I DON’T KNOW: FINDING CREATIVITY BEYOND AMBIGUITY

By

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ABSTRACT OF CAPSTONE PROJECT PRESENTED TO THE COLLEGE OF THE ARTS
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Abstract

This paper describes my research and exploration into creativity with the goal of creating
a deeper understanding of what creativity is, its significance for art education, and what
oftentimes prevents us from considering and utilizing this critical skill. As an a/r/tographer I
applied, researched, and reflected on the actions of inquiry, exploration, and artful play as tools
for developing creative behaviors and overcoming uncertainty during the artistic process. I
consider what happens when an artist says I don’t know, begins to form an investigation, and
artfully and playfully responds to a personal inquiry. During my study, I found investigative
ideas and inspiration, excitement for the project and process, uncertainty along the way, and
playful mechanisms and methods for rethinking and moving forward during the artistic inquiry.
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One doesn’t arrive – in words or in art – by necessarily knowing where one is going. In every work of art something appears that does not previously exist, and so, by default, you work from what you know to what you don’t know. (Hamilton, 2010, p. 68)

Ann Hamilton, a noted contemporary artist, gives us these intoxicating words about the possibilities inherent in not knowing. Not knowing is about looking and seeing, and seeking and finding. The not knowing is what propels us forward to work to make sense of the world around us, as artists, researchers, teachers, and learners.

However, as art educators, we inescapably live and create, and teach, and learn in a world where certainty rules. Control and knowing the inevitability of an outcome is praised and lauded and even rewarded above all else. Our society-at-large doesn’t hold in high regard things that don’t produce beauty or real function, those that are obscure, or are not measurable. But, as art educators, we must support and praise the processes of doing, experimenting, questioning, seeking, and playful making, for it’s in those acts that unknown possibilities open-up.

**Statement of the Problem**

Art and creativity have an inherent connection in most people’s minds. Most art teachers claim it as a desired learning outcome for their students (Hanson & Herz, 2011). But, all-too-often art education becomes a structured strategy for artistic skill building and end products meant to achieve pre-defined results. This very idea goes against the concept of creativity, which at its nucleus is a way to manifest unique individual expression, free ideation, and experimental making (Gude, 2010). Art and art education are often thought of as fundamentally creative subjects and activities, and therefore tends to lack a deeper meaning for creative thought processes and independent practice. When classroom and art educators teach to this
understanding they unfortunately miss the valuable learning experience for students of gathering and synthesizing information, problem solving and patterning, reimagining, and artistic playfulness. When lessons are taught in an overly structured, step-by-step, teacher-led direction, students are deprived of this crucial 21st Century skill, and even the power of imagination and curiosity. We should not be looking for sameness and repetition in arts learning, but rather the different and ignored, the mysterious and the perplexing, the unknown. The nature of the human mind is to inquire and explore, to discover new horizons, and to be curious. I believe this is what we should be teaching towards in art education.

**Purpose of the Study**

The purpose of this study was to examine the action of artful play and exploration as a tool for developing students’ creative behaviors in art education. For my capstone project, I played with artistic prompts and games of play for accessing unconscious waves of creativity, uninhibited imagination, and playful mechanisms for overcoming ambiguity. I expected to better understand how artistic play and exploration can serve as tools for guiding student growth in creativity and conquering uncertainty. Finally, I reflected and examined my own personal and pedagogic experience with creative play, exploration, and experimentation, and what it would mean for more art educators to maintain similar creative practices.

**Research Questions**

Through my research, I sought to address the following questions:

1. How might engagement with an artistic process of play and exploration impact my understanding and awareness of creativity and creative resistance?
2. How can art educators employ lessons learned from their own artistic experiences and practices in their lessons and teaching?
3. How can art educators help students explore and play with materials and ideas to overcome creative resistance?

Rationale and Significance of the Study

The rationale for this study was to examine the significance of free ideation, experimental making, play, and exploration have on creative growth and experience. Through an a/r/tographic study method, this research intertwines, artistic making, reflection, stories, and memories as an artist with narratives drawn from my fields of inquiry. Creativity is often and mistakenly an assumed learning outcome in the art studio classroom and should be studied for further development and thoughtful strategies for student learning.

Assumptions

I entered this project assuming that exploring, experimenting, and playing through art making would elicit creative thought processes and aid in overcoming uncertainty. I believed that student-led ideation through artistic play and exploration would enhance creativity. I assumed that anxiety would seep into the process of ideation at some point. I also assumed that artists are experts and adept at evoking creative thought and highly instinctive about creative play, exploration, and experimentation. My final assumption is that my experience as an illustrator and industry professional would give me a somewhat biased, yet uncommon and distinct understanding of this subject.

Limitations

My biggest limitation is that I am not a classroom teacher. I am a professional industry artist, concerned with everything from scheduling, to brand management, to planning, and concept development. As a result, I relied heavily on scholarly work for ways to translate my
experiences into lessons for practicing art educators and my research could not focus on student experiences or assessment.

**Literature Review**

Scholars who influenced this research included Enid Zimmerman, Olivia Gude, Nicole Gnezda, and Kerry Freedman. In this section I will discuss their ideas and projects about creativity and how they relate to my own research goals about what creativity is and why we need it, how we teach and learn this valuable skill, and what strategies these authors propose for promoting creative and independent thinking.

**Why creativity?**

In the United States alone, over 700,000 businesses are involved in the arts and creative industries and employ nearly 3 million people, making up a significant percent of today’s economy (Americans for the Arts, 2015). This statistic, as high as it is, does not account for other highly creative industries, such as scientific research and computer programming. Jobs in our nation’s creative sector include the following art-related professions: sculpture, advertising, filmmaking, game design, graphic design, animation, architecture, theater, and symphonies, among many others (Freedman, 2010). This understanding should fuel our educational system to utilize more arts education and the creative thinking that should take place within it. But, creativity has long been looked at as a magical activity, fuzzy and ill-defined, leaving educators and art educators with an uneven understanding of creativity and unmanageable expectations. Moreover, as Perkins and Carter (2011) suggest, this limited and uneven view of creativity in education restricts a broader pedagogy and restrains students’ everyday creative thinking. Without some attention given to creativity our students may be ill-prepared to meet the demands they face beyond school.
The word *creativity* does not have a concrete definition; it is essentially elusive, but many scholars have given thought to the context and characteristics of creativity related experiences and activities. Most agree, students must be able to think critically, solve non-linear, open-ended problems, and seek out and investigate information as learning practices for the skill of creativity. Art education can lead the way for creating lessons and facilitating creative activities to promote learning these skills. As Zimmerman (2009) suggests, “researchers and practitioners need to conceive of creativity as multidimensional with consideration of how cognitive complexity, affective intensity, technical skills, and interest and motivation all play major roles” (p. 394).

**What is creativity?**

If we were to do a quick Google search of the word *creativity*, we would find that the top search items shown, Oxford Dictionary, Merriam-Webster, Dictionary.com, all define the word differently and vaguely I might add. For example, Merriam-Webster (n.d) defines creativity as “the quality of being creative,” whereas Oxford Dictionaries (n.d.) defines it as “use of imagination or original ideas to create something; inventiveness.” The same goes for scholars who have grappled with its meaning and definition. They all inherently consider and define it in accordance with their own individual conceptions and perceptions of the word (Tan, 2015). Sternberg (as cited in Tan, 2015) considers creativity as a process that requires the balance of creative, analytical, and practical aspects of intelligence. Treffinger (as cited in Tan, 2015) describes creativity as stages through which a problem is solved. Robinson (2006) proposes it is, “the process of having original ideas that have value.” There is no common acceptance or consensus for its meaning, and this elusiveness and ambiguity may be keeping art educators from
having meaningful discussions and procedures about and for creativity, essentially considering its meaning in a less than ideal way (Milbrandt & Milbrandt, 2011; Zimmerman, 2009).

Attention to creativity has ebbed and flowed in the American consciousness and our educational system for decades. At the beginning of the twentieth century, art educators moved towards creative self-expression rather than simply teaching students to draw—an objective leftover from the industrial revolution (Stankiewicz, 2001). Self-expression was admired as a way to increase creative thinking skills. Furthermore, during this time the freedom to experience, explore, and create with new materials was celebrated for contributing to more humane schools. Such environments were believed to be more growth-inducing than an authoritarian, teacher-lead approach to artmaking.

With ideas rooted in psychology, the 1930s marked a turn toward a more child-centered system and in-turn creative self-expression in the art education classroom (Zimmerman, 2009). Moreover, a teacher’s role at that time was to “provide motivation, support, resources, and supplies, but not to interfere directly in students’ artmaking activities” (p. 384). This ideal lasted for fifty years. However, the 1980s and continuing through the 1990s, art education turned to a new approach meant to foster and attain skills, solidifying it as subject-matter-centered, with the concrete ability to evaluate and easily assess performance. Rote memorization, national testing, and standardized curriculum left much to be desired in the way of creativity, innovation, and imagination in all areas of education (Bastos & Zimmerman, 2011). This played into the No Child Left Behind Act of 2001, which left concern for students’ abilities in seeking knowledge and problem solving (Milbrandt & Milbrandt, 2011).

Because of this paradigm, art education has tended to, and continues to, teach things that are more concrete, and easily assessable; for example, elements and principles, art history, and
foundational skills, even while scholars and researchers are imploring art educators to develop learners that think like artists, creatively and as curious seekers of information, and developers of ideas (Foley, 2014). Zimmerman (2009) points out that many psychologists and educators agree that “creativity is a complex process that can be viewed as an interactive system in which relationships among persons, processes, products, and social and cultural contexts are of paramount importance” (p. 386). The question remains, how can we foster these relationships and help students identify them?

Possibilities

The 2017 Netflix show Abstract, explores the creative process of some of the world’s most innovative designers. In episode one, Illustrator Christoph Niemann stands at his desk, dumps a bucket of LEGO® bricks, those little plastic blocks of color, that have been around for generations, and begins to play (Neville, 2017). He makes an off-duty taxi cab out of a couple of yellow and white bricks, then changes one piece and it becomes an on-duty cab. He uses the bricks as a metaphor for his family; playing with the shape and size and color of the blocks as he builds and rebuilds, connecting ideas and thoughts. Creative possibilities are like a box full of LEGO®. Foley (2014) explains that creativity isn’t in LEGO® kit instruction booklets, but in the bucket of LEGO® with its potential for ideas. Popova (n.d.) looks at LEGO® bricks as little stores of knowledge, the more diverse our bucket of plastic pieces, the more interesting our imagined building will be.

For some, creativity is the development of a new original idea. But most scholars agree it is built on existing ideas and based on interests (Freedman, 2010). What this means is that our new ideas are born from a myriad of pieces of information and experience populating our memory and building on one another. These can be our personal experiences, or previous
knowledge, or our mental pools of inspiration. Consider Graphic Designer Paula Scher (2011) who created the Citi® logo in one second after a meeting with her clients. People wonder how she did it, but as she says, it was really one second, and then she goes on to add, and 34 years; “it’s done in a second but then add every experience, and every movie, and everything in my life that’s in my head.” That one second it took to create that logo, was actually built on her 34 years of life experiences and memories.

Similarly, Gude (2010) reminds us that creativity is not simply the domain of making art, but of living life. She considers that the number one “objective of a creativity curriculum ought to be developing the capacity of students to instinctively respond to situations with playful creative behaviors” (p. 36). She also suggests that art educators should encourage student’s careful observation of their reactions, mood, or attitude as they work through the creative process when considering their personal experiences. Her assessment to being open to experiences and to be able to evaluate emotions during the process can produce surprising and useful results.

Perkins and Carter (2011) ask us to consider that if we think of creativity as a mystical and magical happening, we limit opportunities to encourage creativity for all students. They explain that there is no realm for learning or teaching creativity if it is simply a magical activity. They go on to implore art educators to provide opportunities to explore ideas and interests within the context of their everyday environments and culture, essentially allowing for a LEGO® effect of building upon stores of knowledge, and playing in the box of possibilities. Once we realize what creativity is and how it operates, we can then begin to break it down into essential components for creative output, but it’s also helpful to understand what happens cognitively and emotionally as we begin teaching processes to promote creativity.
Apathy, anxiety, ambiguity

Creativity does not magically or mystically happen, it is a process of showing up every day and doing the work, and it can sometimes be downright scary and anxiety inducing. In *Abstract* (Neville, 2017; Press, 2017), artists Christoph Niemann and Paula Scher both comment on the anxiety they feel when they begin to create an artwork. The program enables the viewer to see them both go through a similar process of procrastination, frustration, and self-doubt. We also see them go through the ambiguous process of generating ideas and artistically experimenting with the blank *canvas* in front of them. Every day they show up to the work before them, they explore ideas, and they experiment until the uncertainty has subsided.

Creativity often involves a range of emotions; everything from apathy while in the ideation phase, to exhilaration at the flash of insight, to intense concentration during the production stage, frustration in the implementation stage, and even disappointment when the process has come to an end (Gnezda, 2011). Understanding this should give art teachers better leverage for planning and implementing creative lessons, and how to respond to the various emotions and each student’s state of mind at any given time during the creative process.

Gude (2010) offers the following example of a student who just doesn’t know what to do with her artwork. A teacher suggested many times that her student just think of things that don’t go together and put them in the painting. The student exhibited the very appropriate emotions of anxiety and ambiguity toward a project that had little structure, and the teacher understandably didn’t know why. Ambiguity, says Foley (2014), is the number one obstacle to creative work, and it happens to everyone at some point. But, it is in actuality a necessary component to creativity. Why does this happen? Gude (2010) suggests that arts education standards, with an emphasis on formal content and finding solutions for problems considered by someone else, as
well as not representing wonder, knowing, immersion, and intention do little to nurture the experience of creativity and in turn creates anxiety filled scenarios with little ability to solve it. Gnezda (2011) suggests that already developed project ideas, and lessons that are highly regulated with a pre-imagined finished product takes away from the process of creativity and ideation as a part of the student’s experience and responsibility.

**Play**

Gude (2010) suggests *play* is a necessary component for creativity and regulating emotions pertaining to its process. She begins her workshops with playful projects for engagement. Her method is often based on Surrealist games for thinking and making and opening-up to possibilities. Like those artists, she uses playful artistic games as a beginning exercise, for loosening up, and a way to access the creativity of the unconscious mind. Surrealists tried to capture the unconscious mind and unrestricted imagination through playful, sometimes collaborative art making processes. For example, *Exquisite Corpse* game is a game of chance, surprise, and playful possibilities among peers. Collaboratively played, a participant *draws* on a piece of paper, then folds it and hides their work, and passes it to the next player to add their *drawing* to a new, blank section of the paper. When all participants are finished, the paper is unfolded and a surprising and unique artwork is revealed.

Echoing Gude’s (2010) sentiment of the importance of play for creativity, Foley (2014) proposes that art educators consider students as the master builders at play in the classroom, in charge of their own imagination and processes. Gnezda (2011) recommends lesson plans that involve student ideation and inspiration based on themes or students’ personal experiences. She goes on to say that coaching students as they develop their own processes, and letting go of preconceived ideas of what the final artwork will be is key. She also advises art educators to
individualize teaching methods, and work to understand the various waves of emotions students go through, laboring with them, sharing in their enthusiasm, and staying engaged as they face challenges.

**Cognitive complexity and creative development**

Some researchers believe that creativity is an innate human capacity, often suppressed over time through various social constructs. Others believe some people are just naturally gifted with creative ability (Gnezda, 2011). Either way there are many characteristics of creative people that can give us clues as to how creativity works, and what abilities we need to foster in students.

*Association* is considered the number one cognitive function of highly creative people, allowing them to focus on more than one thought and many pieces of information at the same time (Gnezda, 2011). Artist Paula Scher has the ability to synthesize a lot of information at once into a final artwork, and is recognizable when looking at her highly-detailed charts, graphs, and maps of what she calls nonsensical information (as cited in Press, 2017). Another cognitive process is the ability to come up with many ideas, and still another is taking a significant amount of time before ideation occurs (Gnezda, 2011). Creative people tend to see the big picture, think metaphorically, transfer knowledge, and recognize patterns (Gnezda, 2011). Creative people also have the ability to play, have an openness to experiences, and the capacity to self-evaluation (Gude, 2010). Csikszentmihalyi (as cited in Zimmerman, 2009, p. 390) found creative people to be energetic, use their imagination but root it in reality, have the ability to fail and make mistakes, to enjoy being creative for its own sake, to be passionate but objective about their work, and to be playful. Realizing the many traits of creative people can give art educators the ability to foster, nurture, and enhance students’ creative potential and propensity.
Zimmerman (2009) found many educators that suggested strategies for supporting the development of creativity. Some solutions he noted included, practicing problem finding and problem solving techniques. Allowing students to find ideas and issues of interest to them and permitting them to grapple with and practice solutions for solving them. Another he mentioned would be to allow students to play with and explore unfamiliar materials, finding and experimenting with new ways to elicit novel thinking. He also stated that encouraging multiple variations of work and utilizing open-ended curricula with unforeseen outcomes is another way to encourage creativity in the art studio classroom. In addition to these various strategies, art educators are called on to make assignments clear, make lessons interesting as well as challenging, help students to be aware of art’s contexts and why artists create, and question their own assumptions (Zimmerman, 2009).

**Mystical illumination, not really**

Creativity is an elusive term; it has no single agreed upon meaning. But, there is research pertaining to a set of cognitive realities and scholarly recommendations for its formation within art education and student learning. Researchers and scholars have been imploring educators to consider that all students have the ability to be creative and that it is our responsibility to establish procedures for developing this higher-level thinking and to make it an integral part of learning. Creativity with its vague definition is essentially the process of knowledge and ideation, a rich and valuable experience filled with ambiguity and emotion, and is a necessary and crucial 21st Century skill. As Robinson (2006) suggests, creativity “is as important in education as literacy, and we should treat it with the same status” (3:12).

As art educators, we must ask students to tackle ambiguity head on, to be voracious knowledge seekers, and to play in the box of LEGOs, making connections and imagining the
possibilities. Artists, such as Niemann and Scher, and many others, remind us of the work and emotions that go into creating and forming ideas, a valuable clarity of what it takes to consistently pursue higher level creative thinking, and the generous rewards it offers.

I realized through my research that creative thinking with its magically shifting definition can be learned, it can have structured procedures, be playful, and that there can be lots of strategies for teaching for creativity. I hope to use the knowledge I’ve learned from my scholarly research to better inform my teaching practices and to inspire my own personal artistic and creative practice. I believe this knowledge will also help me better articulate my belief in art education’s need for and focus on creativity as a core ideal and its continued and consistent presence in education and arts education.

Research Method

I used a/r/tography as the primary methodology to implement my study. According to Springgay, Irwin and Kind (2005) a/r/tography “is a living practice; a life writing, life creating experience into the personal, political, and professional aspects of one’s life” (p. 903). This method is a unique way of looking at, finding, exploring, and seeking out answers in a multiplicity of ways. It is a way of working outside of more traditional methodologies in order to introduce research that expands our ideas of education.

In my capstone project, I wove the three entities of myself as artist/researcher/teacher together, to seek out and be open to new information and experiences, and to be actively engaged in the process of (re)searching. My desire through this process was to observe and be reflective of my own presence within the research and to assume the role of an active participant.

Data Collection Procedures and Instrumentation
Through play and exploration I used what Freedman and Siegesmund (2015) deem as images as study, or the process of making and using artwork as a form of self-reflective study. Through a/r/tography methodology, I took a look in at my own artistic, research, and pedagogical practices through research into art and creativity as an artist and through my artistic experience, by making art, and as an artistic facilitator creating art explorations and play for young students. For 25 days, I moved between creation and reflection, images and written text, blending visual elements with written investigative text and research writing. During this time, I cultivated a practice of exploring and artfully playing with a personal inquiry, artistic materials, and games of chance for creativity and ambiguity. Through this process, I looked in, and sought out information to inform my own pedagogy and that of others, rather than simply looking at the data of my personal artistic making, research, and teaching.

I chose to use this methodology of text and image, words and pictures, to step into the unknown, and to surrender to not knowing. In my quest for knowledge, meaning, and new insights through and from learning, I examined my assumptions of my everyday practice of artistic play and exploration, was self-aware, and critically evaluated my responses to my practice and pedagogy (Finlay, 2008). Finlay (2008) contends that this reflective methodology sets in motion an understanding for life-long learning.

**Data Analysis Procedure**

Through my experiences, I used a three-stage model suggested by Boud, Keogh, and Walker (as cited in Finlay, 2008) to document my reflections. First, I reflected and replayed an experience, describing it in a non-judgmental way. Second, I checked on my feelings, both negative and positive. Then I reevaluated my experience by association, integration, validation, and appropriation.
A/r/tography purposefully forefronts the coexistence of the three equally important identities of artist / researcher / teacher. In arts-based research the arts are often recognized as unique ways to research the world and increase awareness. A/r/tography encompasses teaching and learning as acts of investigation, so that art, research, and teaching are each researched, represented, explained, and acknowledged, in relation to the other, each being entwined and connected (Irwin et al., 2006).

A/r/tography is a form of living inquiry, and as such does not seek to answer questions or move along in a linear process. However, “through attention to memory, identity, autobiography, reflection, meditation, storytelling, interpretation, and/or representation, artists/researchers/teachers expose their living practices in evocative ways” (Springgay, Irwin & Kind, 2005, p. 903).

Although there is a lot of flexibility in this methodology, it still has structure. As Marshall (2014) contends, art practice research must be structured, as the very nature of art making means that it has goals and a framework of thought and process in which artists create work. Freedman and Siegesmund (2015) assert that the act of art making and the visual arts promote a deeper understanding of knowledge and experience through the struggle to understand more than what is in our view, and that these “cognitive forms of play” (p. 6) increase a sense of possibility. They also contend that diligent engagement with theory and art making allows for moments of experiential learning to further our understanding and enlarge our vision.
Findings

Figure 1. A/R/T: Weaving and interacting with the whole story.

As an artist, researcher, and teacher I committed to a 25-day reflection, weaving together the relationship of these three entities. I also embarked on a personal artistic inquiry for creativity (see Figure 1). I set out to understand how an artistic process of play and exploration can improve creativity and the difficulty of encountering and responding to uncertainty. I also explored my wonderings about how artists’ creative practices can apply to an art education experience. During my study, I found investigative ideas and inspiration, excitement for the project and process, uncertainty along the way, and playful mechanisms and methods for rethinking and moving forward during the artistic inquiry.

During this study, I reflected on my process on average every other day, creating a blog, www.shannatellez.com/blog, of thoughts and moments from which to gather data, information, and inspiration related to creativity, tools I used for getting through ambiguity, and my personal process for artmaking. Those reflections consisted of my thoughts regarding research into my inquiry, the anxiety and ambiguity I felt throughout the project, and the possibilities as to why I
felt the way I did at any given moment. My reflections also consisted of the frequent sparks of inspiration and understanding I found throughout the project.

**The known and unknown**

Choreographer Twyla Tharp (2003) says that ideas are everywhere, all around us, all the time, but that good ideas come from those that turn us on. You know you’re on to a good idea because it will generate more ideas. My personal investigation and artmaking for this study started with pixels; those little squares with a singular color, and no mathematical measurement I use in the video game industry. The hours upon hours that I spend at the computer zooming into an image to see each individual pixel and then zooming back out to again see the how the changes I made affected the whole picture started my artmaking inquiry for this research.

The very first thing I did was to create a written resource of all the things I knew and related to pixels. As my investigation continued and I filled my research box with information and reference about my inquiry, I noticed I was building connections from pixels to other things, such as cells and social media, things that portrayed small elements that made up a whole. Where this inquiry finally took me was the curious fact that the invisible is just as important as the visible, and the idea that what we don’t see is what ultimately makes, connects, and completes a story. There was a personal wonderment, curiosity, and engagement in this exploration that motivated me want to inquire and learn more, as well as artistically respond to it.

As I started my project and process I kept in mind what Bayles and Orland (1993) espouse, that “what’s really needed is nothing more than a broad sense of what you are looking for, some strategy for how to find it, and an overriding willingness to embrace mistakes and surprises along the way. Simply put, making art is chancy – it doesn’t mix well with predictability” (p. 21). I started with my wonderment, as well as a basic structure to my study of
seeking, doing, making, and reflection. As well as a gentle reminder to myself to be open to surprises along the way.

To bring out those ideas that elicit the most creative thought, I noticed that artists look to the things that resonate with them the most as a prime source of inspiration. And, more than likely those are the things that can be seen and happen in the everyday, the things that bring joy, or make us feel strong emotions. Very much like the Dadaists and their artistic response to the modern world. Art, as the Dadaists expressed it, was not an escape. Rather, it was a way to make daily events visible (National Gallery of Art, Washington, 2006). For them, the here and now, what they saw and experienced brought about new, creative and artistic responses. The same goes for student artists as I noted in this teaching reflection.

_Last year it seemed that every time I turned around the 1st through 5th graders were working hard at drawing Pokémon characters. And, I also remember a third grader talking to me during an art class about the presidential election results and her genuine fears about deportation, which was a topic being heavily featured in the media. These are examples of things students were recognizing, learning about, hearing, and seeing every day._ (Tellez, 2017, para. 3)

At the same time, it is significant to mention that it is a passion for uncovering the unknown that propels artists forward through investigation. Georgia O’Keeffe in a correspondence with the writer Sherwood Anderson addressed the unknown (Cowart & Hamilton, 1990). As she saw it, the unknown is the obsession with which an artist wishes to clarify something so much that they need to put it down in their own media; scratching away in a sort of darkness to make it known. But, at the same time, she implored the necessity for keeping the unknown always just beyond reach, to keep us curious and create the need scratch away.
Artists often seek out knowledge and information for what is curious and unknown to them, including new and interesting materials to play with and skills, both known and unknown, to explore. They obsess over it, seeking out information, and process it through artmaking, sometimes for years. For example, the artist Paula Shier is passionate about human population data. She obsessively paints out large scale maps occupying the canvas with statistics, facts, figures, and numbers regarding each drawn out region. The artist Richard Bunkall, faced with his own mortality, fixatedly painted scene after scene of an imagined end to life. Biologist Ernst Haeckel, neurotically searched out and drew hundreds of radiolarians, studying their patterns, form, and symmetry.

**Curiosity and wonderment.** Although my time in the studio spent practicing my artmaking and responding to my inquiry was undeniably valuable, I also realized that creative curiosity and inspiration more readily happened when I was outside of my studio, taking a walk, or actively seeking out inspiration in the everyday happenings of life.

*I feel more confident and comfortable with my ideas. I have found that new ideas pop up more easily for me whether I’m sitting at my desk actively working, exercising, or walking around a museum. Inspiration hits me at various moments throughout the day. Maybe sparked by something I’ve seen or done, or just simply based off a previous idea or visual work I had been working on. (Tellez, 2017, para. 1)*

Being curious and seeking out inspiration was a way to fill up my virtual box of information for my current inquiry and future investigations. I found that because of my daily ritual in the studio seemed to heighten my curiosity overall. For example, during my twenty-five-day study, the one day I was not able to be in my studio at all was a day of unique inspiration for me. As I was out exploring the beautiful high desert of Southern California I felt a new level of wonder. As I sat
and talked with a park ranger about the fascinating Honeypot Ants, I formed a connection to my artmaking inquiry into the visible versus the invisible. These ants live and work creating honey underground for survival, only coming out to gather nectar at night. I was glad I had my small sketchbook with me and recorded the information I had gained and sketched out the ants and their habitat for inspiration and remembering later on.

Artists don’t wait for inspiration to strike by constantly sitting in their studios. We seek it out, finding those things that resonate and are worthy of our artistic response. Being curious, seeking answers, and finding inspiration happens everywhere, and being ready for it is something to strive for when cultivating creativity. Having a small sketchbook with me always during this study was and will continue to be useful and essential for recording moments of curiosity and inspiration anywhere, but also as a gentle reminder to always be seeking it out.

**The structure of play**

Play, as art educator Eliza Pitri (2001) suggests, is a spontaneous act, chosen and controlled by the player, with an unknown result. She also contends that play can occur with the familiar as well as explored with the unfamiliar. In the same breadth, she asserts that play is committed to the demands and sometimes changing rules and goals of the activity, and does not have a certain outcome. She also aptly states that play is a tool for learning.

As I found in my study, artistic play needed the larger context of my inquiry to be functional as a tool for learning. It had a meaningful purpose. I used it as a responsive act to the unknown in my investigation and the uncertainty I felt along the way. When I didn’t know something, or didn't know what to do, I often played with mechanical and undemanding patterns, and doodling, and chance outcomes in my artmaking utilizing my chosen artistic materials, and keeping within the boundaries of my inquiry. Play also helped produce new
understandings about my subject as well as being a mechanism for investigating and artistically responding to my inquiry. My artistic playful doing started with drawings on grid paper, and then cutting out various gridded squares from those drawings. I also weaved cut out strips of paper with completed ink drawings together in such a way that the viewer could change the drawing by moving the individual strips, causing many possible variations of the woven drawing. Further playful explorations had me cutting through ink drawings that exposed new elements and hidden figures as an individual interacted with it (See Figure 2.) Each artistic experience built upon the one before it, creating new understandings about the inquiry and materials.

![Figure 2. The invisible.](image)

The games artists play. Most days during my study I felt a certain anxiety about one thing or another. Sometimes it manifested itself based on my artistic ability. Sometimes it was based on what others might think about the work itself. Sometimes I was nervous about making mistakes, and being less than perfect. Ultimately though any anxiety I felt stemmed from not knowing in one way or another; not knowing enough about my inquiry, not knowing enough about my materials, or not knowing what the expectations of others might be. There was also a mammoth emotional uncertainty when faced with the proverbial blank canvas and the
expectation of artistically responding to my idea or inquiry. I felt it this time as I have most times I’ve started an artmaking investigation.

However, during this study each time ambiguity crept in I responded with a set of tried and true tools that I have learned over time as an artist to move past it. For example, if I had enough time, I would take a short drive around Los Angeles, where I live, letting visual inspiration seep in as I drove. At least once I took myself on a field trip to a nearby nature center. Sometimes I would just take a simple walk around the block, remembering to seek out and be open to revelation and inspiration. I would also often have more than one artistic exploration happening at once in the studio. This, in particular, seemed to help keep me from making any one piece too precious, something I often struggle with as an artist. But, many times, and without conscious thought, I would doodle in my sketchbook, splatter ink or cut up already completed drawings, forcing myself to let go of being fussy or trying to be too perfect. It also allowed me to play with chance outcomes during the artmaking process. Early on, for example, I would make an ink drawing on graph paper, and then I would sit and methodically fill in squares that were already more than 50 percent filled with ink. Then I would cut out squares that had less than 50 percent ink (See Figure 3.) It was a process that was left to chance as to what form the drawing would take by the time I was done. I often relished this playful game for conquering my ambiguity or uncertainty during the project. It also elicited new creative avenues and thought concerning my materials and ideas. For example, cutting out those little squares directly led to the creation of little interactive pieces that exposed and created new drawings when they were played with.
As Gude (2007) contends artists don’t always know the outcomes of their work before they start. They will immerse themselves in the playful process of responding to and interacting with ideas, images, and materials as it happens, garnering the most creative outcomes. The Dadaists and Surrealists played artistic games of chance and automatic techniques to unleash inspiration, deepen the artistic experience, disrupt thought, and illuminate various artistic relations (Brotchie, 1995). Finding figures in ink blots, or creating random montages of text or images are both examples of games these artists played for eliciting creative thought.
We rarely get to see artists’ processes or how they get beyond uncertainty while they work through ideas. I know it’s an almost automatic or practiced response for my own self, so even realizing when it was happening during this study took effort. Artists all have their own unique ways of responding to ambiguity, and they do it, because seeking out answers to their inquiries is a passion and maybe even an obsession that must continue to be responded to.

**Scratching and reaction.** As a working industry artist, I’m usually given an already worked out idea handed down from a corporate entity and established brand. The excitement for exploring these ideas comes from a deep individual need to investigate an unknown. Immersing myself in the brand culture, understanding the history, gathering up copious amounts of information from various people and places, *mind mapping* the key ingredients, and artistically testing and sketching out ideas are all a part of the process. Not at all unlike exploring my own personal unknowns.

The first five days of my personal 25-day study, not unlike the first few days of any project I work on, were the hardest in dealing with anxiety and ambiguity about the process of inquiry and artmaking. I was initially excited and had several ideas to start my investigation off and push me forward. I started with the fundamental artist’s tool, graphite, and an artmaking process of drawing to artistically respond to my inquiry into pixels. I drew little cell-like figures and the imagined connections they might have to one another, but I quickly became concerned when my idea and chosen artmaking activity seemed to get in the way of each other (See Figure 4). My artmaking wasn’t conveying my investigation the way I intended or wanted it to. The graphite wasn’t dark enough, and the cells were obliterating what I thought was a key component of my inquiry, pixels and squares. At this point I had to make what I felt was the difficult choice to continue with what I had initially committed to and find a way to make it match my inquiry, or
abandon it and try something different. I realize that as an artist this is a choice and a decision I have made many times over the course of a project and artistic exploration. I always have to wonder and be responsive to whether or not I am conveying the concept in a way that best transports the message I want to or feel like I need to get across. Artists must constantly be aware, evaluate, rethink, and be open and reactive during the process of investigating and artistically responding, otherwise they risk continuing down a dead-end road for too long.

Figure 4. A Start: But not quite right.

Nothing’s a mistake. I don’t consider my initial start a mistake. Even though my inquiry and artistic vision raced ahead of my artistic execution, it was the sort of scratching around at an
idea that Tharp (2003) considers an important part of the process. I also think that I cultivated some interesting ideas to go back and consider at another time, and in reality, anything we do, make, or question, can be considered “guides to matters you need to reconsider or develop further” (Bayles & Orland, 1993, p. 31), whether in skill, idea, or material.

Moreover, I am grateful for the eagerness with which I started. I believe there was a significance in just doing and making, instead of waiting for a perfect moment to make perfect art. It’s also noteworthy that at the start of the project I had a subject that I knew quite a bit about, which translated into an abundance of initial research and inspiration. This gave me a lot of information and a broad structure and idea at the outset that would eventually and inevitably progress and be narrowed down along the way. Constantly evaluating my progress and being open to where my investigative responses would take me was necessary to move the process along.

I’ve noticed younger primary students I teach through a school-based community art program have an uncanny ability to just do and make without personal reproach. They rarely ever make what many students might consider mistakes. They rarely ever dislike what they have created, and they often like to rework their art and try things repeatedly. It’s a quality I greatly admire and hope to foster for them, myself, and older students, knowing that it is a key ingredient to making and doing for creativity. Practicing the same skill, learning and teaching to respond to work in a non-judgmental way, and turning mistakes into opportunities for learning, growth, and new skills is significant to an artistic process and creativity’s growth.

Practice, practice, practice

Skills. The artist Hugh Merrill (Daum Museum of Contemporary Art, 2007) played and experimented for 70 days with printmaking; altering an etching each day on a single plate and
pulling one print of it every day. He said of this process that the act of making and remaking recorded the changes of the material, his own interaction with his subject, and himself. Moreover, struggling through the artmaking process, he said, gave him a deeper understanding of the subject and his own emotional and even physical experience daily as well as over the course of time.

I started my artmaking investigation with something I know well, pixels. I also utilized drawing, a skill I have practiced over many years. I had a basic structure for my study, an hour-a-day commitment, and a skill or ability with which to start the process. But at a certain point, or more specifically toward the beginning of the project, I knew my inquiry needed a different response with a new artistic material. Ink, the new material that I wanted to use was not something I considered a strength, was a bit of an unknown to me, and a little bit scary. But, I knew I had to embrace the fear, as well as the potentially wonderful mistakes that would inevitably appear. It was at that juncture, that I needed to reevaluate what I knew, what skills I was good at and what skills were weak and could use more practice. It was here that I realized that starting with what I knew and did will, pixels, drawing, and interactivity from working in the video game industry, as well as playing with an unknown factor, ink, could push my inquiry further. It could also give me daily practice with an artistic skill and material I didn’t consider myself very good at but wished to possess and be better at; giving me a new skill for my creative and artistic toolbox. This gave me a greater understanding of how we might as artists and teachers implore the consistent practice of technique and skill, as well as being regularly responsive to the artmaking and the discovery it brings.

Ritual. For me the anxiety and uncertainty that inevitably comes with each new project constantly exists. But because I’ve practiced my artmaking processes over the course of a long
career, I usually know what I need to do if I feel stuck. The same is true of my work during this study. The value of constantly playing with and exploring a personal idea or inquiry, utilizing skills I consider strengths, practicing skills I consider weaknesses, as well as pulling from a slew of tools to move past any uncertainty has proven to me the worth of a daily habit for creativity.

I realized that throughout the course of this study and the ritual of daily making and researching I became more confident in my artistic ability. My knowledge and connection to pixels and interactive products wove itself into my research inquiry and artmaking. Work that I was creating could be changed by the viewer. Ink drawings cut into strips and woven together could be moved up and down or sideways, creating a new image. Or precisely cut gridded squares that could be open and closed, randomly revealing new stories (See Figure 5). I understood more about my investigation as time went on. I could more confidently push my artistic skills and abilities, like drawing in ink, and be less precious with the work itself, notably enjoying the process of inquiry more. I started to include interactive vignettes, movable, changeable drawings, as part of the work, as well as more assuredly understood my inquiry into pixels, and the invisible versus the visible. The others or those I considered my audience during this study melted away over time, and I began to have a true passion for the everyday exploration and investigation I was doing. That passion then began to fuel my need to continue to seek answers, even when I wasn’t or couldn’t sit at my desk and create in my studio.
Figure 5. Interactive storytelling.

**Time and Space.** The ritual of being in the studio was sometimes a need, but more-often-than-not it was a choice; a conscious choice to put personal playful creative time on my daily calendar. Like, making sure I make time to exercise, or keep my house clean. I committed to myself to sitting down with my materials at least one hour per day. If I wanted to go longer and could, I did. If I wanted to and could come back to my workspace later during the day to continue my work, I did. There were several days during my study that I exercised this right to more creative time and was happy to do so.
I tried to schedule my sessions during the quietest time of the day in my household, but on occasion that was not possible. In the beginning when that happened I found myself irritated at the disruptions and noise that inevitably occurred, but then I realized I could simply, playfully create patterns on my grid paper, sketch what was in front of me, or play a game of artistic chance during those times. Alleviating the need for deeper concentration. For instance, the work shown in figure 6 was created by drawing a random pattern of squares and then mechanically cutting them out. There was no preconceived idea, and it took shape just by doing and playing.

Figure 6. Undemanding play with chance.
There is no guarantee that creative time for anyone will be as ritualistic as brushing teeth, or eating breakfast, even though those things are undoubtedly a daily ritual as well as a choice. Getting in the habit of constantly being curious, and responding to that curiosity in a creative way is a healthy habit we need to find ways to cultivate for our students and ourselves as artists. For me, having my notebook, no bigger than my pocket, a pen, and just my simple phone camera with me always was a good reminder to continually seek out and respond to curiosity and possibility during this study, wherever and whenever. Scheduling time to practice my craft, and process ideas was also a daily must. Even if I can’t sit in my studio for an hour on any given day, doing a five-minute sketch for seeking information, practicing skill, and just doing is an attainable plan.

Moreover, and most significantly I made sure my materials were always available and ready to explore with. I must mention that my space was and is small and in a visible area of my home. Because of this I took pains to make sure it was tidied up as much as possible at the end of my artmaking sessions. I kept it confined as much as was feasible, cleaning up areas that began to spill out from my little spot. As much as I would’ve loved to have just left it, I also enjoyed coming back to an area that was organized and ready to go the next time. Besides, it felt like I was almost clearing out the clutter from my mind at the end of each day, making a clean path to my investigation for the next day. Lara Fahnlander (2017) interestingly had a similar finding regarding her need to take care of the basics, like cleaning, beforehand to have an unclogged mind during her creative sessions. This organizing and tidiness readily became a part of my ritual, and was in a way comforting, and reminded me of being in art school, ritualistically cleaning up my supplies at the end of class. Even though they always needed to be unpacked, they were always on hand in my art box.
Summary

The unknown - curiosity, wonder, mystery, and possibility - pushes artists forward and brings about motivation and inspiration. Those are the things that propel us to new knowledge or greater understanding. It’s important to always be looking for that thing that makes us want to know more or has us marveling in awe and continuously questioning.

The phrase I don’t know should be revered and held in the highest regard in learning in the art studio, even if that means one never knows, or never comes to a final, tangible conclusion, and accepting that as the way it might always be. Learning to acknowledge and nurture what we don’t know and realizing its importance as a source for creativity is significant. As well, recognizing and acknowledging the ups and downs that inevitably happen during the process of knowledge-making and art-making is noteworthy, and we should be building playful tools to respond to those uncertainties.

As an artist, I move forward from this research seeking inspiration, recording moments of creativity as they happen with my always-at-hand notebook. My art supplies will have a permanent and highly visible place in my home. Moreover, I will make sure those creative moments are scheduled as a part of my daily routine, to continue to practice and build an arsenal of tools to combat ambiguity. Additionally, I will continue to evaluate my own personal skill set, those things I am good at, like drawing and interactive play, and those things that need more practice, like my ability with ink or writing. I will utilize those things I know best, to continue to my artful response to ideas and put into practice those things I might be weaker at, giving myself an opportunity to grow in learning.

My research into creativity is far from over. Through this study, I have realized its importance both personally and pedagogically. Its vastness is also not lost on me, with many
avenues that have yet to be discovered. In particular, I will continue to wonder about and seek out information about artistic skills, those tools that help us respond to our inquiries, in context with creativity. As Tharp (2003) considers, “without skill, all the passion in the world will leave you eager but floundering” (p. 173). My hope is that others will pick up where my research leaves off, and will delve into this and other areas with regard to creativity.

As an art educator, I will take a critical eye to my pedagogy with the knowledge that I must thoughtfully consider the skill of creativity as a foundation with which to build all artistic inquiry and learning for my students. Acknowledging and utilizing students’ individual and unique interests, knowledge, and skill sets, as well as helping them find their own tools to work through ambiguity in various playful ways. My students will be given opportunities to practice with familiar and unfamiliar materials, and a multitude of opportunities to scratch away at their own personal ideas. As well as encouraging them to artistically take risks and experiment. Furthermore, I will embolden them to move through the inevitable and self-declared, awkward reactions to their inquiries, and realize that missteps, blunders, and oversights are opportunities for growth. Additionally, I will remind them to take a diagnostic eye to their artistic investigation and approach, with the understanding that artistic detours sometimes can and should happen when artfully responding to their inquiries.

Implications and recommendations. This research has proven to me that creativity is a critical skill that needs to be thoughtfully considered and maintained by art educators in the art studio classroom. It should not be taken for granted as a magically expected outcome of an art education. It should be consistently taught and learned through all the various artistic activities and explorations in an art studio classroom. We should be nurturing and fostering students’ innate curiosity through current, routine and extraordinary wonderments they encounter daily
and encourage them to be ritualistically inquisitive as well as responsive to their wonderings.

What is more, artful play, such as risk-taking, experimentation, and spontaneity should be used as a tool for creativity and as an answer to ambiguity in the art room, but it must have context and purpose with which to help it thrive in learning. Art educators should make thoughtful choices for creativity in their programs to benefit from learning and growing through the familiar as well as the unfamiliar, the known and the unknown.

**Conclusion.** It is human nature to be curious, to seek out answers to the unknown. In her Nobel Prize acceptance speech, winning poet Wislawa Szymborska (1996) spoke about the phrase *I don’t know*:

It’s small, but flies on mighty wings. It expands our lives to include the spaces within us as well as those outer expanses in which our tiny Earth hangs suspended. If Isaac Newton had never said to himself “I don’t know”, the apples in his little orchard might have dropped to the ground like hailstones and at best he would have stooped to pick them up and gobble them with gusto (para 14).

I maintain that we, as art educators, should value this little phrase as a source for creative thought. As well, we should value the process of experimentation and risk taking, questioning and discovery, exploration and playful doing. For it’s in these acts that cognitive development thrives, reasoning and problem solving are promoted, and effective learners are made (Pitri, 2001).
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Author Biography

Shanna Tellez has been an industry professional artist and art director in the video game industry for over 15 years. She has been a part of many teams, creating over 75 games for various platforms, including PC’s, digital handhelds, DVDs, and various game stations. Her focus over the years has been children’s educational and edutainment products, and has done work for such notables as the Walt Disney Company and Warner Bros. She has spent hours upon hours in creative meetings, surrounded by walls of Post-it notes and tables covered in sketchpads. She has been a member of the Academy of Interactive Arts and Sciences, and is a current member of the National Art Education Association (NAEA). She also spent time early in her professional career teaching the fundamentals of art to children and adults in after-school programs as well as studio settings.

Shanna graduated with Honors from Art Center College of Design in Pasadena, CA, with a Bachelor of Fine Arts, in Illustration. She was a 2015-16 Activate Arts Education Fellow through Arts for LA, a program dedicated to arts advocacy and leadership. Because of learning about the lack of arts education in her local school district, she felt charged to create an art program dedicated to curating ideas and materials for young students to play with, explore, and experiment with during their lunchtime recess.