Do plants need light?” [Teacher is looking for “Yes”.] “Why?” [Teacher is looking for plants so they can make food – writes photosynthesis on the board.]

11. Do animals need light? [Animals so they can see to hunt for food.] “What about animals that live in the depths of the ocean or are nocturnal (awake at night)? Do they need light, too?” [Teacher is looking for “Yes”.] “Eight or nine out of every 10 animals that live in the depths of the sea are bioluminescent (Hadzy, 2009). “Does anyone know what bioluminescent means?” [Teacher is looking for bioluminescence is when creatures or plants create their own light. Show the slide show from the article “*Shining examples: 10 bioluminescent creatures that glow in*

surprising ways”(Hadzy, 2009).] “From the slideshow we can see that some animals, insects, and mushrooms are bioluminescent – they create their own light. Light is important.”

11. “Together we have decided that people and all living things need light. Is light important to people for any other reason?” [Teacher is looking for to symbolize a higher power or God.]

Many ancient cultures worshipped light or the sun or thought light/the sun held special powers.

12. The Plains Native Americans has a special ceremony called the Sun Dance where they gave a blood sacrifice through the dance to fulfill a vow, to get supernatural aide for themselves or someone else, or to gain supernatural powers for themselves (Envity Publishing Incorporated, 2011). Ancient Egyptians saw the sun as a symbol of life with Ra as the god of the sun. Both the Muslim and the Christian faith see light as a symbol of Allah or God, respectively. Muslims build their mosques so that they are filled with physical light to symbolize the spiritual light of Allah (Omer, 2011).

13. “Looking back at our list, we see that people, plants, and animals all need light. We also see that many cultures have considered light as a symbol of a higher power and/or a god.”

14. “I am going to give each table a big sheet of paper and markers for everyone in the group. I want everyone to write down ideas or make little drawings about light. Maybe it will be light from a candle, a fire, a light bulb, the sun, from lightning, a firefly...You can use our list and the images that we made to help give you ideas.”

15. Teacher gives two minutes for the students to come up with ideas. Have the groups hang up their butcher block papers in a place where all the students can see them. “Wow! Look at all these ideas that you have all come up with about light! This is perfect because we are going to do some printmaking and guess what our subject will be?” (Teacher is looking for the answer ‘light’.) “Yes, you are right! It is LIGHT!”

17. “We are going to be using a Styrofoam plate to make the prints. Here are some examples of Styrofoam prints. The artist used this printing block (a piece of Styrofoam) and some printing ink to create this print. You are going to make some sketches and then pick one to draw onto a printing plate. We use the plate actually make the artwork – it is like a stamp that we make ourselves.”

18. “First we need to make some sketches. I will hand out the sketch papers. What is the first thing to do when I give you paper in art? (Yes, write your name on it!) So once you write your name, I would like you all to make at least 4 sketches. Remember you can use some of the ideas you came up with in your table group. We talked about the importance of an illuminating light for people, nature and all living things, and as a symbol of a higher power. Please start making your sketches. Think about the mood you are trying to create in your sketches and use lines to help express that mood. Draw at least 4 sketches. Once you have them done, raise your hand so you can show me which one you have picked to make for your artwork.”

19. Teacher gives 5-10 minutes for sketching, depending on completion of group. As students raise hands, teacher will 1:1 conference with student and gather the sketches. During the conference, the teacher will ask the student which sketch they have chosen and why. The student will then put a small X in the upper left hand corner of the sketch they have chosen.

20. Early Finishers move to stamping area and work with a variety of stamps and markers to make cards until all the students complete their sketches. Students may bring home their finished work.

21. Clean up.

22. Closure: “Who can tell me why plants need light? (wait for answer ‘light to grow, for photosynthesis’)

Who can tell me what bioluminescence means? (wait for answer ‘when creatures or plants make their own light’)

Who can give me one example of bioluminescent animal or insect? (wait for answer ‘firefly, deep sea fish’)

Who can give me one example of a bioluminescent plant? (wait for answer ‘mushroom’)

Who can tell me why people need light? (wait for answer ‘to see, to illuminate or light up, for Vitamin B, to avoid SAD, to be healthy, to have sleep cycles’)

Who can tell me one culture that used light to symbolize a higher power? (wait for answer ‘Native American, Egyptian, Muslim, Christian’)

Who can tell me what kind of art media we are going to work with? (wait for answer ‘printing’)

BETWEEN CLASSES: Teacher should check sketches and make sure they are all completed and student has chosen one as the final design. Teacher will also attach checklist to front of packet, initial it, and, if student is ready for it, attach the paper for the enlarged final design.

DAY TWO:

Materials: Digital Projector, computer, 4 trays filled with a variety of tools for printmaking (*stamps, one rubber stamp with words, stamp pads, foam stamps, used linoleum blocks, a variety of linoleum prints, used styrofoam plates, a variety of styrofoam prints, brayer, printing ink, acrylic inking plate, gouger, found items used for stamping*) computer, Ppt, 4 sets of handouts *Looking At and Understanding Art*, classroom set of handouts *Printing Tasks Checklist*, ‘final design’ paper (size 6”x9”), pencils, erasers.

1. Students enter the room to see artwork that shows an illuminating light focusing on nature and living things, people, and as a symbol of a higher power.

2. On each table is an image of one of the following works: James Turrell's "Wilson Tunnel", Thomas Kinkade's "The Guiding Light", an illustration from the book, "The Girl Who Loved Horses" by Paul Goble, and a still photograph of "Brisbane, Australia" an installation by Shih Chieh Huang.
3. "Today we are going to 'Look At and Understand Art' about light as table groups, learn a little about the art we are going to make, and begin to transfer one of our sketches into a final design."
4. "When we look at and understand artwork, there are 4 steps. Raise your hand if you can tell me the four steps. (wait for answer 'describe, analyze, interpret, and evaluate') Today we will **describe** what we see, **analyze** how the artist used the principles of design to create meaning, and **interpret** why the artist made this art. After you finish the worksheet, your goal is to share at least two observations about the cultures shown in the artwork, using the information you just gathered."
5. "Let's try it together as a class. This artwork is JMW Turner's "Chichester Canal". It was made around 1828! That was a long time ago! Wow! I am going to read the questions to you from the handout. We know the artist and the name of the artwork along with when it was created. Raise your hand if you can tell me what you see in this artwork." (wait for 'boat, water, sunset/sunrise, trees, etc.') "I need to write that answer in on the line. Raise your hand if you can tell me the art process. I am wondering if it is a drawing, painting, sculpture, or what?" (wait for 'painting') "I can circle this answer. Is this a portrait, landscape, still life, or something else?" (wait for 'landscape') "What medium did the artist use? Raise your hand if you know." (wait for 'paint') "I am going to make sure I have circled all the answers. If I ever have a question with a line for an answer, what does that mean? Raise your hand to tell me". (wait for

‘write it down’) “Yes, you’ll see that sometimes the questions where you can circle the answers have an ‘other’ with a line. That means if you pick ‘other’ you need to write down something on the line.”

6. “Now we need to pick two elements of art that the artist used, circle them in question #7 and then write them in the boxes for question #8. Raise your hand if you can share one element and how the artist is using it in this painting.” (field two appropriate answers)

7. “Next, we are going to **Analyze** the work. We are going to look at how the artist used the principles of design. We need to pick two principles of design that the artist used. Raise your hand if you can share one principle and how the artist used it in this painting.” (field two appropriate answers)

8. “Raise your hand if you can tell me how the artist is trying to make you feel. What is the mood?” (field appropriate answers)

9. Now we need to **Interpret** the work. We are trying to find out the purpose and meaning of the artwork. Some artworks are made to show nature or feelings, tell a story, or document (remember) history. There may be other reasons that a work is made. Raise your hand if you can tell me why this artwork was made and why.” (field appropriate answers)

10. “Some purposes of this work might be for artistic expression, functional art (art that can be used by people), narrative (to tell a story) or ceremonial. Raise your hand if you can tell me what the purpose for this work might be.” (field appropriate answers)

11. “Raise your hand if you have an idea of what is the significance or importance of the work.” (field answers)

12. “The last question on the handout asks what this artwork says or means to you? Raise your hand if you would like to share your thoughts about the meaning this artwork has to you.” (field answers)
13. “Now that we have described, analyzed, and interpreted this work, what are two things you can tell me about the cultures show in this artwork?: (wait for ideas such as ‘lived near water, used boats, no signs of current technology, not living in heavily populated area’)
14. “It is your turn for your group to work together. There is one artwork about light on each table. As a table group, you will describe, analyze, and interpret the artwork using the “Look At and Understand Art” handout. You will need to pick one person to fill out the paper and a different person to share the information with the class. While in your group, everyone should share their ideas. If you have any questions, just raise your hand I will come to you.”
15. “You have 5 minutes. After the 5 minutes, one person in your group will share your answers with the class. Now you first need to figure out who is going to write and who will share your answers with the class afterwards. Remember to involve everyone in answering the questions.” (Teacher passes out Looking At and Understanding Artwork.)
16. Teacher will check all the groups for understanding and field questions.
17. Teacher will check completion and call time.
18. “Table #1, who did your group choose to share your answers with the class?” (Have that student speak from their seat about the work. Continue with the other groups until done. Teacher will assist as needed.)
19. “You did a great job looking and understanding the artworks about light. What are the 3 steps we used to talk about artwork today?” (Teacher is looking for ‘Describe, Analyze, and

Interpret'). "Yes, describe, analyze, and interpret. Great work!" Gather all the materials from the activity.

20. "Now I am going to put a tray of tools on each table. Take a good look at them. What could they be used for? Keep your guesses in your head! Don't say them out loud!"

21. Teacher passes out trays to each table group. Give them 15-20 seconds to really look.

22. "Who can tell me what these tools and materials could be used for?" (wait for answer 'Printing/Stamping')

23. "You probably have already done a lot of printing in your life! Who can tell me one thing a person can print with? If you need some ideas, look at your tray." (wait for answers such as rubber stamps, potatoes, found objects) "Artists can also make their own 'stamp' called a "printing block". Printing blocks can be made from linoleum, a rubbery, easy to cut material, foam, paper, found objects, plexiglass, or metal." (Teacher will point out some examples of printing blocks.)

24. "Who can tell me how to make an image with a rubber stamp? What are the steps?" (wait for "press the stamp into a stamp pad and then press it on the paper to make an image")

25. "What else could an artist use with a stamp besides a stamp pad?" (wait for 'markers, paint, printing ink') How does an artist choose which one to use? (wait for 'depends on what you are trying to print on, how long it will take, and how long you want it to last'.)

26. If students are unable to answer, ask "Why would you NOT use a mini rubber stamp with markers to put a permanent design on your bedroom wall?" (wait for 'it would not last, would take forever, and would not be permanent')

27. "So an artist picks the kind of stamp or 'printing block' and the kind of ink or paint based on what they are printing, how long it will take, and how long they want it to last."

28. “We are going to make our OWN ‘printing block’ or stamp. You made some sketches last week and picked one out. That will be the image you use to make your own printing block today. We are going to use Styrofoam to make our block.”
29. “One of the trickiest things we need to remember about printing is that our printing block prints the reverse of what is on the block. This is most important when you are using any words or numbers in your design. Look on your tray for a rubber stamp with words. What do you notice about these words?” (wait for ‘they are backwards!’)
30. “When you want to make a printing block with words or numbers you have to make them backwards, just like the stamps. Here is an example that I made where I forgot to make the printing block backwards. Look at what happened when I printed it!” (show the “Art Rocks” printing block and finished print.).
31. “Last week you made some sketches about light. Today we want to prepare to transfer these sketches onto our Styrofoam blocks. The first step is to pick out the sketch you want to use. Most of you have already done that and I have approved them. If you have NOT chosen one and had it approved yet, we will do that today.”
32. “Once you pick your sketch, you will need to make a final design of it. Please gather around me so that I can demonstrate.” Teacher will sit in the middle of a table so that students can gather all around. If the class has any students with special needs, teacher will position themselves near those students.
33. “First, I am going to give you a checklist to help you remember all of the steps you need to complete. When I give you a paper in art, what is the first thing you need to do?” (wait for answer ‘write your name on it’) Teacher will write name on the top of the paper.

34. “You can use this checklist to make sure you remember what you need to do.” The teacher will use the checklist to show that tasks #1-3 are complete. Then she will give a brief demonstration on how to enlarge their design onto the ‘final design’ paper. “Only lines can be used. A scribble won't work. The lines I draw will be where the ink does not go”. Show a teacher's example.

35. “Here is my sketch that I have decided to use as my final design. I will need to draw it bigger or ‘enlarge’ it onto this piece of paper. I want to make sure that my design fills the page.” Teacher shows 2 finished drawings. One fills the page well while the other is too small and leaves a large amount of white space. “Raise your hand if you think this one fills the page best. Raise your hand if you think this one fills the page better. As a teacher, I am looking for an example like this one since the image fills more of the page and it is well balanced.”

36. “Now you are going to use your chosen sketch and draw it bigger or “enlarge” it on the paper. Once I hand back your papers, please return to your seat and begin enlarging your sketch. If you have not finished your sketches or chosen a final design, you will need to do that first and then raise your hand so that I can approve your sketch BEFORE you start drawing it larger. Notice the first page on your packet is the checklist. Please check off what you tasks you have completed and then begin the next step. Many of you are ready to enlarge your design onto the final design paper. You may start as soon as you finish checking off the tasks on the checklist.”

37. Teacher passes out the papers and students begin to work. Teacher assists as needed.

38. As students finish, they raise their hand and teacher initials and collects paperwork. Teacher passes out blank bookmarks and markers to each table for early finishers. Teacher will explain early finisher project to individual students as they finish.

39. Early finishers may use stamps/markers from their tray and free-drawing to make

bookmarks. Students may bring home their finished work.

40. Clean up materials.

41. Closure: Students will be asked the following T/F questions as a review of the day's lesson.

Two students will be chosen from each table group to answer a question.

- a. Drawing is the first step in "Looking At and Understanding Artwork". (F)
- b. Describe is the first step in "Looking At and Understanding Artwork." (T)
- c. Analyze is the second step in "Looking At and Understanding Artwork." (T)
- d. A stamp is used for printing. (T)
- e. Only rubber stamps can be used for printing. (F)
- f. We are using 'Superfoam' to make our printing blocks. (F)
- g. Printing blocks must be made with the letters backwards. (T)
- h. Enlarge means to make something smaller. (F)
- i. Bioluminescence means when plants or creatures makes their own light. (T)

BETWEEN CLASSES: Teacher should check final designs and approve designs as needed.

Depending on the rate of completing, teacher may set up the transfer (see below for instructions).

(SETTING UP THE TRANSFER: Place the plate (with a small roll of masking tape on the back) on top of the cardboard square centered. Place the sketch on top on the cardboard plate and tape the top edge of the sketch onto the cardboard. The cardboard allows for the student to move the plate and sketch without losing their registration. It also allows the student to lift the sketch to see the plate to make sure all of the lines have been transferred.)

DAY THREE

Materials: Digital projector, Ppt with slide of Staller and Turrell work side by side, Paper packets (checklist, sketches, final design), dull pencils (one per student), 4 rolls masking tape, 1/2" masking tape, classroom set of cardboard rectangles (minimum size 6"x9"), classroom set Styrofoam printing plates (size 6"x9"), 8 stamp pads, scrap paper, thin line markers, wipes, Copies of Ed Emberly's Finger and Thumbprint Books along with some teacher examples of finger and thumbprint characters.

1. Students enter to see a variety of lights used to create art like Eric Staller. (Christmas lights, light pens, light gloves, finger lights, light wands, etc.) Students have a few minutes to check them out, and then the materials are put away.
2. "Today we are going to briefly compare value or worth in artwork, finish our final designs, transfer our final designs onto our Styrofoam printing blocks, and work on some simple fingerprint art inspired by Ed Emberly." (teacher turns on digital projector to Ppt slide of Staller's and Turrell's work)
3. "Let's look at these two artworks. This one on the left is the "Wilson Tunnel" by James Turrell. It is found in a museum in Houston, TX. One of the groups last week looked closely at this work. Let me read some of the things they said about it. (teacher reads from 'Looking At and Understanding Art' handout from last week).
4. "On the right side is a light painting artist named Eric Staller. Light painters use light and photography to make their work. Sometimes it is permanent like the lights on this Volkswagen Bug car and sometimes it is not. The picture that the artist takes becomes a way to remember the

event. Eric's 'Synergy II' is like one of the works where the picture has to stand in for the art event."

5. "Raise your hand to tell me what you see in 'Synergy II'? (wait for 'tube of lights, bridge, city, made a night, no one around, etc.')

"Raise your hand and tell me one element of art you see and how it is used." (teacher fields two appropriate responses)

"Raise your hand and tell me one principle of design you see and how it is used." (teacher fields two appropriate responses)

"Raise your hand and tell me the mood of this work" (teacher fields a few appropriate responses)

6. "Now that we have talked about both works, let's talk about why artwork is valuable. Raise your hand to tell me why artwork might be considered valuable." (teacher is looking for a variety of answers and writes them on the board)

7. "Your table has two minutes to decide which artwork is more valuable, Turrell's 'Wilson Tunnel' or Staller's 'Synergy II'. You all have to agree on one answer and then one person in your group will share your table's answer with the class. Are there any questions?" (Teacher moves around room and checks for understanding. After two minutes teacher begins discussion.)

8. "Raise your hand if you would like to share your table's opinion about which artwork is more valuable." (teacher continues with all tables)

"We see that to consider something valuable is an opinion and we all have different reasons for considering one of these works more valuable than the other." (teacher recaps the reasons each group considered a particular work valuable).

"In art, talking about how valuable something is falls under aesthetics. Great job!" (teacher turns off digital projector)

9. "Now we are ready to transfer our final designs onto our Styrofoam printing blocks. Many of you have finished enlarging your design and are ready to transfer. Please gather around me so

that I can demonstrate.” Teacher will sit in the middle of a table so that students can gather all around. If the class has any students with special needs, teacher will position themselves near those students.

10. “To save time, I prepared many of your final designs to make them ready to transfer. First, I took a piece of cardboard the same size as the Styrofoam plate and taped it on the back with a loop of tape. (Teacher demonstrates.) Then, I took the final design and taped it on top like a hinge. Why would this kind of taping be helpful in art?” (Teacher lifts the hinged paper to show the Styrofoam plate underneath. Teacher waits for answer, “to make it easy to check your work.” If no answer is given, teacher will share answer and start demonstration.)

11. “Let’s start transferring! I want to use a dull pencil to draw onto my final design. I am pushing down with medium pressure to transfer the design onto the Styrofoam plate.” (Teacher picks up the hinged paper to show the progress and then replaces it.)

12. “Remember you can check your work to make sure you haven’t forgotten any lines.”

13. “You will finish drawing over the whole design with a dull pencil, making sure the whole design transfers onto the Styrofoam. Then go over the lines with the dull pencil, drawing right on the Styrofoam. Be careful NOT to tear it!” (Teacher demonstrates.)

14. “Remember first, start drawing right on top of your drawing. Check your Styrofoam plate to make sure you are pressing hard enough and not too hard. Trace over the whole drawing and then lift the paper off and draw your design right onto the Styrofoam, being careful not to tear it.”

15. “As soon as I pass your paper to you, please go back to your seat and start transferring. If you have not finished drawing your final design you will need to do that first. Then I will check it and help you prepare your Styrofoam plate and design for the transfer. When you are done

with your transfer, raise your hand and let me check it. DO NOT REMOVE any tape until I have checked your work!”

16. Teacher finishes passing out papers and assists as needed.

17. As students finish and have been checked by the teacher, teacher will collect papers and pass out stamp pads, thin line markers, and scrap paper and handouts on making finger print animals and characters. Teacher hands out wipes for students to clean off their fingers.

18. Clean up. Students may take their Early Finisher work home.

19. Closure: Some of the Daily Discussion Questions

BETWEEN CLASSES: Teacher should check the completion of the Styrofoam printing blocks. Depending on the number of completed blocks, teacher may need to take some time at the beginning of the next period to get everyone’s block ready to print.

DAY FOUR:

Materials: Digital projector, Pilobolus’ “Summer in the City” performance on YouTube, completed styrofoam shapes, water soluble block printing ink, brayers, barrens inking plates, paper towels, construction paper cut to size in several colors (9"x6"), butcher block printing mat (with areas marked out for inking plate, inking the block, and printing), specified areas for each group to put their wet prints.

1. Students enter room with digital projector set up to watch Pilobolus’ “Summer in the City”.
2. Teacher will discuss the 4 steps in Looking At and Understanding Art with the class concerning this performance. “DESCRIBE what you see in this performance.” (teacher writes it on the board under the heading ‘Describe’)

3. “Now, we need to ANALYZE. Raise your hand if you can tell me an element of art in their performance. (teacher fields two answers) Raise your hand if you can describe the mood that was created. How did the group used the Principles of Art in this performance to create a mood?” (teacher writes down the ideas shared under ‘Analyze’)
4. “Raise your hand if you can tell me what the third step is. (teacher is looking for ‘INTERPRET’) “Interpret means to discuss the purpose and meaning of the work. How would you interpret this work? What is its purpose and meaning?” (teacher writes down student answers on board under ‘Interpret’ heading)
5. “Raise your hand if you can tell me what the fourth step is, (teacher is looking for ‘EVALUATE’.) “Evaluate means to judge the work and decide whether it is a good work of art and why. You may also decide if you like it or not, giving a reason why. Raise your hand if you would like to share first.” (teacher writes down student answers on board.)
6. “Now that we have used the four steps to Looking At and Understanding Art on this performance by Pilobolus, each table will compare and contrast how the dance used an illuminating light to how the “Wilson Tunnel” by Turrell used an illuminating light. Your table will need to write down two similarities and two differences. Some things to think about are how the mood is created and how the light affects the people. Everyone at the table needs to help and one person will need to write down your answers on the paper I give you. You will have five minutes to work together as a group. Does everyone understand what to do?”
7. Teacher will move around room and assist groups as needed. After four minutes, teacher will check on progress and adjust time as needed, letting the students know how much time is left. Teacher will write “Similarities” and “Differences” on dry erase board in two separate columns.

8. “Table One, please share your similarities and differences between the two works.” Teacher writes them on the dry erase board and repeats with other tables until all have shared. Teacher summarizes findings, looking for similar themes.

9. “Now I would like you to gather around me as I demonstrate how to pull a print. I am going to use the Styrofoam block that I made. First I need to clear off the table and put down this mat. I have made one for each side of the table. When you print, you will be working with a partner. Everyone will pick a certain color of ink to use when printing. You and your partner will be using the same color ink, the same printing plate and brayer, and printing mat. You may change the color of the papers you use to print on, but the ink must be the same for all of your prints.”

10. “I have labeled the three sections of this printing mat. The goal in printmaking is to make a good, clean print. What do you think I mean by that?” (teacher is looking for a clear print, no stray ink on paper)

11. “In this first section, I will place the inking plate. Notice it is labeled ‘Ink the Brayer’. This is a piece of plexiglass (plastic sheeting). I will put some ink on the inking plate and then use the brayer to pick up just a little bit of the ink and roll it onto my printing block. I want the ink on the brayer to be smooth and not too thick, so I will roll the brayer back and forth in a few different directions to help spread the ink evenly on the brayer. Remember, the goal is to spread the ink on the brayer, not onto the inking plate. When I have spread the ink well over the brayer, I can usually hear the ink crackle as I roll the brayer back and forth. Listen for the crackle!”

12. “The next section is for rolling the ink onto the printing block, the styrofoam. Notice it is labeled ‘Ink the Block’. The ink should cover the whole block, or piece of Styrofoam. Be sure to check the corners!”

13. “In the last section is where I lay the clean paper to print on. It is labeled ‘Pull the Print’ It is VERY important to keep this area clean. I also want to keep my fingers clean while I am printing. In this area, I take the printing block and lay it ink down on the paper. The plate will stick to the paper. Then I flip over the plate/paper and gently rub the back of the paper with the heel of my hand.”

14. “The last step is to pull the plate off of the paper. The paper you printed on is called a print. It is one copy of your artwork. Prints should go on the drying rack.”

15. “Look carefully at your print. Do you like the way it looks? Is there an area that did not print as well as you were hoping? If you need to add any additional lines to your plate, you will first need to wash it off. Take it to the sink and rub off the ink under the water. Be careful not to scratch it!”

16. “Dry off your plate and then add the missing details by drawing onto your dry, clean plate with a dull pencil. Once you are satisfied, raise your hand for teacher approval. Then you may reprint your design.”

17. “Print enough so that you have 3 copies of your own and one for each person in your class, and one for me, your teacher. (Teacher will share the exact number of prints with her class.) As a class, we are going to participate in a printing suite. A printing suite is where printers make extra prints of their work so that they can share with each other. An artist’s print is artwork – it is valuable. Many artists live off of selling their artwork for money. We are going to make extra prints so that we can give everyone in class a print and still have a few copies of our own work, too.”

18. “When you are done printing today, you will need to clean off the printing plate by running it under water and rubbing it gently with your hand. Be careful not to add any scratches to it!”

19. “We will be printing for the next few days. You will not get them all done today. It may take you two or three class periods to finish.”
20. Students will sign up for a color of ink, which will determine their partner.
21. Students will pull their first prints and decide if adjustments need to be made, acting accordingly.
22. Students will begin printing, placing their prints on the drying rack as they are printed.
23. Teacher will allow 10 minutes for clean up.
24. Closure: Some of the Daily Discussion Questions

DAY FIVE:

Materials: Completed styrofoam shapes, water soluble block printing ink, brayers, barrens inking plates, paper towels, Construction paper cut to size in several colors (9"x6"), butcher block printing mat (with areas marked out for inking plate, inking the block, and printing), specified areas for each group to put their wet prints.

1. Review printing and vocabulary.
2. Review how to pull a print.

*Set up the printing area on top of the butcher block printing mat making sure all the necessary supplies are there.

*Place a small amount of ink on the inking plate.

*Use the brayer to spread the ink evenly over the brayer by rolling it in several directions but keeping it in a small area on the plate.

*Roll the ink onto the plate. Make sure ink is on each corner too.

*Place the plate ink side down onto the paper.

*Turn over the plate/paper

*Rub the back of the paper in all areas with a barren.

*Pull the plate off the paper to reveal print. Put prints on drying rack until dry.

*Print more or clean off the plate.

*Once the prints are dry, sign and date the prints.

3. Students will continue to work as partners to print.

4. Clean up.

5. Closure: Some of the Daily Discussion Questions

DAY SIX:

Materials: Pencils, Light Print Worksheet, assorted stamps, paper, markers, colored pencils, construction paper, and masking tape.

1. Review printing vocabulary and artists. Review benefits. Review process.

2. The teacher will demonstrate how to make a portfolio for the class prints.

3. Students will continue printing with their partner until everyone has enough prints made (10).

Everyone should finish printing today.

4. Early finishers can make a portfolio to put their prints in. They can also work on filling out a brief worksheet about their light print.

5. Additional stamps will be available for students to work with to make their own compositions.

6. Clean up (10 minutes)

7. Closure: Some of the Daily Discussion Questions

DAY SEVEN:

Materials: Pencils, Sun Print Worksheet, finished prints, construction paper, masking tape, markers.

1. Review printing vocabulary and artists. Review benefits. Review process.
2. Demonstrate how to sign a print (left: name of print, center: name of artist, right # of print/total prints made)
3. Students will choose prints of their own to keep, giving for the hallway display (1), and to exchange with their classmates that share their table (5-6).
4. Students will exchange their prints and place them in their portfolios.
5. Any students not done will fill out a brief worksheet about their sun print.
6. Clean up.
7. Closure: Some of the Daily Discussion Questions

Assessment:

Art Production: Students created a one color 6"x9" styrofoam print that used imagery to represent a personal experience with an illuminating light. (VA:Cr1.2.3, C6) [Rubric]

Art Criticism: As a table group, students verbally compared and contrasted the artists' use of an illuminating light in James Turrell's "Wilson Tunnel" with "Summer in the City" performance by Pilobolus, citing at least one similarity and one difference. (VA:Re8.1.3, C5) [Teacher observation of class discussion]

Art History: As a table group, students verbally shared at least two observations about the cultures depicted in Thomas Kinkaide's "Guiding Light", an illustration from the book, "The Girl Who Loved Horses" by Paul Goble, "Brisbane, Australia" an installation by Shih Chieh Huang,

or James Turrell’s “Wilson Tunnel”, giving a reason for each observation. (VA:Pr6.1.3, C4)

[Teacher observation of class discussion and handout]

Aesthetics: As a table group, students verbally decided if Eric Staller's "Synergy II" light painting photograph is less/more/equally valuable as James Turrell’s “Wilson Tunnel”, giving at least two reasons for their opinion. (VA:Re9.1.3, C6) [Teacher observation of class discussion]

Vocabulary:

printing plate- the acrylic sheet that ink is placed on prior to inking the brayer and the block

block printing (or relief printing) – printing method in which a block of wood, linoleum or

Styrofoam surface is carved so that an image can be printed from it. The uncarved areas will receive ink which will be transferred to another surface when the block is pressed against it.

brayer- a roller tool used to roll ink onto a surface by hand, usually in block printing and in monoprinting.

baren- a hand held tool used to impress a print from a wood block or a Styrofoam plate.

Photosynthesis – a process where plants use light (such as from the sun), water, carbon dioxide, and minerals to create food.

Bioluminescence – when creatures or plants create their own light.

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