The Playful Art Museum: Employing Creativity as a Tool for Visitor Engagement

THESIS

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By

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Abstract

Using Simon Sinek’s ‘Golden Circles’ framework, this study begins by identifying what a hub for creative engagement is—a space that provides opportunities for visitors to foster creativity through participatory engagement. This study then explores how large regional art museums implement hubs for creative engagement. Using the Wonderkamers in the Gemeentemuseum in the Netherlands and the Center for Creativity in the Columbus Museum of Art in the United States as case studies, this study relies on a mixed-methods approach of synthesizing publicly available sources, curator interviews, and participant observations to understand how these spaces impact visitor creativity and visitor engagement. Participant observations reveal that visitors of all ages are attracted to hubs for creative engagement, that visitors are more likely to choose participatory over passive engagement when given the option, and—per Stuart Brown’s (2010) typology of play—that social, creative, and object play occur most frequently when they participate. By comparing these findings to the curators’ intentions for these spaces, this study also reveals how effectively these hubs for creative engagement meet their intended goals. Finally, this study finds that creativity and innovation are understood in largely the same way in both the United States and the Netherlands, making hubs for creative engagement an asset for art museums in more than one region of the world. Consequently, this study provides a framework for how to implement a hub for creative engagement that can be utilized by any applicable art museum.
Dedication

This thesis is dedicated to Oran Kennedy for his unwavering love and support, even from an ocean away. Thank you for always encouraging me to persevere through the many of obstacles of school and of life. I can’t wait to begin our adventure together.
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Vita

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Conditions

Problem + Goal

Activities + Outcomes

Impact

Chapter 7: Conclusion

Answering the Primary Research Question

Answering the Secondary Research Questions

Does nationality influence the understanding of creativity? What about related ideas such as innovation and play?

What age groups of visitors are using hubs for creative engagement?

How do visitors engage with hubs for creative engagement?

What is a possible international framework for hubs for creative engagement?

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Chapter 1: Introduction

My love for the arts has always been an active one. With an opera and performance background, I associate artistic experiences with physically immersing myself in in a piece. Even as an audience member, I crave the collective effervescence of a live performance: that amplified, excited reaction made possible when a group of people experience something emotional together. By comparison, the stoic world of visual arts was distinctly foreign to me. As a child, I was loud and rambunctious and the traditional art museum experience felt too subdued for my boisterous disposition. It was a genuine struggle for me to quietly take in a piece of art. In comparison, I had many fond memories of visiting an interactive space like Columbus’s Center of Science and Industry (COSI). Whether it was the exhilaration of unicycling over a crowd of people or experiencing the intensity of a rocket’s liftoff to space, each visit to the museum felt like an adventure.

By the time I entered college I was finally able to articulate why my instinctual reaction to art museums was distinctly underwhelming. I simply do not respond well to the passive visitor experience. However, when a good friend took me to the Columbus Museum of Art (CMA) during my Fall Break in 2011, I had the eye-opening realization that not all art museums are passive or stuffy. A large regional art museum in the downtown of Columbus, Ohio, the CMA was historically known for its modest collection of European and American modern works, and a meaningful collection of photography.
from the Photo League. But in early 2011, the CMA took a bold step and converted their basement into a permanent gathering space of participatory exhibitions and hands-on activities, collectively named the Center for Creativity. I can still remember participating in a printmaking activity in the style of Columbus-Artist, Elijah Piece, during that visit five years ago. It is one of my first memories of really connecting with art, and I left that visit with a deep respect for the CMA and a new understanding that art museums had just as much capability to create a participatory experience for its visitors as a science or history museum.

However, it was not until the summer of 2015 that the CMA re-entered my life. Having accepted a spot in The Ohio State University’s Arts Policy and Administration master’s program, I wanted to find a fulfilling internship to complement my studies. Working with CAPA or ProMusica might have made more sense with my experience as a house manager for the Ohio Light Opera (OLO), but I could not help but be drawn to the CMA. Even though I connected with patrons every day as a part of the frontline staff at OLO, I felt like I had so much more to learn about the potential of arts organizations to engage with its visitors. With my positive past experience, its well-respected position in the community, and a $30 million expansion set to open in the Fall of 2016, I knew CMA had a lot of potential.

Consequently, from September of 2015 to August of 2016, I interned with the Office of Development at the CMA. As their intern, I had the privilege of not only working with the people from my own department, but also members of visitor experience, learning, marketing, curatorial, and the executive leadership team. Although their roles were very different, I found that no matter with whom I collaborated, I
encountered a relentless and infectious passion for the work that they do. While surely part of that enthusiasm is linked to general enjoyment of their daily tasks, I believe that most of the passion drives the staff at CMA is tied to their strong buy-in of the organization’s mission.

Under the leadership of its current executive director, Nannette Maciejunes, the CMA has adopted and implemented the mission to “create great experiences with great art for everyone” (“About,” 2016). The journey toward this adoption first began when the learning department repositioned itself around the philosophy of creativity. Rather than limiting the museum visitor’s educational experience to one form of learning—fact-filled tours and informative labels—the learning departments creates opportunities that encourage imagination and the generation of original ideas. During my internship, I quickly came to realize that the Center for Creativity is CMA’s very literal show of commitment to its values. By reformulating its mission to favor the visitor experience over the preservation of art, the entire museum staff had also adopted creativity as an institutional value (Mostov, 2014). This hub for creativity was the institution’s way of communicating this change in values to public and engage visitors in their message. This risk-taking step to favor immersive and play-filled experiences has not only endeared the museum to its community and its stakeholders, but also to critics. In fact, in 2013, the Museum was awarded the National Medal, the Nation’s highest honor for museums, from the Institute of Library and Museum Service.

As a clear leader in the field of the visitor-centered museum experience and in their commitment to creativity, I knew the CMA would provide me ammunition for any number thesis topics. My epiphany came in March of 2016 during a vacation in The
Netherlands. On a day trip to The Hague, I decided to visit the Gemeentemuseum in order to see an exhibition they had installed featuring Gustav Klimt. While, I certainly knew the Dutch museum experience was not drastically different from that in the United States, what I was not expecting was to be so viscerally reminded of home. After spending a sufficient time taking in the beauty of Klimt’s work, I wandered to the ground floor of the Gemeentemuseum and found myself immersed in a space filled with wild colors, the buzz of technology, and sounds of children laughing and playing. Although the Gemeentemuseum and the Columbus Museum of Art are continents apart, they have startlingly similar creative epicenters. Much like when the CMA established its Center of Creativity, in 2013 the Gemeentemuseum established its award-winning permanent installation called the Wonderkamers as a means to answer its “ever-increasing inclination to involve the public by means of innovative displays” (Cantini, 2015, p. 39). With two art museum programs built upon innovation, engagement, and creativity as the central tenets of their formulation, I knew I had a thesis topic at hand. Ultimately, through this study I aim to establish how these large regional Dutch and American art museums utilize creativity to engage their visitors and what these art museums can learn from one another in their visitor-centered creative experiences.

Finally, I want to acknowledge a couple of biases that influence my interest in pursuing an international comparison of art museums rather than focusing on a single nationality. First, my thesis as an undergraduate Religious Studies and Sociology major was also a cross-examination of two western cultures. Its purpose was to critically interrogate the phenomenon of satirized religion found in both British and American cultures within the works of Monty Python and South Park. By choosing two nations that
shared significant similarities, I was able to identify the subtle yet important differences in how satire is conceived and received in each western culture. Consequently, I hope that by choosing art museums in nations that are also comparable, I will be able to flesh out any distinctions in how creativity is conceived. Additionally, I have a personal stake in this research: I will be moving to the Netherlands in the summer of 2017 and consequently there is a self-serving element to my choices. As an individual with future aspirations in development for an arts organization, I look forward to using this academic research as a means of becoming a better fundraiser and leader in my creative community when I enter the workforce.

Problem Statement

The role of museums as a means of intercultural understanding cannot be overemphasized. Museums—art-based or otherwise—stand as major attractions in our globalized world where millions of people travel for the discovery of other cultures. Furthermore, they offer valuable resources to scholars of a variety of disciplines to study our world’s intricate past. However, my review of the literature has revealed a distinct lack of research about the intercultural relationships of museums at the institutional level. While museums offer a plethora of artifacts within their walls for scholarly examination, few scholars have considered the museums themselves as a means of comparing and contrasting two different cultures (Aronsson & Andreas, 2008; UNESCO, 2009). Consequently, one of the purposes of this thesis is to inductively analyze whether nationality plays a role in how museum leadership define creativity.

For example, the United Nation’s Educational, Scientific, and Cultural Organization, or UNESCO, explains on its website that the modern museum is a socially-
engaged institution and “intrinsically linked to creativity and innovation” (UNESCO, 2016, para. 1). No matter where a museum is located, UNESCO (2016) insinuates that there is an international expectation that museums should not only preserve and conserve their collections, but also exhibit them in an innovative and creative way. While UNESCO argues that creativity is necessary to the sustainability and development of the museum, it fails to consider whether innovation and creativity are constructed the same way, given a museum’s cultural context. By using two international models of how museums implement creativity—The Center for Creativity (CFC) in the CMA and the Wonderkamers in the Gemeentemuseum—I will be able to illuminate a fresh perspective about what creativity means to each museum and the role that creativity plays in its relationship to its constituents.

In addition to personal interest, the choice of these two museums is strategic. Although there is academic literature about creativity in Dutch art museums and American art museums (Aarsman, 2011; Simon, 2010) there is no literature that specifically compares museums from these two countries, let alone these specific institutions. Furthermore, the CMA and the Gemeentemuseum are both share the following characteristics:

- They are both classified as large art museums (Columbus Museum of Art, 2015; Gemeentemuseum, 2015).¹
- They are both located in cities of comparable size (City-Data, 2016; “The Hague,” 2016).

¹ The Institute of Museum and Library Services (2011) defines a large art museum as a museum with an operating budget greater than $2,899,092 (p.I-6).
• Their visitor audiences are both primarily local and regional in nature (Columbus Museum of Art, 2015; Gemeentemuseum, 2015).

• They both state that creativity is an institutional value (Columbus Museum of Art, 2015; Gemeentemuseum, 2015).

Their similarities as institutions will make it easier to highlight any differences between how they define creativity and implement creative engagement through their respective participatory galleries. Finally, I hope that through my analysis I will be able to offer salient advice about what these institutions can learn from one another as institutions branded by creativity.

Research Questions

Since I began this study, the ultimate scholarly aims of the research study include: to investigate how the Gemeentemuseum uses the Wonderkamers and the CMA uses the CFC to promote creativity to their visitors, to observe how visitors actually participate during their visits, and to determine the similarities and differences between the intended experience and the actual visitor experience. I will then use this information to analyze the effectiveness of these participatory experiences that promote creativity to inductively determine if nationality plays a role in the production of these programs. It is important to note that over the course of this study, the primary question has changed. The original question was: “what is distinctively Dutch and American about promoting creativity in art museums?” Yet, after collecting the necessary data to answer these scholarly aims, I realized that trying to measure how much nationality affects the valuing of creativity was much too great of an endeavor for this study. I was also unsure of what audience would find the answer to this question relevant.
After searching for a way to explain my existing data, I decided to focus on the process of implementing participatory galleries from an arts management perspective. Thus, many of the implications for this study are highly pragmatic and will be addressed specifically to museum leadership. In order to identify my question and organize my data into findings, I have adopted a marketing framework invented by Simon Sinek. Although Sinek’s “Golden Circle Theory” was initially crafted with inspirational leadership and business practices in mind, its principles are widely applicable to museums and other non-profit organizations. Due to the significant focus on visitor engagement in this study,
I decided that this model is particularly relevant because it identifies the emotional core of what makes employees and customers/visitors buy into a company/organization (Sinek, 2011).

Per Sinek, the “What” refers to a company’s product. In this study, the product is the museum’s participatory gallery. I have decided to call this kind of gallery a *hub for creative engagement* and it will hereby be defined as a space that provides opportunities for visitors to foster creativity through participatory engagement. The “How” describes the method of how something is produced or executed. This middle circle reflects the primary research question I have chosen to answer with this study: *How do art museums with primarily regional audiences implement hubs for creative engagement?* As I synthesize my findings from studying the Gemeentemuseum and the CMA, I will ascertain the conditions, the problem and the goal that inspired museum leadership to formulate a hub for creative engagement. I will then identify any consistent activities and outcomes that art museums may rely upon to operate their hubs for creative engagement. Other sub-questions for this study include:

- Does nationality influence the understanding of creativity? What about related ideas such as innovation and play?
- What age groups of visitors are using hubs for creative engagement?
- How do visitors engage with hubs for creative engagement?
- What is a possible international framework for hubs for creative engagement?
- How do my findings relate to the relevant literature regarding interactive and visitor-centered museum experiences?
Finally, the innermost circle, of Sinek’s model is “Why,” which refers to the philosophy and vision that characterizes a company. This circle is considered by Sinek (2011) to be the most difficult for employees and visitors to articulate. Although scrutinizing how hubs for creative engagement are implemented may illuminate why museum leadership formulated them in the first place, it is not the focus of this study. Instead, an investigation of the motivation of the central circle will be relegated to future research.

**Significance of Study**

In the short term, my study will provide practical insight into both CMA’s CFC and particularly the Gemeentemuseum’s Wonderkamers program. During the last three years, CMA staff members or consultants contracted by the institution have conducted four internal studies in relation to its CFC (Ancelet and Luke, 2015; Foley and Trinkley, 2014; Lehe, 2016; Mostov, 2014). These studies will provide a baseline of information about the CFC and what the CMA itself considers valuable for scholars and the public to understand about the program. Meanwhile, the Gemeentemuseum has no publicly-accessible study that explores its Wonderkamers program. Furthermore, only a few outside scholars have taken serious note of the work that these specific museums have accomplished in recent years in regard to their creative, experiential programming (Cantini, 2015; Coldrion, 2015; Samis & Michaelson, 2016). Whether professionally affiliated with one of these institutions or not, no scholar has specifically published an outcome evaluation about whether this actual visitor experience matches the intended original goals of the programs. If my research provides evidence that these goals and outcomes do not line up, then my study could potentially impact the methods of delivery for the programs.
More importantly, no scholar has yet made a direct comparison between the CMA and Gemeentemuseum. My hope is that if my study uncovers any differences in program impact between the two types of programs, then the CMA and Gemeentemuseum will not only gain a deeper understanding of how their programs work, but will also be able to learn strategies from one another. Typically, case studies regarding the visitor experience of art museum are singular in nature (Foulds, 2013; Snoyl, 2012; Steinmann, 2013). Perhaps this singularity is due to the fact that case studies can be a cost-effective way to discern whether a potential explanation (e.g. participatory experiences have a longer lasting impact on museum visitors than passive experiences) is worthy of further investigation. There are instances in both The Netherlands and the United States in which much larger art museums partner together to conduct a costlier longitudinal study (Munley, 2013; Schep, 2014). For example, the Whitney Museum of American Art, the Walker Art Center, the Contemporary Arts Museum Houston, and the Museum of Contemporary Art, Los Angeles, partnered together for five years in order to “better understand and document the long term and continuing impacts of youth engagement and empowerment in museums” (Munley, 2013, p. 5). However, there are no documented studies in which Dutch and American art museums partnered together or were cross-compared in an academic study.

Consequently, this study will contribute to a burgeoning field of cross-cultural studies of art museums. For example, Kirchberg and Trondle (2012) reviewed a collection of empirically oriented studies from the United States and Europe concerning visitor experiences in museum exhibitions in order to pinpoint similarities and differences among them. By comparing theoretical and methodical issues, as well as important
results, they were able to outline several analytical building blocks that compose a complex framework of visitor expectations, experiences, and outcomes. Although the scholarly material relating specifically to cross-cultural comparison art museums is still limited, I posit that this field will grow due to a larger global interest in the creative industries (Comunian, 2010; Fleming, n.d.; James, Martin, and Sunley, 2006; Oxford Economics, n.d.; UNESCO, 2013).

Finally, there is a gap in the literature where no one has both philosophically and pragmatically examined creativity as a societal value in the context of art museums. While there have been studies that more broadly consider how creativity differs between different cultures (Badibanga, 2013; Hondzel & Gulliksen, 2015), no one has specifically used art museums as a means of insight into these differences. My research certainly cannot fully answer that vast of a question, but I hope to provide some insight by unpacking in my literature review as to what historical context may have led to creativity to be a valuable form of cultural capital in the Netherlands and The United States. I will then unpack how the curators of each hub for creative engagement presently understand creativity, and explore how visitors in each museum actually utilized activities that were intended to foster creativity. At the very least, I hope that my research will provide an opportunity for American and Dutch readers alike to learn more about each other’s culture and for museum leaders to learn a wider participatory exhibition techniques through this dialogue.
Chapter 2: Literature Review

My literature review consists of four large sections with several subsections. The first section is the definition of terms closely related to this study: national culture, innovation, and creativity. I consider how each term is defined in the context of Dutch culture and American culture, and then craft a working definition for each to guide this study. In the second section, I discuss the social significance of art museums in the context of each culture. In particular, I investigate the development of museum education in the Netherlands and the United States, the funding trends for these institutions both historically and in our present day, and the government’s relationship with art museums in each respective nation. Establishing that art museums do have inherent significance in the Netherlands and the United States allows me to make the argument that their educational programming is reflective of its culture’s values. Third, I review the relevant theories regarding play and the museum visitor experience. Finally, I discuss in detail some specific studies that evaluate museum exhibitions that are interactive or visitor-centered in nature, including the exhibitions that are at the center of my thesis. This section allows me to make the argument that my thesis topic is worth exploring, and helps me to address the void in the literature that my study will help to fill.

Part 1: Defining Terms

The scope of this study is necessarily daunting. Thus, it is helpful when immersing oneself in a new subject of study to define, as clearly as possible, what the
boundaries of that subject should be. Therefore, I have clarified what I mean when I use keywords in this expanding conversation by answering: how does one effectively define national culture, innovation, and creativity and where do they meet in everyday experience?

**What is national culture?** American marketing consultants and researchers, Herbig and Dunphy (1998) define culture as follows:

“Culture is the sum total of a way of life: it is the values, traits, or behaviors shared by the people within a region. The function of culture is to establish modes of conduct, standards of performance, and ways of dealing with interpersonal and environmental relations that will reduce uncertainty, increase predictability, and thereby promote survival and growth among the members if any society” (p.13).

This definition hints at the fact that culture is not stable but evolves to meet the needs of society.

Dutch social psychologist Geert Hofstede (1991), however, presents a more definite and less flexible conception of culture when he defines it as “the collective programming of the mind, which distinguishes the members of one human group from another” (p.21). Hofstede acknowledges that intersectionality exists and people belong to different cultural groups at the same time, such as nation, gender, or organization. With regard to economic activities however, he considers the national scale to be of particular importance. According to Hofstede (2010), national culture is the set of collective beliefs and value that distinguishes people of one nationality from those of another. This view perceives national cultures as extremely stable. Hofstede (2001) claims “… this stability
can be explained from the reinforcement of culture patterns by the institutions that themselves are products of the dominant cultural value systems” (p.34). Even if cultures shift in the long run, “they shift in formation, so that the differences between them remain intact” (Hofstede, 2001, p. 255). For this study, I will adopt Hofstede’s definition of national culture. Not only has Hofstede applied his definition in an exploration of United States culture (itim International, 2016), but many other researchers have adopted his definition in more recent works (Brewer and Venaik, 2012; Rinne et al. 2013, Siau, et al., 2007; Touburg, 2016).

**What is innovation?** For over a century, few countries have been able to match the United States in its capacity for innovation. As a nation, the United States continues to be responsible for a disproportionate share of “the world’s innovation in technology, science, business and creative industries” (Barlow, 2008, p. 1). Although there is a tendency to idolize American freedom and the American dream as the impetus for its innovative success, America’s sudden mid-20th-century ascent to technological fame can be credited to something much simpler: money. According to Fingleton (2013), throughout history rich nations have gotten to the future first, because “their companies can afford to equip their tinkerers and visionaries with the most advanced materials, instruments and knowledge” (para. 7). With a financial state much more fortunate than its peers after World War II, the United States government joined corporations in increasing funding for research and development, which led to decades filled with medical, technological, and astronomical advances.

Meanwhile, the Netherlands has maintained an even older reputation for innovation. According to Hisham (2015), “being a low-lying, flood-prone country, the Dutch
government has always been innovative in protecting the land against flooding and to secure freshwater supplies” (para. 2). As a result, windmills have been pumping water off the land since the 14th century and Dutch universities are producing some of the best engineers and managers in the world and exporting their expertise. More recently, the increased friendliness toward startup organizations also plays an important role in driving innovation in the country. In the recently published European Digital City Index (2015), Amsterdam is ranked second, after London, as the most digital-entrepreneurs-friendly city in Europe for its support ecosystems for startups. In fact, the Netherlands also introduced a startup visa law in 2015, as a recognition from the Dutch government of the value of startup entrepreneurs to the Dutch economy (Hisham, 2015).

So, how would one define an innovation culture? Building from Hofstede’s framework of national culture, Didero et al. (2008) explain that “innovation culture is to be understood in terms of attitudes towards innovation, technology, exchange of knowledge, entrepreneurial activities, business, uncertainty and related behavior and historical trajectories” (p.3). Later in their study, Differences in Innovation Culture Across Europe, Didero et al. (2008) break down Hofstede’s model and examine in detail five dimensions—power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation—as they relate to various European nations. Meanwhile, Herbig and Dunphy (1998) highlight the profound significance of culture for the adoption of innovative technologies when they hold that “existing cultural conditions determine whether, when, how and in what form a new innovation will be adopted. If the behavior, ideas and material apparatus which must accompany the use of innovation can affect improvements along lines already laid down in the culture, the possibilities of acceptance
are much greater” (p.14). Herbig and Dunphy (1998) cite several previous studies that attribute higher innovation capacities to societies, which are characterized by:

- Higher Individualism
- Willingness to take risks
- Readiness to Accept Change
- Long-Term Orientation
- Low on Power/Status/Hierarchy (Low Power Distance)
- Weak Uncertainty Avoidance
- Openness to New Information
- Frequent Travel
- Positive attitude Towards Science
- Value of Education to Society (High Education Levels)
- Early Adapters (innovators ARE early adopters not so much the other way round)
- Religion (So long as it emphasizes work ethic, like Christian Protestantism)

In short, because American and European cultures have historically been characterized by the ethic that “work is a moral virtue” and that idleness is sin, it is unsurprising that both the Netherlands and the United States demonstrate many of these characteristics for innovative capacity (Herbig & Dunphy, 1998, p.18). Consequently, by exhibiting many of these innovative characteristics, I argue that both the Netherlands and the United States are innovative cultures and therefore value innovation.

Finally, how will innovation be defined for this study? According to Ezell and Marxgutt (2015) “Innovation is inherently and inextricably linked to change – that is, to the disruption of the status quo and the existing method of doing things (p. 158). In a definition that seems quite similar to creativity, Lyons (2007) explains that innovation is “fresh thinking that creates value.” Litchberg et al. (2008) expands upon this idea and argue that innovation is not a skill or an ability, but an outcome of business and entrepreneurial activity. Under the premise that creativity is both a skill and a process, this study will expand upon Litchberg et al.’s understanding that innovation is an
outcome. Therefore, I will define *innovation* as the implementation of a new or significantly improved idea that creates value for business, government or society. In order words, innovation is not about formulating new ideas, but the strategy by which these ideas are enacted.

**What is creativity?** According to American psychologist James Kaufman (2013), creativity is “considered something that is both new and appropriate to the task.” It is a concept that is embraced by the arts, but does not necessitate their inclusion in order to exist. Furthermore, Lichtenberg et al. (2008), in their study of creative readiness of the U.S. workforce, define creativity or creative ability as “a skill set that employees bring in which innovation is the end product” (p.4). Consequently, I find it interesting that the United States of America has historically harbored a squeamishness toward creativity. The United States has long upheld an American spirit of innovation in its culture, but only recently has creativity entered the forefront as an important cultural marker. While individual innovation, experimentation, and research have been essential ingredients in American society’s development, the resources and commitment to American creativity — in the arts, business, science, and other fields — has only recently starting to be embraced.

For example, coined by the National Science Foundation in 1996, STEM (science, technology, engineering, and mathematics) education is often championed by education policymakers as the cornerstone of American competitiveness (Woodruff, 2013). There is certainly no question that STEM skills are a vital part of America’s edge, but many educators would argue that STEM is missing a key set of creativity-related components that are equally critical to fostering a competitive and innovative workforce. These skills
are summarized under the letter “A” for Arts, which transforms the term STEM to STEAM. For instance, in 2008 the Conference Board and Americans for the Arts, in association with the American Association of School Administrators (AASA), conducted a survey of executives and school superintendents. The study, called Ready to Innovate, demonstrated that more and more companies are looking for skill sets in their new employees that are much more arts/creativity-related than science/math-related. In short, innovation cannot exist without creativity. Companies want workers who can brainstorm, problem-solve, collaborate creatively and contribute/communicate new ideas.

Consequently, in the United States, as in many other parts of the world, there is an explosion of initiatives in cultural and economic policy relating to the emergence of creative placemaking and the creative industries.

For instance, creativity clearly plays a role as a national cultural value in the Netherlands. According to the Dutch Ministry of Economic Affairs (2009), “culture and creativity are of immense importance for the Dutch economy” (p.3). In a report about boosting the economic utilization of culture and creativity in the Netherlands, the authors examine the abundance of creativity in their country and ultimately argue that creativity is an essential element in a forward-looking knowledge economy. When defining creativity, the authors consider creativity to also be linked to innovation as well as diversity (Ministry of Economic Affairs, 2009, p. 8). Using an economic lens, they explain that creativity plays a crucial role in the creative industries because it contributes to “the creation of significance or symbolic worth” for the goods and services they produce (Ministry of Economic Affairs, 2009, p. 12). While Kaufman focused more on the originality and utility of the idea when defining creativity, the Ministry of Economic Affairs...
Affair’s definition places more emphasis on creativity as a means of creating worth. Nonetheless, it is clear that in both the United States and The Netherlands that creativity is directly related to the generation of new ideas.

The Gemeentemuseum does not specifically explain how it defines creativity, but it does explain in its mission that it strives to be an “open, creative, and dynamic museum with strong roots in the community” (“Jaarverslag 2015,” 2015, p. 5). Meanwhile, in its explanation of institutional values, the CMA defines creativity as “the process of applying imagination and critical thinking in order to generate new ideas that have value” (Lehe, 2016, p. 1). Although the Consequently, it seems that the art museums, or at least the CMA and the Gemeentemuseum embrace creativity in their programming not because it is inherently related to art, but because it is a skill that their communities value. This theory is further supported by a study by George Land (1993) in which he reveals that creativity is both a skill that can be developed and a process that can be managed. I have decided to define creativity primarily as a process rather than a skill. My definition is as follows: creativity is a process that generates ideas that are both new and significant. However, I argue that the skill of creativity is the ability to effectively use the creative process. Thus, when a museum professes to ‘foster creativity,’ I argue that it is providing a space to participate in activities that necessitate the generation of new ideas and to learn and refine the creative skillsets that are utilized in this process. As visitors become more adept at generating new ideas, they are developing the skill of creativity.

**Part 2: Establishing the social significance of art museums**

In both the United States and the Netherlands, there is a shared belief among most museums that they are a resource that belongs to everyone in their community. In the
study, *More than Worth It: The Social Significance of Museums* (2010), researchers for the Netherlands Museum Association contend that museums are the custodians of public heritage, and are charged with both carefully preserving it and making it accessible to a wide audience. These researchers contend the museums ultimately provide five social values: collection value, connecting value, educational value, experience value and economic value (DSP Groep, 2010, p. 2). Its American composite, the American Alliance of Museums (2016), also makes an argument that “museums are educational, trusted, beloved and economic assets to communities everywhere” (para. 1). Nevertheless, while the argument provided by museum associations are compelling, an understanding of the actual significance of the museum sector to the other facets of society is essential to this study. As a result, this part of the literature review will focus on investigating the relationship of art museums with education, government, and funders in general.

**What is the history of art museum education?** The meaning of education in any learning-focused institution is socially constructed and conditioned by historical, social, and cultural phenomena (Kim, 2001). The United States was long recognized as the leader in developing the educational role of museums (Hein, 2006). For example, children’s museums began in the US with the establishment of the Brooklyn Children’s Museum in 1899, and in the early years of the twentieth century many museums in the United States developed strong education departments in collaboration with local school districts (Hein, 2006, p. 341). The educational value of exhibitions in American art museums have undergone a variety of shifts due to outside social factors. For example, during the Great Depression, President Franklin D. Roosevelt articulated a key aspect of his New Deal Relief program to deal with unemployment would focus on making the
government a patron of the arts (Kim, 2001, p. 21). An aspect of this patronage was providing funding to art museums to assist them in developing an education department whose function would be “to supervise various types of instructional services such as are now commonly expected of a public art museum” (Kim, 2001, p. 22). For example, the Museum of Modern Art developed educational programs for patrons both young and old that promoted an understanding of the value of creative art experience in everyday life (Kim, 2001). However, in the 1950s nationalist fervor resulting from the Cold War with Russia led to national educational changes in schools in which science, mathematics, and problem-solving became the center of curriculums (Kim, 2001). Creative art education was challenged and in its place returned a passive, historical approach to museum education.

Today this form of museum education still exists and is often labeled traditional. However, many museums in the United States are supplementing or even totally replacing this approach with a more participatory design. According to Simon (2010), “the chief difference between traditional and participatory design techniques is the way that information flows between institutions and users” (para. 4). In traditional exhibitions, the museum delivers content for visitors to consume with a central goal of creating consistent and high-quality content so that every visitor obtains a similarly good experience. Conversely, Simon (2010) explains that participatory design lends itself to multi-directional content experiences. The exhibitions function like platforms that connects its diversity of users. While the museum cannot promise a consistent experience like the traditional model, it instead offers a wider diversity of opportunities for visitors to co-produce experiences.
Meanwhile, there is little available information about the history of Dutch museum education. In her literature review, Cantini (2015) acknowledges some specific aspects of museum history in Europe. For example, the viewing and collecting of art used to be carried out by the same restricted group of wealthy people, but from the late eighteenth century a division between collectors and masses took place (Cantini, 2015). The establishment of the public museum was a reflection of the spirit of the enlightenment and the excitement about equal possibilities of experiencing knowledge for everybody. However, in a similar dilemma to the American traditional museum model, a byproduct of creating an experience that is equal to all is that the museum becomes a passive institution in its delivery of knowledge to visitors. Cantini then frames her literature review around why the concept of exhibition is expanding beyond its usual boundaries in order to embrace opportunities for audience engagement and participation. Consequently, it is clear that the transition from traditional to participatory design in museums is not solely an American phenomenon.

**What is the government’s relationship with art museums?** Dutch museums have traditionally maintained close ties with the government. Although the buildings and the collections remain the property of the state, the museums enjoy a high degree of independence as far as their functioning and policy are concerned (DSP Groep, 2011). In the last three decades, the Dutch government has sought to downsize and has implemented austerity measures in a number of areas. The pinnacle of this change was the passing of the Privatization of the National Museum Act by the parliament in 1993 (Bína, 2008). All national museums are now accommodated in foundations, such as the public cultural Fund Mondriaan Foundation. According to its website, the Mondriaan
Fund has an annual budget of around 26 million euro and the majority of this budget comes from the Ministry of Education, Culture and Science (“About the Mondrian Fund,” 2016).

In essence, the foundation is the middleman between the museums themselves and the government. According to the researchers for the Netherlands Museum Association, this change in policy can be attributed to the following factors:

- An unfavorable economic climate
- An ageing population
- The attendant increase in costs for healthcare and pensions (DSP Groep, 2011, p.13).

As the funder of foundations, rather than the art institutions themselves, the Dutch national government has gradually assumed the role of a moderator of cultural activities (van Hamserveld, 2015). Meanwhile, the local government may still play a more direct role in the funding and management of municipal museums by providing grants, or lending art from a municipal collection (“Governance and Policy,” 2017).

Government support for the art museums and other forms of art in the United States is often compared unfavorably with that provided by European countries. In contrast, governments in the United States, before the 1960s, provided little direct support for the arts, relying instead on favorable treatment under the property and income taxes (Clotfelter, 1991). Although the federal government supported the arts during the Great Depression through a variety of New Deal programming, the turning point in federal policy toward the arts came in 1965 with the passage of the law setting up the National Foundation on the Arts and Humanities. What emerged were two separate funding agencies, the
National Endowment for the Arts (NEA) and the National Endowment for the Humanities (NEH), authorized to make grants available to individuals and institutions. According to its website, the NEA is “an independent federal agency that funds, promotes, and strengthens the creative capacity of our communities by providing all Americans with diverse opportunities for arts participation” (art.gov). The NEA extends its work through partnerships with state arts agencies, local leaders, other federal agencies, and the philanthropic sector. Though preservation and display of works of humanistic scholarship have always been part of its mandate, the NEH was created primarily to support advanced research in the humanities-related disciplines (Berman, 1984, p. 6). In that sense, the NEH is more closely akin to the National Science Foundation than to the NEA. However, the leaders of the NEH became quickly aware that scholarship in the central disciplines of the humanities is a cause without enormous popular appeal and decided to also offer more sweeping rationales for the NEH’s existence and undertake highly visible and politically popular initiatives, like bicentennial commemorations and education reform (Berman, 1984).

Both of the endowments were set up so that their scope and power would be limited. Congress was not interested in sustaining the operating costs of arts institutions (Clotfelter, 1991, p. 238). Grants were to be made only for specific projects, not general institutional support, and all grants would have to be matched by private funds, with no more than half of the support for any project coming from the federal grants. In the decades since their formations, the NEA and the NEH have gone through waves of favor and disfavor with congress in regard to the amount of funding they
receive. Nevertheless, this arm’s length approach to the government’s relationship to art museums and other cultural entities remains even today.

**How are art museums funded?** As of 2008, 27 of the 775 museums in the Netherlands were subsidized by the Ministry of Education, Culture and Science (Bína, 2008). The museums they subsided were often the major tourist destinations, such as the Van Gogh Museum and the Rijksmuseum. Starting in 2009, Dutch museums that were subsidized by the Ministry were leaving a 4-year funding system in favor of management contracts with the museums, stipulating the conditions for funding that will last 30 years (Bína, 2008). The government is also instituting additional grant opportunities for specific activities for which all museums in the country, not only museums subsidized by the Ministry can qualify. These grants often have a specific goal, such as increasing participation of target groups like young adults or ethnic minorities. The researchers for the Netherlands Museum Association also emphasize that it is important for museums to form new alliances in the market and with private individuals (DSP Groep, 2011).

In January 2013, the *New York Times* reported an abrupt shift in Dutch public funding for the arts (Siegal). With a new conservative government in power, led by Prime Minister Rutte, a dramatic series of cuts had been enacted with traumatic results. According to Hagood (2016), Dutch national funding for culture dropped by 22%, while regional and municipal governments cut their budgets between 10 and 20%, leading to an overall loss of 632 million EUR to the sector as a whole. The public subsidy system had not encouraged arts groups to build up reserves because grants needed to be spent in full each year and endowment funds were virtually unknown in the Netherlands. Consequently, organizations were left without reserves to navigate the transition.
In order to soften the impact of its funding cuts, the Dutch government has implemented several measures that encourage private sector actors to support arts organizations. For instance, from 2012 through 2016, individuals or households who make gifts to cultural entities may deduct them from their personal taxable income at a boosted rate of 125% and up to 1,000 Euro (Hagood, 2016). Corporations may claim a tax deduction for gifts to culture as a business expense and also have the option to deduct charitable donations from company profit, up to 50% and up to 100,000 Euro. According to Hagood (2016), to promote use of these incentives, “the Dutch Ministry deployed a promotional campaign, ‘Cultuur, Da Geef Je Om,’ which loosely translated means, ‘culture, worth caring about,’ though the use of the verb ‘geven,’ to give, also carries a clear double meaning” (p.6).

Conversely, philanthropy in the United States has much longer legacy of being the leading means of funding arts and culture organizations. Using data from Americans for the Arts, Hagood (2016) explains that government support at 9% of arts organizations’ total income is almost negligible. Typically, 60% is earned income from ticket sales, the museum’s shop and café, parking revenue, etc. and individual and institutional donors give the remaining 40%. In fact, individual giving at 24% is the largest source of this contributed income. In the U.S., as in northern Europe, arts funding is distributed at three levels: national or federal level, the regional or state level, and the local or municipal level. However, according to the NEA, United States funding amounts to $1.23 billion or $3.89 per person, with just $146 million made available at the federal level, mostly through the National Endowment for the Arts (Woronkowicz et al., 2012).
In stark contrast, Woronkowicz et al. illustrates that government funding for the arts in France totals, 15.6 billion EUR, equivalent to 236 EUR per capita.

Examining beyond that of social status and belonging, I want to further explore how money carries layers of symbolic and emotional value in the Dutch and American cultural funding systems. For example, the U.S. has ranked in first or second each year in the World Giving Index (Charities Aid Foundation, 2015). For its 2015 report, the Charities Aid Foundation examined three sets of data from 145 countries participating in Gallup’s World View World Poll: the percentage of people who donated to a charity, helped a stranger, and volunteered in the last month. With a second-place finish, the U.S.’s results were 63%, 76%, and 44% respectively. However, in seventh-place, The Netherlands had 73%, 59%, and 36%, which means a high percentage of Dutch citizens are actually donating money to charity (Charities Aid Foundation, 2015). In the hands of a philanthropic donor, at all levels of support, funds become a vehicle for expressing allegiance to and even endorsement of a museum’s mission and programs.

Part 3: Play and the Museum Visitor Experience

What is play? Creating a definition for play is a challenging endeavor because scholars have previously defined play as a process (British Toy and Hobby Association, 2011; Brown, 2010), a behavior (Pellegrini, Dupuisa, and Smith, 2007; White, 2012), and an activity (Grenier, 2010; Huizinga, 1950). For example, Dutch anthropologist, John Huizinga (1950) departed from previously deterministic understandings of play and defined it as an activity that exists only for its own sake. Per Gwen Gordon (2009), Huizinga argues that “activity is play if it is fully absorbing, includes elements of uncertainty, involves a sense of illusion or exaggeration, but most importantly, true play
has to exist outside of ordinary life” (p.2). However, this perspective is not uniquely Dutch and is also championed by Robin Grenier (2010) of University of Connecticut, who defines play as “a voluntary activity involving active cognitive and/or physical engagement that is pleasurable for its own sake and often includes some form of suspension of disbelief or make-believe quality” (p. 78).

Meanwhile, Pellegrini, Dupuisa, and Smith (2007) contend that play is ostensibly a “non-serious” alternative of functional behavior. Playful behaviors are similar to serious behaviors, but typically the participants are focused on the behaviors themselves rather than the function of those behaviors. Rachel White (2012) further argues in the report, *The Power of Play*, that play must be intrinsically motivating. She suggests that “children engage in play simply for the satisfaction the behavior itself brings. It has no extrinsically motivated function or goal” (White, 2012, p.2).

However, play as a process is a synthesis of both play as an activity and play as a behavior to achieve play as process. Stuart Brown, Director of the National Institute for Play. Brown’s (2010) argues that play should be considered a voluntary process that provides an opportunity to comfortably discover and try behaviors or activities with no pressure to be correct (Brown, 2010). Brown (2010) believes that play is something that is spontaneously “done for its own sake” (p. 17), and also primarily fun because “the state of play is one in which attention is focused exclusively on the pleasurable play activity” (p. 102). However, Brown perceives that play should entail an element of self-improvement by arguing that it should “lead one to the next stage of mastery” (White, 2012, p. 2).
With these characteristics in mind, Brown (2010) constructed a typology of play, dividing play into six different categories: body/movement, object, imaginative/pretend, social, storytelling/narrative, and creative. This typology is used for data collection purposes in this study and will be further explained in the methods section of this study. Consequently, I have chosen to situate my definition closely to Brown’s (2010) understanding of play as process. I define play as an intrinsically-motivated process that produces pleasure and enjoyment through voluntary activities that have systematic relations to what is not play.

Many of the components to my definition align with Catherine Garvey’s (1990) collection of descriptive characteristics for play that she deems critical to its definition:

1. Play is pleasurable, enjoyable.
2. Play has no extrinsic goals.
3. Play is spontaneous and voluntary.
4. Play involves some active engagement on the part of the player.
5. Play has certain systematic relations to what is not play.

In the context of a museum, I believe that play is highly reliant on the first, fourth, and fifth characteristics, but somewhat negates the second and third characteristics. To attract visitors to actively engage, it is logical that all play encouraged by the museum is pleasurable in nature (Grenier, 2010; White, 2012). However, not all play in a museum setting is spontaneous. I argue that museums can implement open-ended activities that are totally reliant on the visitor’s voluntary intrinsic motivation, or institutionalized activities that are not spontaneous because “there are fairly rigorous guidelines” for play to occur (Garvey, 1990, p.7). Although all museum activities arguably have an
educational goal, highly-directed activities are devoted to reaching a particular end and offers an extrinsic motivation—either a reward or a negative consequence—in order to achieve that educational goal.

Finally, this fifth quality is extremely important for understanding the purpose of play in a museum setting. Play is not an isolated aberration of childhood, and its existence depends on contrast (Garvey, 1990). Play has been linked with “creativity, problem solving, language learning, the development of social roles, and a number of other cognitive and social phenomena” (Garvey, 1990, p.5). Museums are aware of these systematic relations between play and what is not play and are actively evaluating how play in their spaces develop their visitors and fosters any related skills (Cantini, 2015; Chick, Yarnal, &Purrington, 2012; Goldstein, 2012; Grenier, 2010; Kanhadilock & Watts, 2014; Proyer &Wagner, 2015; White, 2012; Whitebread, 2012; Yarnal & Qian, 2011). Historically, museum evaluations of play are just focused on child development (White, 2012; Whitebread, 2012). This trend is not unique. In fact, between 1998 and 2008, 3,000 psychological studies focused on play, but only 40 addressed play in adults (Van Leeuwen and Westwood, 2008).

There are a growing number of scholars who have taken note of this severe gap in the literature and are addressing the benefits of play in adults (Chick, Yarnal, &Purrington, 2012; Goldstein, 2012; Grenier, 2010; Kanhadilock & Watts, 2014; Proyer &Wagner, 2015; Yarnal & Qian, 2011). Conveniently, American museums are a particularly popular lens for examining intergenerational play (Foulds, 2013; Grenier, 2010; Kolb and Kolb, 2010). For example, Grenier (2010) explains that “the potential of play in museums is centered in its ability to promote situations where a person is not only motivated to earn,
but is propelled into the learning process, and finds the process as satisfying and
rewarding as the outcome” (p.78). Kolb and Kolb (2010) view play as the highest form of
learning, yet adults often do not engage in environments that foster opportunities for play.
Because museums have the potential to offer novel learning environments that allow
visitors to engage with art, science, and history, these sites are an excellent context for
exploring the potential of play to enhance adults’ creative thinking and generate
opportunities for new learning.

However, there is a notable cultural lag between European and American studies
of play in this regard. Most studies regarding adults and play in art museums are being
produced and published in the United States (Chick, Yarnal, &Purrington, 2012; Grenier,
2010; Robinson, 2016; Yarnal & Qian, 2011). Many of these studies are attached to an
interdisciplinary journal called The American Journal of Play. According to its website,
“the Journal aims to increase awareness and understanding of the role of play in learning
and human development and the ways in which play illuminates cultural history”
explains that researchers within the European policy arena increasingly recognize the
benefits and value of play for adults, as well as children. However, most of the research
concerned with play carried out by European experts is concerned with play in children
from birth to six years (Whitebread, 2012). Consequently, Whitebread’s research is
predominantly concerned with the impact of play on development and play in pre-school
and educational settings. Although there is an emerging field of study in Europe about the
importance of play for all age groups (Cantini, 2015; Goldstein, 2012; KanhadiLock &
Watts, 2014; Proyer &Wagner, 2015), it is not concretely established. Consequently, this
study will argue that play is more commonly acknowledged in European academia as a behavior of children and that this age-specific definition will affect how museums attract visitors to their play-filled exhibitions.

**What is a visitor-centered museum?** Although there is no singular way of defining the visitor-centered museum, it seems that most scholars pay attention to access and sustainability (Bradburne, 2001; Hood, 1991; Samis and Michaelson, 2016; Simon, 2010). As explained by Marilyn Hood (1991), if art museums want to maintain their visibility and visitorship, it is imperative that museum leadership think about the visitor experience. Often, this process involves creating comfortable surroundings where visitors can feel at ease both physically and psychologically (Hood, 1991). James Bradburne (2001) considers a visitor-centered museum to be one that makes every effort to be easy for visitors to experience or user-friendly. This study will largely rely on Samis and Michaelson’s (2016) definition for visitor-centeredness: “[an approach] that puts collections/ exhibitions and visitor experience on equal footing” (p.4). They argue that a visitor-centered museum should demonstrate a desire to “reach beyond their traditional core audiences to a much broader community” (Samis & Michaelson, 2016, p.4). Thus, visitor-centeredness operates as a philosophy that should be integrated into every aspect of the museum.

**How is play utilized by a visitor-centered museum?** Play is often posited by scholars as a tool for a constructivist approach to learning in the context of a museum. For example, Gwen Gordon with Sean Esbjörn-Hargens’ (2007) argue that “freedom is a hallmark of play” (p. 65). Meanwhile, George L. Hein (2002) believes that a museum’s focus should lies on storytelling based on the visitor’s own experience rather than on the
intention of a curator. In *Learning in the Museum*, Hein (1998) established six conditions for learning:

1. Control: Give visitors a sense of self-determination and control
2. Confidence: Give visitors a sense of competence
3. Curiosity: Find ways to surprise and intrigue visitors
4. Challenge: Help visitors perceive something to work towards
5. Communication: Encourage visitors to engage in meaningful social interaction
6. Play: Build in elements of sensory enjoyment and playfulness

Hein (2001) argues that it should already be assumed that learning occurs through play and “consider how to best organize that play so that it can lead to optimal learning” (p. 35). Finally, in “Setting the Stage for Interaction: Digital Craft and the Museum of the 21st Century,” Bradburne (2004) advocates an open dramaturgy of staging and exhibition design in museums that seeks to give the visitor the greatest possible freedom to explore his environment on his own. This model was largely based on learning environments whose exhibit pieces only reveal their contents and functions through the active involvement of the visitor.

This constructivist result of developing the creative processes through play is also reflected in Simon’s understanding of the participatory museum. She considered the participatory institution to be a place where visitors can create, share, and connect with other visitors (Simon, 2010). Both Simon (2010) and Hood (1983) believed that visitors have an expectation for active involvement when engaging in leisure time. Simon (2010) argued that active involvement can be cultivated through participatory principles and techniques that transform the museum into a platform that supports multi-directional
content experiences and connects different users together by turning everyone into content creators. By using participatory techniques, museums can attract more leisure-seeking visitors and do so in a way that furthers the mission and core values of the institution (Simon, 2010).

**What is the relationship between visitor motivation and visitor learning?** Visitors have a wide variety of interests, making it imperative that museums create multiple entry points when developing exhibits and programs tailored to suit audiences of various learning styles (Black, 2012). In fact, museums have begun using the term museum learning because it connotes active involvement of the learner instead of museum education, which reflects formal study and passive delivery of information (Black, 2012).

In *The Museum Experience Revisited*, John Falk and Lynn Dierking (2012) explain three interconnecting contexts that influence visitor-centered learning:

1. The personal context: a visitor’s own personal interests, thoughts, and motivations in relation to a specific museum visit or a specific museum interaction.

2. The sociocultural context: any influences from a visitor’s cultural background or any social interactions with other visitors or museum staff.

3. The physical context: relates to the feel of the museum to the visitor and includes the physical layout and the objects held inside.

By interweaving all three contexts, a picture of the visitor’s learning experience emerges: “Whatever the visitor does focus on is filtered through the personal context, mediated by the sociocultural context, and embedded within the physical context” (Falk & Dierking, 2012, p. 30).
In 1997, Scott Paris concluded that in the context of a museum, visitor motivation and learning are related. John H. Falk (2006) furthered this theory by arguing that people have a limited number of reasons for choosing to visit a museum. Motivation is a sociological construct derived from a visitor’s prior knowledge, prior experience with the setting, social relationships, social and cultural meaning the visitor gives to the museum, personal interests, and sense of identity (Falk, 2006). Moussouri (1997) placed these visitor motivations into six categories: education; entertainment; social event; life-cycle; place; and practical issues. Falk and Moussouri later worked together with Coulson (1998) and discovered that the visitor typically conveyed a combination of these motivations and that a visitor’s motivation directly related to their learning. For example, visitors who had education as their primary motivation learned differently than visitors who preferred entertainment (Falk, 2006). In both scenarios, the visitor learned.

Falk (2006) also posited that museum visitors usually ‘enact’ a museum ‘identity’ during their visit. For instance, while visiting a museum in a new city or country, the visitor may enact the ‘tourist’ identity, but at a museum in their home town, another identity might be utilized. Meanwhile, when an adult visitor goes to a museum with children, a ‘parent’ identity may be adopted. Regardless of the specific identity used, the identity defines the motivation for the museum visit, which then influences visitor learning during that visit (Falk, 2006). Furthermore, other researchers have also acknowledged the relationship between visitor motivations and visitor learning. Harre and Moghaddam (2003) suggested a “positioning theory” which connects visitor learning to specific motivations, and Packer and Ballantyne (2002) found that entry motivations were correlated with specific learning behaviors during the museum visit. Thus, one can
infer that people’s motivations for museum visits seem to directly influence their learning while in the museum (Falk, 2006).

**Part 4: Program Evaluations of Participatory Art Museums**

A key part of this study is establishing the similarities and differences in how the Gemeentemuseum and the Columbus Museum of Art (CMA) define creativity. Mostov (2014) and Foley (2014) of the CMA and Coldrion (2015) of The Ohio State University have published studies about the formation of the CFC and the introduction of creativity as an institutional value. Their work proves helpful for establishing an institutional history for the CMA. Furthermore, Mostov (2014) establishes that creativity was a transformative addition to the museum’s way of thinking about learning, which is what ultimately led to its adoption as an institutional value. Thus, employees at the CMA were encouraged to bring imagination and creativity in all of their museums practices and give permission to all visitors and to themselves to be playful and be innovators (Mostov, 2014). In short, rather than solely building on the creativity of others, CMA sought to accommodate, or change their current mental models around creativity and its related terms (Lang, 2008).

In 2015, Cantini examined how art museums in the Netherlands were not utilizing participatory programs to their full potential. In her examination, specifically of the Gemeentemuseum, Cantini provides a helpful institutional history and analyzes how the permanent exhibition of the Wonderkamers stresses the museum’s “ever-increasing inclination to involve the public by means of innovative displays” (2015, p. 39). Cantini (2015) concludes that millennial visitors often do not relate to traditional passive museum experiences. Yet, despite their interest in customized activities and participatory projects,
they are denied access to those activities because the activities are intended for younger visitors. By framing play as an activity targeted for children, these findings ultimately demonstrate that the Wonderkamers’s was crafted to assimilate, or fit into the community’s pre-existing frameworks of creativity and its related terms rather than encourage its visitors to accommodate these ideas.

**How have the case studies been previously evaluated?** The museums at the center of this study, the CMA and the Gemeentemuseum, have had their respective hubs for creative engagement—the Center for Creativity (CFC) and the Wonderkamers—evaluated to some degree. For example, in 2015 consultants Ancelet and Luke investigated whether visitors to the CFC’s Wonder Room engaged in play. To gather their data, Ancelet and Luke randomly chose 100 participants who were a part of 31 intergenerational groups that were already visiting the CMA (2015). After these participants gave their consent to participate, they entered the Wonder Room to play for sessions that lasted approximately 21 minutes. These sessions were recorded with GoPro cameras and later analyzed to create the standardized coding for the most common types of play (Ancelet & Luke 2015). CMA also conducted an in-house evaluation of the effectiveness of its Connector Series program, a visiting artist program that takes place the second Saturday of every month. Although it is not technically a part of the CFC, the Connector Series is a participatory program for visitors and a manifestation of the CMA’s shift toward being a more visitor-centered art museum that is focused on its responsiveness to its community. Interestingly, while both studies describe their respective programs in the CMA and report a variety of collected data, they offer no form of analysis or conclusions that should be drawn from the pools of data. Finally, the
studies by Foley (2014), Mostov (2014) and Coldrion (2015), while helpful in other aspects of the study, are written from the perspective of the CFC’s first formation. As a result, they offer little insight into its current effectiveness and functionality after existing for five years.

Meanwhile, the Gemeentemuseum has a highly-detailed multi-year plan for 2017-2020, including qualitative data about the Wonderkamers (Gemeentemuseum, 2016). Outside of this self-published data, Cantini’s (2015) study of participatory museum programs in the Netherlands, including the Gemeentemuseum, finds that these institutions often short themselves of millennial visitors, or visitors between the ages of 19 and 25 (2015). In her study, Cantini observed visitors to the Wonderkamers and found that visitors of a wide variety of age groups were attracted to the participatory arrangement and the high usage of technology (2015). However, visitors 19-35 often left frustrated when they were informed that the Wonderkamers were only advertised as appropriate to children and families. Finally, the website Museeum published an extensive interview with the executive director of the Gemeentemuseum regarding the creation of the Wonderkamers (Kravchuk, n.d.).

What are other evaluations of participatory art museum programs? Beth Ann Foulds (2013) also noticed a lack of programming in art museums that engaged both the adults and children in family groups. She has begun to fill this gap in the literature by analyzing the practices of an interactive, intergenerational gallery entitled MoMA Art Lab: People, located within the Museum of Modern Art (Foulds, 2013). Foulds found that adults were most engaged with stations focused on art-making, as well as those conducive to conversation (2013). My research study will complement Fould’s work by
addressing the lasting effects that program participation may have on the creativity of all visitors.

Furthermore, other studies have used similar design techniques to Foulds’ study in their evaluations of art museum programming. The Whitney Museum of American Art conducted a study of its teen program and its contribution to the personal development of its alumni (Munley, 2015). The importance of the Whitney’s study is that like my investigation of the CFC and the Wonderkamers, no baseline data for these programs exists because these programs are already underway. However, the Whitney’s researchers make a compelling argument that there does not have to be a control group of people who had not experienced the museum programs so long as the study design is highly attentive to the quantity and quality of the data (Munley, 2015).

Additionally, Steinmann (2013) investigated the importance of the “one-shot,” single-visit model for studies of art museums with a focus on school field trips. This single-visit field trip model can be problematic because often the novelty of the situation can distract students and it is difficult for museum educators to create a meaningful learning experience for a few short hours (Steinmann, 2013, p. 2). However, Steinmann (2013) pragmatically argues that although it would be ideal for all museums to have multi-visit programs in place, the reality is that a typical student will visit the museum one time during the school year. My research study will further Steinmann’s argument by considering if even one encounter with a participatory museum program will result in a lasting appreciation of creativity.
Chapter 3: Design of Study

My Worldview

Based on my training in Sociology, I am primarily an interpretivist as a researcher. Interpretive sociology, was largely developed through the work of German sociologist Max Weber. Weber sought to establish an alternative to positivist sociology that would focus more on understanding subjective experience, as opposed to a rigid adherence to facts and observation (Burger, 1977). In other words, because there can be several different valid viewpoints in a social context, sociological claims based on facts alone may not always be correct. Instead, this sociological perspective seeks to answer a question like, “How do people’s decisions influence the values and norms they hold true to their own culture?” By adopting this perspective, I am using this study to investigate how people think, and show how their interactions with society affect their knowledge.

This perspective will influence two key assumptions in my design of study. First, when considering the visitor’s experience at these museums, I am assuming that physical context affects a visitor’s learning. I believe that if people lack the ability to generate personal meaning or identify connections to the ideas iterated by a museum, then the museum as an institution lacks significant cultural value. Consequently, the collective decision-making behind the development of each museum’s brand identity is also made in response to the values and norms of a nationwide culture. As a result, I also assume that the museum as an entity interacts with society as it shapes its institutional
knowledge. If the cultural institutions are responsible for the maintenance of culture and cultural identity, then it too will adapt its schema over time through sociocultural interactions.

Due to my interpretive tendencies, I also fully subscribe to critical theory and believe that oppression comes from imbalances of power. As a result, the ontology of this study is grounded in historical realism. Reality is shaped by intersecting forces that are social, political, and cultural in nature and the result is a series of structures that are taken as real (Denzin & Lincoln, 2011). As a qualitative researcher, I believe it is my job to examine these phenomena and offer rich descriptive accounts of their functional relations. Furthermore, critical theory applies not just to the content of my study, but also to my relationship with the people I observe. While I can never be truly objective, I want remain of myself as a researcher and the power differences that exist between myself and the people who I observe and survey.

However, I will anchor the epistemology and methodology of this thesis in postpositivism. The use of the scientific method allows human subjects research to be as positivist as possible. Humans are unpredictable, making it impossible to be truly positivist when studying them. There will always be exceptions to whatever rules and theories researchers try to construct. However, the epistemology will still strive to be objectivist with particular emphasis placed on external guardians of objectivity (Denzin & Lincoln, 2011). Denzin & Lincoln explain that these guardians are both the critical community of professional peers and academic experts and the critical traditions that they have produced through preexisting knowledge. Meanwhile, the postpositivist methodology is modified experimental and will aim to conduct inquiry in “more natural
settings, collecting more situational information, and reintroducing discovery as an element in inquiry” (Denzin & Lincoln, 2011, p. 106). These aims will contribute to the qualitative nature of this research and will be accomplished through a triangulation of participant observations, open-ended written interviews, and information that is publicly available from the museum.

**Methodology**

According to Denzin & Lincoln (2011), qualitative research embodies a naturalistic approach that “consists of a set of interpretive practices that turn the world into a series of representations” (p.3). Consequently, qualitative researchers “study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2011, p.3). In order to make sense of the creative and innovative spaces of the Wonderkamers and the Center for Creativity (CFC), this study will be structured as a comparative case study. The specific qualitative practices that will guide this research will be a combination of field notes relating to participant observation in the hubs for creative engagement and written questionnaires completed by curators of these spaces. As an interpretivist, I recognize that I am trying to understand a reality that is not my own. Therefore, I am trying to construct the “truth” through a collaborative process. Although I can never fully know the reality of the people who do engage with the space, I will attempt to take objective observations of their experience. Then in my analysis I will formulate a dialogue between those observations, my own perspective, and the perspective of the people who constructed the space.
According to Yin (2009), the goal of a case study is to collect, present, and analyze data fairly. It is an ideal method when "'how' or 'why' questions are being posed, the investigator has little control over events, and the focus is on a contemporary phenomenon within a real-life context” (Yin, 2009, p. 2). This explanation matches well with my pursuits to study why art museums are recently branding themselves as centers of creativity and how the public is responding to these designated spaces. Creswell (2012) draws attention to several features of the case study approach, but emphasizes a critical element “is to define a case that can be bounded or described within certain parameters, such as a specific place and time” (p. 98). By focusing specifically on the current goals and outcomes of the CMA’s CFC and the Gemeentemuseum’s Wonderkamers, I will be able to draw themes from each case that can be used to create a dialogue between the cases. I may also be able to offer assertions that future research can apply to other participatory museum exhibitions that are branded with creativity.

Furthermore, it is worth noting that Yin (2009) considers “single- and multiple-case designs to be variants within the same methodological framework” (p.53). The important piece of insight to remember is that multiple cases should follow a replication logic instead of a sampling logic. In other words, having multiple cases is not similar to having multiple respondents to a survey. Instead, “the replication logic is analogous to that used in multiple experiments” (Yin, 2009, p.54). In other words, each case must be carefully selected so that it either predicts similar results, or predicts contrasting results, but for anticipatable reason. In this comparative case study, I will be pursuing the latter idea. This theoretical replication will investigate whether nationality plays a significant role in the motives and outcomes of the exhibitions.
**Data Collection**

Due to the qualitative and comparative nature of these case studies, there will be many more variables of interest than data points (Yin, 2009). Consequently, I use multiple sources of evidence derived from a combination of privately collected data and publicly available information. Publicly available information includes published interviews by museum leadership, press coverage of the museums, publications made by the museums, and information found from the museum websites. This widely available data reflects the image that the museum leadership attempts to broadcast to the public. Meanwhile, the between method triangulation of curator questionnaires and participant observations provide access to a more restricted view of the museum and how it operates. The data for these case studies was gathered from both publicly and privately available sources so as to study the museums from both an insider and an outside perspective.

Although the questionnaires will be completed online, they will function more like open-ended interviews. Consequently, I will be calling this aspect of my design “written interviews.” The questionnaires are comprised of open-ended questions that are tailored to the curator of each hub for creative engagement. The benefit to communicating through writing is that the social dynamic between myself as the researcher and the interviewee is less likely to shape the nature of the knowledge generated (Denzin & Lincoln, 2001). Meanwhile, participant-observation is a data collection technique with roots in ethnographic methods (Yin, 2009). Although there are many ways in which to conduct observations, I will focus specifically on observing and documenting my own participation in the hub for creative engagement and then
documenting the participation of others in the space. However, there will be no contact between myself and the museum visitor population.

**Data Collection: Written Interviews** After IRB approval, I sent open-ended questionnaires to the curators of the Wonderkamers and the CFC in early December of 2016. The main risk of this study is that I have not protected the identity of the participants. However, the participants had the ability to choose not to answer a question if they did not feel comfortable. The survey was open-ended in nature and was completed online via email. It is imperative that these surveys are completed online, because email surveys “yield better quality data in terms of item completion and more detailed responses to open-ended questions” in comparison to hardcopy versions (Denzin and Lincoln, 2001, p.721). Each participant will receive the same questions but tailored to their institution:

- What factors led to the formation of the ________?
- What are the institution’s goals for the ____________?
- What are the program components of the ____________?
- How does the organization attract funders for this exhibition?
- How does the organization promote and market this exhibition?
- Approximately how many people do you think engage with the ________ per year?
- What kinds of people do you think engage with the ____________?
- What influenced the decision to make the exhibit participatory?
- In what specific ways do you hope the people engage with the ____________?
- How do you define creativity?
• How do you define innovation?

• How does this space encourage creativity and innovation?

• Why is it important this institution has a participatory space dedicated to creativity?

• Are there any aspects of the exhibition that you think could be improved?

**Data Collection: Participant Observation Timeline**

My observations of the two spaces were short-term as opposed to prolonged (Denzin and Lincoln, 2001). I conducted four observational visits at each museum; two on weekend days and two on weekdays. For each category, one observational visit was conducted at the beginning of the day, and the other observational visit began near the end of the day. For each two-hour visit I rotated spots every 30 minutes. In the CMA, I spent 30 minutes in the Wonder Room, 30 minutes in the Big Idea Gallery, 30 minutes in the Community Gallery, and 30 minutes in the creativity lounge.² In the Wonderkamers, I spent 30 minutes in the entrance area of the exhibition, 30 minutes in the central miniature museum, 30 minutes in the Depot gallery, and 30 minutes in the games and tasks galleries.³ Finally, before I conducted observations in each museum, I took a separate visit to hub for creative engagement and documented the different participatory activities I found in the space.

The ways in which I took field notes consisted of two parts. First, I collected descriptive information in which I attempted to accurately document factual data (Labaree, 2016). For example, I noted the date, time, and the specific setting. However,

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² See Appendix A
³ See Appendix A
in order to maintain construct validity, I also developed a sufficient set of definitions for my subjective judgments (Yin, 2009). Consequently, in my field notes I will operationalize the following observations as follows:

- **Age** = the oldness of the visitor as best approximated by the researcher into the following ranges:
  
  - **Early Childhood:** 0-5 years of age.
  - **Middle Childhood:** 6-12 years of age.
  - **Late Childhood:** 13-18 years of age.
  - **Early Adulthood:** 19-35 years of age.
  - **Middle Adulthood:** 35-60 years of age.
  - **Late Adulthood:** 60+ years of age.

- **Object time** = the approximate length of time a visitor engages with a specific part of the exhibit.

- **Play** = an intrinsically-motivated process that produces pleasure and enjoyment through voluntary activities that have systematic relations to what is not play.

Using Stuart Brown’s (2010) typology, this broad process can be subdivided into specific types of play:

- **Pretend or imaginative play:** Play in which someone invents scenarios from his or her imagination and acts with them as a form of play; can involve moving back and forth between reality and pretend.
- **Storytelling play:** The play of learning and language that develops intellect.
- **Creative play:** By which one plays with imagination to transform/transcend what is known in the current state, to create a higher state.
- **Social play:** Play which involves others in activities, and builds connections with another person or group of people.
- **Object play:** Manipulating object/handling physical things in ways that use curiosity.
- **Body and movement play:** Play in which someone explores the ways in which his or her body works and interacts with the world.
• **Engagement**= is when a visitor is observed giving their full attention to the components that fill a specific gallery in the hub for creative engagement. This category is then sub-divided into three different types of engagement:
  
  o **Participatory engagement** is an active form of engagement in which visitors utilize dynamic/interactive components of the exhibition that rely upon one or more form of play to complete.
  
  o **Passive engagement** is a form of engagement in which visitors only interact with the static components of the space through passive observation.

  **Disengagement** is when the visitor does not acknowledge any components in the gallery. **Semi-engagement** occurs when the visitor engages in a participatory or passive manner but the visitor is only giving the component their partial attention.

• **Attitude**= the way in which the visitors conduct themselves in the exhibit, as best approximated by the researcher by body language and their tone of voice.

• **Conversation**= the informal exchange of ideas by spoken words between the visitors.

Additionally, I also documented reflective information, which reflect my thoughts, ideas, questions, and concerns as I conducted the observations (Labaree, 2016).

**Strengths and Weaknesses of this Design**

First, this study must address concerns about its external validity. External validity is “the degree to which the conclusions of [this] study would hold for other persons in other places at other times” (Trochim, 2005, p.27). Although the participants being observed were chosen randomly as they enter each exhibit, they were still visitors who had already elected to visit the art museum and as a result did not represent a truly randomized group of people. This fact makes it impossible to generalize the sample to the entire population and poses a threat to external validity. Conversely, this study is likely to
benefit other museum educators who have participatory exhibitions or are interested in curating one for their museum. The fact that this sample has a pre-disposition for museum attendance may not concern them. There also is no comparable group of people who have not experienced each hub for creative engagement that can act as a control group. Thus, there is no experimental means of addressing the counterfactual. Furthermore, the lack of control group prevents any opportunity for an interaction effect or social response bias.

Internal validity also begs consideration. Internal validity is “the approximate truth about inferences regarding cause-effect or causal relationships” (Trochim, 2005, p.135). Due to the inductive nature of this study, there are no firm cause and effect relationships. For example, I will not be testing whether exposure to this hub for creative engagement makes visitors more creative. Furthermore, there is no formal experiment that is being conducted on the visitors themselves. They are merely being observed in a public environment. However, because I administered the written interviews to the curators of the hubs for creative engagement, I do test whether the expectations that the curators had for the visitors of these spaces actually occurred.

Finally, it is worth acknowledging and accepting the role that my own biases play in the nature of this research. Bias is the one factor that makes qualitative research much more dependent upon experience and judgment than quantitative research. For example, both my observations and my written interview is subject to observer’s bias. As I take field notes, the data must go through my own mind before it is put on the paper and the questions that I have chosen for the written interviews are reflective of my interests as the person who constructed them. This observer’s bias is significantly apparent in my
conceptions of nationality and with my interactions of the Gemeentemuseum in general. As an American citizen, I am more likely to understand the behaviors and attitudes of the people I observe in at the CMA rather than the people I observe at the Gemeentemuseum. Dutch culture is still relatively new to me and what I might observe as indifference could be a social norm for something else. Furthermore, I worked for a year at the CMA as an intern. I am much more familiar with their spaces and their values as an institution in comparison to the Gemeentemuseum. Although I will try to treat both institutions objectively, I am still bringing a much deeper knowledge of one institution to the table than the other.
Chapter 4: Case Study of The Wonderkamers in the Gemeentemuseum, The Hague, The Netherlands

Museum Profile

The Gemeentemuseum is a municipal art museum located in The Hague, the capital of the province of South Holland. Despite being in the city that houses the Dutch national government, the Gemeentemuseum is a product of its local government. Rather than primarily attracting tourists and visitors from outside of the local community, like the Maurithuis or the Rijkmuseum, the Gemeentemuseum was originally intended to serve its local and regional audience. It was also created to be a milestone in contemporary architecture (“Gemeentemuseum,” 2017). Designed by Dutch architect, Hendrick Berlage, it is often considered his final masterpiece and a crowning
achievement of the Art Deco red-brick design. Berlage started his first drawings in 1919, but it was not until 1935 that construction was completed and the Gemeentemuseum opened its doors to the public (Postiglione, 2004, p. 50).

Over the past few decades, the museum developed a reputation for its wide collection of international modern art and for the fact that it holds the largest collection in the world of paintings by Piet Mondriaan (“About Us,” 2017). The permanent collection contains modern art, fashion, music, decorative arts, a print room with about 50,000 drawings, and prints and posters (“Gemeentemuseum,” 2017). Additionally, the museum has five large style rooms, each representing a different art period. Finally, the Gemeentemuseum holds one of the world's leading collections of fashion items, an extensive music collection, and a decorative arts collection exhibited in Berlage's original display cabinets.

Today, the Gemeentemuseum is no longer a subsidy of the local government, but rather a nonprofit organization with a supervisory board. Their current Executive Director is Benno Tempel, serving in the role since 2009 (“Governance and Policy,” 2017). Under his direction, the museum has set sights on growing its community engagement as a museum. As part of this strategic plan, the Gemeentemuseum has adjusted its governance philosophy to be more visitor-centric in nature. Jet van Overeem (2016), the Head of Education at the Gemeentemuseum, explains that “the museum is there for the visitors and not the other way around” (p.5). It is the responsibility of the museum “to constantly explore ways in which one can engage and facilitate visitors in a way that’s really interesting.” Thus, the current mission statement of the Gemeentemuseum is “to interest
and educate a wider public, including children, in the fine and decorative arts and to do so in a creative, innovative and contemporary way” (Van Overeem, 2016, p.3).

There are four main methods by which they are accomplishing this mission (de Ruijter, 2017):

1. Curating and hosting more “crowd-pulling” temporary exhibitions
2. Offering more supplementary activities for adults, children, and families, such as tours, workshops, and events
3. Extending the museum’s opening hours to accommodate a wider diversity of schedules
4. Introducing a hub for creative engagement utilizing their permanent collections

Judging solely by a steady increase in yearly visitors, these methods are proving successful (“Jaarverslag,” 2013). The museum welcomed 560,000 visitors in 2016, making it the 7th most-visited museum in the Netherlands and the most-visited museum outside of Amsterdam (de Ruijter, 2017). In this case study, I will focus on the fourth method of mission accomplishment, the Wonderkamers..I will explore how this hub for creative engagement was formulated, its purpose, and its effectiveness in attracting a wider public.

**Description of the Wonderkamers**

In 2005, the Gemeentemuseum completely refurbished its basement into a 1,400 square-meter exhibition area that could be used to utilize the education potential of its permanent collection (Cantini, 2015). This progressive reformation resulted in the first iteration of the Wonderkamers; an exhibition exploring Function and Design (Ineke Hans Studio, 2005). Designed with a target audience between the ages of 12 and 16, its
labyrinth of rooms were filled with items from the permanent collection that illustrated the meaning of ‘design,’ such as how something like a cupboard can be constructed very differently depending on an intent of decoration or functionality. According to Tempel, the goal of the exhibition was “to bring art to people in a different way,” particularly this target audience of teenagers (Kravchuk, n.d, para 2). Museum leadership believed that teenagers often regarded school and museums as learning, and this exhibition was their opportunity to create a gateway to the rest of museum by “showing them something new and enjoyable” (Kravchuk, n.d, para 2).

The exhibition was received well by visitors and critics, but after 8 years of operating, museum leadership felt that it was time for a technological update (Kravchuk, n.d). Thus, Wonderkamers 2.0, the current iteration of the exhibition, was born. Unlike the first Wonderkamers, this second version features an optional participatory adventure. The concept and the design of the exhibition was realized by the architect studio Kosman dejong, who worked in close collaboration with a team of museum educators, film-makers, game designers and media specialists (Cantini, 2015). I argue that the participatory intent of the exhibition is to stimulate the visitors to unravel the space while exploring the objects displayed.

For visitors choosing to partake in the participatory activity, Tempel claims that the visitor’s journey begins with a film that asks viewers for help to curate a new exhibition (personal communication, December 16th, 2016). Visitors are then given an electronic tablet—called the wonder-guide—that functions as their guide to creating a new space. Although often pursued in pairs, the Wonderkamers adventure can be done solitarily. The first part of the mission involves visiting the thirteen games and tasks
areas. Visitors do not get to choose which rooms they visit, but instead are randomly assigned to a room for a task. After a task is completed, the visitors are assigned to another room and this cycle continues until the visitors elect to go on to the next phase of the mission, or all thirteen tasks are completed.

Each room features a specific theme relating to items in the museum collections, such as fashion, furniture, and the works of Mondrian.\(^4\) While in this part of the exhibition, visitors play various kinds of games to earn points that will be used later in the adventure. The games are all encompass all the types of play from Brown’s (2010) typology: pretend or imaginative, storytelling play, creative play, object play, body and

\(^4\) A complete list of the games from the games and tasks area can be found in Appendix B.
movement play, and particularly social play. Because visitors are encouraged to engage in the Wonderkamer’s participatory adventure in pairs, nearly every activity can be adapted to include social play (personal communication, December 16th, 2016). The games are also very structured in nature. They are built on the premise of visitors earning points, which means that each task has a component where a visitor can be “right” and “wrong.” For example, in the activity “Berlage’s Museum” guests read through a short presentation on Berlage’s history as an architect and the fundamentals of art deco design. They are then asked to design a museum wing in the style of art deco on a computer screen, based on what they learned. Rather than being a space for open-ended design, the task necessitates replication and the visitor’s ability to retain new information.

When the visitors complete their desired number of tasks, they are then directed to the central exhibition space, ‘The Depot’ (personal communication, December 16th, 2016). At the end of the game, visitors swap their points for virtual artworks from the
Depot, which they can store on their wonder-guide. Finally, the visitors are invited to curate in their virtual gallery in the Miniature Museum. After arranging the galleries on their wonder-guide, the guests can then transfer them to one of thirty display windows in the Miniature Museum so that others can view their final accomplishment. It is important to distinguish though that while the games and tasks area is primarily designed with only the participatory adventure in mind, the Depot and the Miniature Museum also function as spaces for passive museum engagement. The Depot itself displays a diverse range of items from the collections of the Gemeentemuseum, such as paintings, sculptures, photos, furniture, ornamental and everyday objects, and fashion, and then arranges them by themes. Finally, at the heart of the Wonderkamers, is the Miniature Museum. Standing approximately, 10-12 feet tall, the Miniature Museum contains hundreds of miniature artworks by artists around the world, all from the Lex and Ria Daniëls collection, Amsterdam (Van Overeem, 2016). While the visitor engaging in the participatory adventure is only required to visit the window they are designing in the Miniature Museum, the reality is that there are hundreds of windows filled with both real art and Pepper’s Ghost films for a visitor to investigate.
Findings from Curator Written Interview

Jet van Overeem is also the curator of the Wonderkamers. She explains that “one of the Gemeentemuseum’s main aims is to interest a wider public in classic modern and contemporary art [and] it developed the Wonderkamers as part of this outreach effort” (Van Overeem, 2016, p.2). In essence, the Wonderkamers are the playful manifestation of the museum’s mission statement and visitor-centered philosophy. She believes that the target audience for this exhibition are adults with children or grandchildren, and secondary school students between the ages of 12 and 16. Although there are no age restrictions on who can use the space, this demographic focus on children in the middle to late childhood categories has shaped many of the strategic choices for the exhibition.

The Wonderkamers manifested because the museum leadership perceived a dual problem in which the average museum visit typically lasted 90 minutes and that “many children are simply bored by art museums” or not visiting them at all (Van Overeem, 2016, p.4). Consequently, museum leadership assembled a multidisciplinary team of “educators, designers, and game producers” to tackle the challenge of creating “an
exhibition in which children get in touch with art in an exciting way” (International Design and Communication Awards, 2014). Although neither Van Overeem, nor Kossmann.dejong\(^5\) cited specific strategies that they had used from other childrens museums, the Wonderkamers 2.0 have been praised by Hands On! International as one of the best childrens museums in the world for basing the exhibition on “previous experiences with the target group.” Thus, one of the underlying goals since the Wonderkamers’ inception has been to increase the number of visitors in this target childhood demographic. To achieve this goal, the museum created an exhibition that was close to the perception of children. Van Overeem (2016) explains that the leadership in the Gemeentemuseum “strongly believes that children are more keen in learning of arts by doing” and that this current generation has always been surrounded by technology that necessitates interaction (p.4). Consequently, interactivity was made a priority as a means of solving both young visitor boredom and increasing the length of an average museum visit.

It is important to note that an increase in visitors is not the sole goal. The interactivity should function as a means of fulling the museum’s mission of instilling an interest in art in the wider public. Van Overeem (2016) explains that “interactivity and extraordinary design concepts have always been means to an end. Wonderkamers may be full of tablets, QR codes, virtual dressing rooms and touchscreens, but it’s really all about art” (p.4). By using familiar interactive tools, the museum hopes to offer an alternative means of enabling visitors to connect with art in a meaningful way.

\(^5\) The firm that designed the Wonderkamers
Technology also serves to engineer a more efficient visitor experience. For example, the random assignment of visitors to a room is actually a carefully engineered formula. Each room is ranked with a ‘fun factor’ and rooms with a higher fun factor are more likely to be assigned to a visitor earlier in the rotation. The fun factor directly correlates with its relevance to the rest of the museum. The higher the fun factor number, the more that museum leadership believes that that room is valuable to understanding the museum’s permanent collection. Thus, if a visitor to the Wonderkamers only has 30 minutes to undertake an adventure, they will be able to have a similarly impactful experience to someone with 2 hours to spend in the space.

Van Overeem considers the current iteration of the Wonderkamers to be a success. Since the section re-opened, no fewer than 30,000 games have been played. While they do not officially track the general number of visitors in the exhibition, she did know through reservation requests that approximately 7,000 visitors from secondary schools utilized their space for field trips in 2016 (Van Overeem, 2016). Furthermore, since the opening of Wonderkamers, the average length of all visits to the Gemeentemuseum has doubled. She attributes this increase to a change in attitude in which it is the children who cannot be dragged away. Youngsters have been returning three or four times. Finally, she anecdotally marks success through the fact that more children are spotted visiting the other parts of the main museum to see the originals of works referenced by the Wonderkamers. As Tempel says, “When you’ve just created your own Mondrian on a touchscreen, it’s hardly surprising if you want to take a look at the real thing afterwards” (Van Overeem, 2016, p.4).
Participant Observation Findings

Who is using the space? Although I had a cap of no more than 40 observations per 2-hour observational visit, there were two days that I encountered fewer than 40 people during my entire observation. Thus, my total number of people observed over the course of the 4 observations was 115. For example, Tuesday, December 20th was particularly sparse at 8 total observations, perhaps due to the spurious effect of holiday travel plans. Meanwhile, while I only officially observed 40 visitors on Wednesday, January 4th, I estimate that over 100 people entered the space during those two hours. This uptick in visitors was related to a field trip that was occurring during that afternoon and may also be attributed to families who need something to do with their children during the last week of Winter Break from school.

Van Overeem cites that the target audience is ages 12-16. While that age bracket falls between two of the age categories I defined, there are still related conclusions to draw. For example, as depicted in Chart 1, I observed 31 visitors that I categorized as middle childhood. Consequently, visitors ages 6-12 comprised the largest group of visitors, or
27% of all visitors to the Wonderkamers. Meanwhile, ages 13-18 comprised only 7% of all visitors. While arguably the Gemeentemuseum may be scheduling field trips with classes that fall between 12-16, I would argue that the average child visitor who does not come through a school program is likely to be around the age of 10. Van Overeem (2016) did share she is considering adding to the exhibition “a tour especially for ages 4-9” (p.5). I think that such a tour would be a worthwhile choice, because it would be geared toward their most represented age-demographic and it would offer something to attract more visitors for the underrepresented early childhood demographic. I observed that children who fell into the Early Childhood category were always paired with an adult visitor. These adults were also more likely to be passively engaged because they were focused on their role as caretaker. By having an option that allows children to experience the exhibition without their adult, it may encourage more adults to bring their young children to the museum. Caretakers can then experience the Wonderkamers, or perhaps other parts of the museum at their own pace, rather than the pace dictated by the child.

It is important to note that adult visitors observed actually outnumbered child visitors observed at 63% adults, 37% children. Although many of these adults were acting in a caretaker capacity, many others were visiting with no children at all. It is likely that many of the caretakers had arrived at the museum with the pre-determined intention of visiting the Wonderkamers with their children. However, I observed many adults without children who entered the space with an attitude that conveyed hesitancy. The Wonderkamers are located between many of the main stairs that connect to the other parts of the museum. Thus, it is worth considering that some of the adults without children who engaged with the space were not expecting to spend time there, or did not
know it existed until that moment. Even though the space is aimed toward the perception of children, there is an observable appeal for all ages. The Gemeentemuseum leadership may also want to consider implementing more methods to preemptively attract adults without children to utilize this space for creative engagement.

**Passive vs. Participatory Engagement** As defined in chapter three, participatory engagement is an active form of engagement in which visitors utilize dynamic/interactive components of the exhibition that rely upon one or more form of play to complete. Passive engagement is a form of engagement in which visitors only interact with the static components of the space through passive observation. Eighty-nine percent of all children that I observed used the space in a participatory manner. However, all the children who were not labeled participatory seemed like outliers in some capacity. The two who were disengaged were acting in such a way to be defiant toward their parent. Meanwhile, the passive early childhood visitors were too young to grasp the full adventure design, and the passive older children had a disability and could not access many of the participatory aspects of the Wonderkamers. While it was not the focus on this study, I think that other scholars should consider conducting future research about the accessibility of hubs for creative engagement and how to make these spaces more accessible for visitors who are not able-bodied. In this particular observation, the guest I observed was in a wheel chair and was relegated to a passive experience in the Depot. Thus, I posit that a child who can be labeled as “typical” and able-bodied, after a certain age, will always choose to have a participatory experience if given the option.

Conversely, adult visitors were much more divided in whether they used the space in a passive or a participatory manner. Fifty-four percent of adults utilized the
Wonderkamers in a passive manner, while 36% displayed participatory engagement. Many of the adults in the middle and late adulthood demographics who displayed participatory engagement were also caretakers. The adults in these demographics who did not arrive with children were more likely to remain in the Miniature Museum and Depot area and do so in a passive manner. However, there was a trend of adults in the early adulthood category who would arrive without kids and engage in the Wonderkamers participatory adventure.

![Chart 2: Engagement by Area in the Wonderkamers](chart)

It is important to recognize that across the age demographics, engagement types did differ based on the part of the exhibition in which the visitor was observed. Visitors in the games and tasks area, which is almost entirely comprised of interactive components, were much more likely to be engaged in a participatory manner. Thus, as depicted in Chart 2, the majority of visitors in the Games and Tasks Galleries were engaged in a participatory manner.
manner. Meanwhile, visitors in the Miniature Museum were split evenly between passive and participatory engagement and the Depot Gallery actually saw more passive than participatory visitors. I attribute this distribution to visitor self-selection. For example, although the highest levels of disengagement were observed in the entrance, I do not think that the entrance to the Wonderkamers causes people to become disengaged. Instead, I think visitors who were not interested in the Wonderkamers exhibition gravitated to the area with the most seating.

Furthermore, if a visitor enters the Wonderkamers with the intention to have a passive experience, then they are likely to gravitate to the areas filled with static and passive components, rather than the ones that necessitate interaction. For example, many of the passive visitors who did enter the games and tasks galleries without children often ended up in the Makers activity. This room is filled with art making tools and supplies that are inherently interesting to view without the context of the ‘I-Spy’-style game that accompanies them. Conversely, an activity like the Dance the Victory! is solely comprised of interactive components. A passive visitor would only be able to stand in an empty room with a stage and a screen, or perhaps watch other
people engage in the dance and movement components. Thus, because the Depot and the Miniature Museum can stand alone as art galleries but also incorporates the interactive adventure component, they are the most likely to attract a wider diversity of engagement levels.

![Chart 3: Types of Engagement in the Wonderkamers](image)

Overall, as illustrated in Chart 3, 55% of observed visitors displayed participatory engagement and 37% of visitors exhibited passive engagement. Although a few visitors fell under the semi-engaged categories, there is nothing significant to report about their more half-hearted displays of engagement. The important takeaway is that a majority of visitors are using the space by engaging in the participatory adventure curated by the exhibition’s designers. However, with more than a third of visitors electing to use the space in a passive way, it seems that the Gemeentemuseum is also missing a marketing opportunity to its audience who prefers a more traditional museum experience. Its
leadership may want to consider employing more methods to pre-emptively alert visitors of all ages that there is a traditional gallery space incorporated into the Wonderkamers that can enjoyed without needing to engage with the interactive components of the exhibition.

**Types of Play** In direct correlation to the trends for participatory and passive engagement, children were more likely to exhibit at least one kind of play and adults were more likely to exhibit no play. As depicted in Chart 4, there is a strong upward trend that the older one is, the less likely they are to play. Meanwhile, in middle childhood there is a sharp spike in which 95% of visitors from that demographic were witnessed playing, but the other two categories of children were more evenly split between play and no play. Again, I attribute the lack of play in early childhood to visitors who were too young to be able to understand the participatory adventure and its activities. There is a tipping point between late childhood and early adulthood where visitors shifted from being more likely to play to less likely to play. Fifty-four percent of late childhood

![Chart 4: Play or No Play Exhibited based on Age Demographic in the Wonderkamers (X-Axis= Age Demographics, Y-Axis= Number of Visitors, Bars= Play or No Play)](chart.png)
participants played while 46% did not. Conversely, 45% of early adulthood participants played while 55% did not. The difference grows wider between middle adulthood and finally late adulthood, where 82% of visitors did not play. These statistical findings also reflect the qualitative observations I took regarding behavior and attitude. Starting around middle childhood, the younger a visitor was, the less intimidated they were to play in front of others. While some adults proved to be outliers in their enthusiasm, it seemed that the older the visitor was, the more uncomfortable they acted in regard to play.

Often the only adults who would participate in the interactive components of the exhibition were those who were also accompanied by children. This trend is particularly telling when considering instances of social play. As illustrated in Chart 5, of all the middle and late adulthood visitors who did play, every single one was reliant on social play. In other words, no adults in these categories played by themselves. They always had

![Chart 5: Social Play or No Social Play Exhibited based on Age Demographic in the Wonderkamers (X-Axis= Age Demographics, Y-Axis= Number of Visitors, Bars= Social Play or No Social Play)](chart5.png)
to interact with someone else. A large majority of children also preferred social over no social play in their interactive components. Interestingly, 45% of early adulthood adults played without a social component. These adults demonstrated an ability to complete activities in silence either alone or without interacting with their companion. A possible explanation for this phenomenon is that younger adults feel more confident about customizing their participatory experience to meet their preferred experience, while older adults who are more unfamiliar with participatory spaces may rely on someone, like a child, to take the lead in play-based activities.

After the observational visits, I inductively realized that social play is the most common kind of play in the Wonderkamers. As illustrated in Chart 6, social play accounted for over half of all observed instances of play. This trend can be attributed to the fact that each interactive component of the Wonderkamers is intentionally designed to
be adaptable for social play. When participating in each interactive component in the Wonderkamers, I found that besides social play, each activity relies on one other primary form of play to complete. For example, the Catwalk activity primarily embodies pretend play, because it encourages the participant to walk and pose like they are in a real fashion show. These other types of play were distributed fairly evenly among the interactive components of the Wonderkamers. However, there are a couple of additional factors that affect the frequencies of certain exhibited forms of play. First, there are more creative play activities available to visitors, the most obvious of which is when the visitor curates their own exhibit in the Miniature Museum. Thus, creative play was the second most-demonstrated category. Secondly, games that relied on movement play and pretend play often had the highest ‘fun factors.’ The result was that these rooms saw more frequent visitor traffic and thus guests were more likely to engage in those activities. Finally, it is
worth acknowledging that because the visitors were largely directed by the wonder-guide in deciding what activities to do, there were no other notable preferences for play.

**Time** Due to the rotational nature of my observational schedule, it was impossible for me to track the average length of a total visit to the Wonderkamers. However, I did gain insight to the average amount of time a visitor spent in each aspect of the Wonderkamers: the entrance, game and tasks galleries, the Miniature Museum, and the Depot. The average amount of time spent each day in the entrance was about 6.5 minutes, visitors spent about 4.5 minutes in each individual game or task area, they spent about 10 minutes in the Miniature Museum, and about 11 minutes in the Depot. However, an interesting occurrence happened on January 4th, 2017 that is illustrated in Chart 7. While visitors averaged similar amounts of time the first three days of observations, the amount of time spent in each area almost doubled on the last day of observations. Thus, it would be

![Chart 7: Average Time Spent (Minutes) in each Area based on Day in the Wonderkamers (X-Axis= Museum Areas, Y-Axis= Average Time Spent, Bars= Day of Observation)]
worth further observations to see if that was an outlying day, or if there are other factors that can cause average length of time spent in each area to rise so rapidly.

These times were largely replicated across age groups. For example, as illustrated in Chart 8, all age groups averaged between 4-5 minutes in each game or task gallery. This uniformity is likely caused by the directed nature of the interactive components of these areas; each game has a distinct beginning and an end and when the visitor finishes one task their wonder-guide immediately encourages them to visit the next task.

Meanwhile, I think that the longer times in the Depot and the Miniature Museum are the result of two different factors. First, the older visitors often took their time, walking slowly as they observed and discussed the artworks in these areas. Secondly, the younger visitors in these areas more likely to be participatory rather than passive in their behavior. They are trying to collect artworks and then curate their galleries for the Wonderkamers participatory adventure.

Chart 8: Average Time Spent (Minutes) in each Area based on Age in the Wonderkamers (X-Axis= Museum Areas, Y-Axis= Average Time Spent, Bars= Age Demographics)
This trend is further illustrated when one considers the average amount of time in each area based on engagement type. As a more open-ended activity, visitors have the liberty to take as little, or as much, time as they would like in both the Depot and the Miniature Museum as they create their ideal gallery. Thus, as demonstrated in Chart 9, visitors engaged in a participatory manner in the Miniature Museum and the Depot Gallery averaged longer times spent in these space than passively engaged visitors. Furthermore, this bar graph demonstrates that disengaged visitors often drove up the average time in the areas that they occupied. Even though they would spend a long time in each space, it was often because they were just sitting and waiting for another companion or companions to complete their engaged experience in the Wonderkamers. Based upon my limited observations, I suspect that if an average visitor were to visit the Wonderkamers in a participatory way and engage in all of the interactive activities, their
average length of visit would be about 100 minutes. This time is much shorter than the 3 hours that Tempel claims visitors spend in the Wonderkamers (Kravchuk, n.d, para 2).

**Conclusion**

All in all, the Gemeentemuseum has been very successful in achieving the goals stated by its curator, Van Overeem. While perhaps the average visit in the Wonderkamers may not be much longer than 90 minutes, it is clear that children—particularly in the targeted middle and late childhood demographics—are participating and enjoying the space. However, these demographics are not the only demographics interested in using the Wonderkamers. Based upon my observations, adults are already indicating interest in the space without being appealed to directly. Adults in the early adulthood category demonstrate interest in the participatory aspect of the space and adults in all categories show an interest in engaging with the more traditional passive parts of the exhibition, such as the Depot and the Miniature Museum. Thus, it may be more in line with the Gemeentemuseum’s mission statement to broaden their outreach and marketing efforts to include a wider, more adult audience in their promotion of the Wonderkamers.

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6 6.5 avg at entrance + (4.5 avg. at each activity multiplied by 13 activities) + 11 avg at Depot gallery + 10 avg at Miniature Museum + 15 minutes of travel time between areas = 101 minutes
Chapter 5: Case Study of The Center for Creativity in The Columbus Museum of Art in Columbus, Ohio, The United States

Museum Profile

The Columbus Museum of Art (CMA) is a regional art museum located in downtown Columbus, Ohio in the United States. Founded in 1878, it was first known as the Columbus Gallery of Fine Arts and was the first art museum in Ohio to register its charter with the state (“Chronology,” 2015). Its original mission “for the exhibition of paintings, sculpture, and works of art as well as for lectures and teaching upon art and kindred subjects” indicates that the CMA has viewed education as an integral part of its work since its founding (“Chronology,” 2015, p.1). The current building in which the museum resides was completed in 1931. It was designed in the Renaissance Revival style.
by Columbus architects Richards, McCarty and Bulford, who worked closely with Charles Platt, designer of the Freer Gallery in Washington, D.C.

Over the next century, the CMA’s galleries became known for its outstanding collection of late nineteenth and early twentieth-century American and European modern works of art, and more recently its acclaimed collection by the Photo League and the Philip and Suzanne Schiller Collection of American Social Commentary Art. (“About,” 2017). However, the CMA’s primary focus has always remained on the surrounding community. For example, the CMA houses the largest collections of works by beloved local artists Aminah Brenda Lynn Robinson, Elijah Pierce, and George Bellows. Even its mission statement from 1995 to 2004 clearly stated that “the Columbus Museum of Art is an educational and cultural center for the people of central Ohio, dedicated to the pursuit of excellence in art through education, collections and exhibitions” (“Chronology,” 2015, p.2). Furthermore, the museum is extraordinarily reliant on this community for its financial success. As a registered 501(c3) nonprofit organization, the CMA dubs itself “a museum built for the community, by the community” and credits its success to the investment of generations of local families (The Columbus Foundation, 2015). Today, much of its income is still derived from private contributions and memberships (“Annual Report,” 2015).

When the CMA underwent a major brand transformation, it still retained a community-centric focus. In 2004, under the new direction of present-day executive director, Nannette Maciejunes, the CMA adopted its current mission statement: “to create great experiences with great art for everyone” (“Chronology,” 2015, p.3). Brief, yet concise, this statement places value on artistic excellence, but first and foremost on
visitor experience. As a result, a visitor-centered philosophy has permeated all of the subsequent decisions made by museum leadership. The most impactful consequence of its implementation was the total refurbishment of the original building in 2011 and the addition of a new 50,000 square-foot wing in 2015, dedicated to contemporary art.

The second brand shift occurred in 2011, after the completion of the original building renovations. After experimenting with creativity as an educational framework in the department of learning, CMA officially adopted creativity as an institutional value (Mostov, 2014). As an institutional value, the leadership of CMA defined creativity as a synthesis of critical thinking, innovation, and imagination (Foley, 2014). After the unity of creativity, visitor-centrism, and community engagement as institutional values, a variety of programs were implemented or adjusted to execute these guiding values: (“Chronology,” 2015; Mostov, 2014):
• A reimagination of the entire first floor of the original building as a Center for Creativity (CFC)
• The unification of visitor services and gallery associates as a singular visitor experience team
• An increase in educational partnerships with both schools and other institutions that promote lifelong learning
• An increase in social engagement by using various social media outlets to implement digital campaigns that utilize creativity

Judging solely visitor interactions, these methods are proving successful. The museum welcomed over 200,000 visitors in 2016 and reached over 56 million around the world through social media (The Columbus Foundation, 2015; Mostov, 2016). In this case study, I will focus on this first method, the space deemed the Center for Creativity (CFC), by exploring its formulation, its purpose, and its effectiveness in attracting a wider public.

**Description of the Center for Creativity (CFC)**

After the development of their new mission “great experiences with great art for everyone,” CMA leadership began the journey of its implementation in the education department. In 2006, the museum’s newly-hired Director of Education, Cindy Foley, made the first goal of her tenure to answer a question posed by Maciejunes: “What is purpose or value of an education department in…our art museum?” (Coldrion, 2015, p. 30). The answer that soon manifested was: creativity. Foley (2014) felt that creativity is what makes education at the CMA “needed and valued in our community” (p. 140). However, to bring creativity to the forefront of the visitor experience, the education department had to first evaluate goals and outcomes that would reflect creativity’s ability
to flourish. Soon, Foley and her team produced a formalized evaluation for every gallery regarding its ability to educate through creativity. In 2011, creativity was promoted from an education value to an institutional one. After five years of articulating it as the educational core of the CMA, creativity expanded beyond the realm of education and was called upon to reimagine the operations and function of the CMA as a whole.

The Center for Creativity (CFC) was the first and most visible manifestation of this new focus on creativity. Located on the first floor of the original museum building, the CFC is an 18,000-square-foot space that consists of galleries, studios, interactive activities, and spaces for exploration and experimentation. This center exemplifies creativity by acting:

“as a catalyst, a jumping-off point for individuals and groups to discover their unique connections to creativity…and provide a myriad of experiences that engage visitors with art and with each other, model the creative process, highlight creativity in action and underscore the importance of creativity in our community” (Foley, 2014, p. 141).

In essence, the CFC is the physical manifestation of both the Education Department’s internal reflection and evaluation of visitor learning and the CMA’s perpetual goal being a resource for the Columbus community (Coldrion, 2015). Although the physical space includes a studio, an innovation lab, an auditorium, and two rooms for temporary events and exhibitions, these spaces are not consistently open to the public. Thus, this reflection will focus on the four primary spaces that always have visitor access: the Big Idea Gallery, the Wonder Room, the Creativity Lounge, and the Community Gallery.

The Big Idea Gallery is a gallery that “emphasizes learning through play, the creative process, and thinking like an artist” (Coldrion, 2015, p.44). Every year or so, a ‘big idea’
is selected to act as the guiding theme for the entire gallery. In January of 2017, this theme was ‘Dogs’ (Personal Communication, January 7th, 2017). The theme is then presented equally through traditional static components, like paintings and short informative videos, and as well as interactive components, like puzzles, games, and writing prompts. Sometimes the interactive elements are dependent on the static elements for success. For example, at either end of the Big Idea Gallery was an activity entitled ‘Tag it!’ Each featured a tub of dog collars and on each tag was a singular descriptive word like ‘lazy,’ ‘fierce,’ ‘playful,’ etc. Visitors were then invited to hang these tags next to the paintings that they think best embodies the word. In this gallery, all activities are at least somewhat directed. They often are accompanied by a prompt and a suggestion of how to complete the activity.
By comparison, the Wonder Room is a space for experimentation. In this forest-themed space, there is still a mix of static and interactive elements, but the elements that necessitate play are very open-ended in nature (Personal Communication, January 7th, 2017). For example, there are a couple of somewhat directed activities, such as a table filled with found objects that guests are invited to use to construct nests. However, many activities come with no instruction at all. Whether it is a table covered with wooden building blocks, or a tree house filled with nooks and crannies to explore, it is up to the visitor to decide its creative purpose.

The Creativity Lounge challenges guests to make art. In January 2017, there were two projects that occupied this space: Drawing with Friends and Lego building (Personal Communication, January 7th, 2017). The first activity is highly directed. There is a large mural with a 10 square by 40 square grid, the majority of which are filled with pictures drawn by visitors. The activity is to think of the grid like Scrabble but with pictures. The visitor looks at the drawings and then uses the paper provided to create a drawing that
will connect to the other drawings. When the visitor is done, they can hang it on the wall so that their drawings interact with the other drawings on the board.

Meanwhile, other tables are filled with bins of only white Legos and a simple sign that reads “imagine and experiment with White Legos” (Personal Communication, January 7th, 2017). This activity is highly open-ended. Guests can destroy their work when they are done, or place it on one of many shelves in the area for other visitors to see. Although they vary in regard to directedness and openness, both activities encourage a longer-term participation from visitors. Other than the static elements of being able to look other visitors’ creations as a passive visitor, or a large graphic about creativity that adorns one wall, this space is entirely reliant on participation. Consequently, as the Creativity Lounge, this space subtly hints to the visitor that creativity is linked to participation.

Finally, the Community Gallery is a space of equal size to the Big Idea Gallery (Personal Communication, January 7th, 2017). Every few months CMA invites a community group to curate an exhibition for the hallway. In January of 2017, the gallery
was dedicated to the work of Ronald Wimberly, the CMA’s Graphic Novelist in residence, who was selected in partnership with another Columbus arts organization, Thurber House. Wimberly is an artist from Brooklyn whose work brings attention to contemporary social issues regarding race. Much of his exhibition was dedicated to comics he completed during his residency and a timeline tracking and questioning the underrepresentation of black characters in comics. The space featured just two interactive components. In one part, visitors were invited to answer a few questions relating to Wimberly’s work by placing a post-it note under the question. Another activity invited visitors to collage a poetry remix of lines by both Shakespeare and famous rap artists. By comparison to the other permanent spaces in the CFC, the Community Gallery is structured more like the other galleries in the rest of the museum. Most the space is dedicated to the static elements, but there are typically one or two interactive components that stimulate and supplement the learning experience from those static pieces.

**Findings from Curator Written Interview**

The CFC is curated not by Foley, but another member of the education staff, Merilee Mostov. Before the CFC was even formulated, Mostov (2014) was spearheading new and often experimental initiatives at the CMA as their Chief Engagement Officer. Today, she is the Director of Inclusive Interpretation. In part, this position necessitates curating the exhibitions for the Big Idea Gallery, the Wonder Room, and the Creativity
Lounge, but it also comes with many responsibilities outside of the CFC. For instance, Mostov is responsible for implementing connectors in every gallery in the museum, and conducting various evaluations of the drop-in visitor experience.

When the museum’s renovation of the original building coincided with the reimagination of “imagination and creativity as the lens for learning,” the CFC would be “an experimental hub dedicated to champion, celebrate and cultivate creativity in everyone” (Mostov, 2016, p.1). However, the CFC is more than just a physical space. It is home to innovative exhibitions, a programming stream, and a philosophy about the value of creativity in our communities. Mostov also specifies that creativity is a value that that engages the whole museum, not just the CFC. Today, visitors should think of the CFC as a more concentrated manifestation of that value.

In order to achieve their visitor-centered philosophy, Mostov (2016) guides museum leadership to perceive the entire museum as participatory. Mostov explains that over the last decade, she has implemented a system in which every gallery and exhibition in the museum has specific visitor learning outcomes. Each exhibition begins with a ‘big idea,’ or a broad thesis that clarifies its purpose (Mostov, 2014). Next, the system addresses design concepts that impact the visitor’s experience. For example, will the exhibition be presented chronologically or thematically? Then, the stakeholders in the curation of the exhibition are asked to consider what they want visitors to do during their journey. This part is the step Mostov has deemed the ‘visitor learning outcomes.’ This term means “the specific activities or actions we want the visitor to undertake in that gallery.” Finally, Mostov and her team generate ‘connectors.’ She defines connectors as the specific strategies that the museum provides in order to increase the probability that
each visitor will achieve these visitor learning outcomes. Together, this entire process crafts a drop-in visitor experience that both fosters and makes space for visitor creativity in every gallery.

What makes the CFC different is that visitor creativity *is* the big idea that guides the entire hub. Each exhibit often has a higher proportion of these connectors than the typical galleries. For example, in the Big Idea Gallery about 50% of all objects in that gallery—including individual paintings—were connectors. According to Mostov (2016):

> “in the Center we use many strategies to encourage imagination and critical thinking such as question prompts written on the wall or labels, drawing activities, puzzles that encourage close observation (a skill of creativity), costumes that encourage pretend play and imagining, design choices that promote wonder, surprise and curiosity, drawing activities that encourage critical thinking and imagination, etc. (p.3)

Although visitor creativity is among the goals for other connectors in the museum, it is often the primary goal for the connectors in the CFC. Furthermore, there are numerous programs that occur within the CFC that reflect a visitor-centered, creative philosophy. Many of these programs are offered on a routine basis, such as Open Studio time each Saturday that features various artmaking activities. However, there are many one-time experimental programs initiated as well (Mostov, 2016). These experimental programs reflect one of Mostov’s (2016) overarching beliefs: in order to embrace the nature of innovation that guides creativity, the CMA should be willing to “try new things all the time” (p.1).

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7 For example, in the summer of 2016 the CMA tried “Think like an Artist” Thursdays in order to target the young professional crowd. On the last Thursday of every month, the CFC staff and the member relations team would pick a theme from the CFC and promote a happy hour event based on that theme. For instance, one of these happy hours utilized a previous Community Gallery’s big idea ‘Spin Art.’ This exhibition was produced in partnership with CD 102.5 and celebrated the memorable art of record and vinyl covers. During this happy hour, drinks were served in the art studio and supplies were available for guests to paint, collage, etc. their own album covers.
Finally, this example highlights an important tenet of the CFC: this hub is designed for “everyone. Anyone. Visitors” (Mostov, 2016, p.2). While the CFC does produce programs with intended age-based audiences: Think Like an Artist happy hours, Young Child Art Studio, and teacher professional development, there is no primary intended audience for the space itself. According to Mostov, the CFC should attract people across all age demographics. In fact, part of the broader adoption of creativity as a lens for learning was that instead of targeting specific age groups, all museum galleries should consider the social and educational needs of visitors in the development of their creativity.

In summation, in 2011, the CFC was the CMA’s first major step toward demonstrating to its community that “an art museum’s value to a community must be more than just a warehouse for great works of art” (Mostov, 2016, p.3) Today, creativity is actively promoted in all facets of the CMA and the CFC acts as a robust hive concentrated with a myriad of experiences. The physical space itself illuminates the great human creativity found in art and is brimming with connectors that should encourage visitor creativity, no matter their age. Mostov (2016) explains, “At CMA we acknowledge that we want our community to see our museum as a place to see great creativity and then be inspired to cultivate their own creativity in different ways. Everyone does not have to be an artist, but everyone does benefit from cultivating creative and critical thinking.” (p.3).

**Participant Observation Findings**

**Who is using the space?** Although I had a cap of no more than 40 observations per 2-hour observational visit, there were two days that I encountered fewer than 40 people
during my entire observation. Thus, my total number of people observed over the course of the four observations was 110. For example, on both the Wednesdays I conducted observations—January, 11\textsuperscript{th} and January 18\textsuperscript{th}—I only observed 15 visitors. This low rate of visitors is likely attributed to the spurious effect of Wednesday being a work day. Meanwhile, while I only officially observed 40 visitors on Sunday, January 15\textsuperscript{th}, I estimate that approximately 100 people entered the space during those two hours. This uptick in visitors was related to the fact that the CMA offers free admission ever Sunday.

Mostov cites that there is no specific target audience regarding age in the CFC. However, these participant observations have indicated a few trends regarding who is actually using its permanent spaces. For example, as demonstrated in Chart 10, the day of the week played a significant role in determining which age demographics were in the CFC at any given time. The likelihood of seeing an individual who falls under the early childhood, early adulthood, or late adulthood category was more or less the same.
regardless of it being a weekend or weekday. Meanwhile, visitors in the middle childhood, late childhood, and middle adulthood categories could often only be found on weekends in the CFC. In fact, no children in the middle and late childhood categories were observed in the museum on a weekday regardless of the time of day. The only exception was that on Wednesday, January 18th, there was a fieldtrip of middle childhood girls from a private all-girl’s academy leaving the CFC as I entered. The lack of weekday childhood representation is likely attributed to these middle and late childhood individuals being in school and then having no means of reaching the museum after school. The lack of weekday middle adulthood visitors is likely due to these individuals being at work during the museum’s regular hours. This lack of working adults in attendance is an issue across the museum, and museum leadership has addressed it by keeping the museum open until 9:00 PM every Thursday.

Another interesting trend is the ratio of children to adults. Forty percent of the observed participants were categorized as children and 60% were categorized as adult. As reflected in Chart 11, there is a fairly even distribution across age demographics, which is in line with the audience goals articulated by Mostov. However, not all age groups were represented equally. For example, ages 19-35 comprised the largest group of visitors, or 33% of all visitors to the CFC. In part, this high volume of young adults can be attributed many of them being caretakers. I observed that children who fell into the early childhood category were always paired with at least one adult visitor, often from the early adulthood or middle adulthood category. It is likely that many of the caretakers with children had arrived at the CMA with the intention to use the CFC. However, there were also many early adulthood visitors without any dependents who entered the space without
hesitancy. Thus, it is worth considering that some of the adults without children who used
the space arrived at the CMA expecting to visit this hub for creative engagement.

Meanwhile, ages 13-18 comprised only 5% of all visitors. While arguably school
played a spurious role in their attendance as well, very few teenagers were observed even
on the weekends. The CMA does recognize this void and has addressed it by offering a
teen-specific program called Surge Columbus. Surge is a Drop-In Studio Time every
Thursday from 4:00 PM – 8:00 PM in which Columbus teens are welcome to join “pop
up events in the Studio and Innovation Lab, experimenting with technology and art
supplies, and just hanging out” (“Surge,” 2017). The success of this program indicates
that late childhood visitors may prefer to visit the museum with people of similar age
than with people of mixed age demographics. This idea is further supported by the fact
that the late childhood visitors I did observe visited the CFC in groups of similar age,
rather than with intergenerational companions. Interestingly, late adulthood visitors also
came either independently or with other companions of similar age. The majority of

Chart 11: Total Participant Observations by Age Group in the CFC
(X-Axis= Age Group, Y-Axis= Number of Visitors)
observed intergenerational groups featured mixes of children in the early and middle childhood demographics and caretakers in the early and middle adulthood categories.

**Passive vs. Participatory Engagement** As demonstrated in Chart 12, children demonstrated a strong preference for participatory engagement. Eighty-six percent of all children that I observed used the CFC in a participatory manner. However, the few children who were observed engaging passively rather than in a participatory way were found in the Community Gallery where there were only two connectors. Meanwhile, the disengaged child visitors in the CFC can be categorized as outliers. They were either so young that they could not leave their mother’s arms do anything, or they were older and walking with purpose to another part of the museum. Thus, I posit that the average child, no matter the age, will opt to engage in a participatory manner if given a sufficient variety of interactive options from which to choose.

![Chart 12: CFC Visitors Observed by Age and Type of Engagement](image)

*Chart 12: CFC Visitors Observed by Age and Type of Engagement (X-Axis= Age Group, Y-Axis= Number of Visitors, Bars= Engagement Types)*
Conversely, adult visitors were much more divided in whether they used the space in a passive or a participatory manner. Fifty-four percent of adults utilized the CFC in a passive manner, while 39% displayed participatory engagement. However, the likelihood to engage in a participatory way dropped significantly after early adulthood. Only 26% of middle adulthood visitors and 13% of late adulthood visitors demonstrated any participatory engagement. While many of the middle adulthood visitors who did participate were caretakers, the late adulthood adults who played an ‘I-Spy’-style game together in the Big Idea Gallery were not accompanied by any children. In fact, there was an interesting trend in some adults across the age groups where they would switch from passive to participatory engagement. For example, I observed two early adulthood women who came into the Big Idea Gallery together. They walked along the hall, looking at the paintings and chatting about them, but never touching the participatory activities.
Then, at the end of the hallway, they backtracked to a connector called the #dogssma gallery. One of the women was really excited and whipped out her phone to upload a picture of her dog to the interactive digital gallery. Thus, by offering a high proportion of connectors, many adults who intended to only look at the art in a passive way, may unexpectedly connect with at least one connector and transition from a passive to participatory engagement.

![Chart 13: Engagement by Area in the CFC](image)

As Chart 13 demonstrates, location often dictated different kinds of observed engagement. For example, adults who were caretakers demonstrated high levels of semi-engagement in the Wonder Room. As an enclosed space with activities that were usable for even extremely young children, there was a tendency for caretakers to treat the Wonder Room as a play-pen. Whether passive or participatory, some adults would do just enough to make sure the child they were with was occupied, and then spend the rest of their time on their phone or talking with an adult companion.
Meanwhile, the Big Idea Gallery and the Community Gallery saw the highest levels of passive engagement, largely due to their more traditional gallery arrangements and high proportions of static art components. In fact, the activity in the Community Gallery was almost entirely passive and often semi-engaged. While I think the passive behavior can be attributed to the lack of connectors, I suspect the primary reason for semi-engagement was the gallery’s location by the stairs. Many people were walking through the area to get to other parts of the museum and would only stop briefly to look at the art in this section. Finally, the behavior in the Creativity Lounge was almost exclusively participatory because it functioned more like a drop-in studio than a gallery. Although a few visitors would stop to look visitor creations on the wall, the majority of people who spent time in that gallery chose to do so because they wanted to engage with the activities occupying the space.

Chart 14: Types of Engagement in the CFC
As illustrated by Chart 14, more than half of visitors demonstrated participatory engagement. Overall, 58% of observed visitors displayed participatory engagement and 35% of visitors exhibited passive engagement. Although 11% of visitors fell under the semi-engaged categories, this choice half-hearted engagement can be attributed to haste toward another part of the museum, or the play-pen phenomenon in the Wonder Room. The important takeaway is that most visitors are using the CFC by engaging in the participatory connectors curated by Mostov and her team. Meanwhile, 35% of visitors elect to only use the space in a passive way. Although participatory engagement is perhaps the primary focus for the CFC, it does not scare away visitors who seek only a traditional gallery experience. In fact, the CMA often capitalizes on its mixed-base of CFC visitors by actively marketing both the static artwork and the interactive elements of each exhibition hosted in its galleries. However, the Community Gallery struggled the most to achieve full visitor engagement, particularly participatory engagement. Thus, CMA leadership may want to consider modeling future Community Gallery exhibitions with a higher proportion of connectors. It will help to attract and retain more visitors and offer more means of appreciating the artistic talents and ideas of fellow community members.

**Types of Play** In direct correlation to the trends for participatory and passive engagement, children were more likely to exhibit at least one kind of play and adults were more likely to exhibit no play. As depicted in Chart 15, there is a strong upward trend that the older in age a visitor is, the less likely they are to play. In early and middle childhood, an overwhelming majority of visitors played. Then, a shift began in late childhood where 66% of visitors played and 33% did not. However, the major tipping
point from being more likely to play to less likely to play occurred between early adulthood and middle adulthood. 57% of early adulthood participants played while 43% did not. Conversely, play by middle adulthood participants was a mere 26%. Finally, the gap grew even wider with only 13% of late adulthood visitors demonstrating behaviors of play. These statistical findings also reflect the qualitative observations I took regarding behavior and attitude. Starting around middle childhood, the younger a visitor was, the less intimidated they seemed to be to play in front of others. While many early adulthood visitors demonstrated enthusiasm for play, it seemed that middle adulthood and late adulthood visitors were disinterested or slightly uncomfortable with public play.

Chart 15 illustrates that most adults who play in the CFC demonstrate social play. Often adults who did participate in the interactive components of the exhibition were reliant on playing with another individual. Regularly, this other individual was a child, but there was also a trend of adults who would still play if accompanied by another adult of a similar age. This trend is particularly telling when considering instances of social
play. Of all the adult visitors who did play, 82% demonstrated social play. In other words, the vast majority of adults did not play by themselves. Early and middle childhood visitors also preferred social play over no social play in their interactive components, but comparatively demonstrated much higher rates of play without a companion. I observed that these younger visitors would often try a wide variety of play-based activities during their time, especially in the spaces with a higher variety of interactive components. Their focus was often on trying the most activities, which lead many children to opt to play independently rather than have a play companion. Interestingly, 66% of late childhood visitors played without a social component. These children demonstrated an ability to complete more complex activities in silence either alone or without interacting with their companion(s).
After the observational visits, there were three kinds of observed play that stood out over the others: social play, object play, and creative play. Together, they accounted for 86% of all play observed. The large amount of social play, one third of all observed play, can be attributed to the fact that many interactive components of the CFC are adaptable to both independent and group-based play. Meanwhile, the CFC has a high proportion of object-based activities and art-making activities. Together, they have led to many instances of object play and creative play respectively. Furthermore, many of the activities in the CFC utilize more than one type of play. For example, the Drawing with Friends activity in the Creativity Lounge primarily embodies creative play, because it encourages the participant to use their imagination and connect the image they created to other images already on the board. However, I observed many visitors utilizing both...
storytelling play and social play as well as they worked with a companion to create a story behind how their images connected. Finally, there were no specific activities that required pretend play or movement play to complete. However, one could argue that the Wonder Room—with its fantasy forest and tree house—is a space that encourages open-ended versions of pretend play and movement play to occur. For example, I observed children climbing upon and around the different tree stumps that fill the space, and I witnessed other children playing a game of their own invention in which they were princess kittens and the tree house was their castle. However, no adults participated in these kinds of play and in general they happened quite infrequently; combined they accounted for 5% of all observed play.

**Time** Due to the rotational nature of my observational schedule, it was impossible for me to track the average length of a total visit to the CFC. However, I did gain insight to the average amount of time a visitor spent in each of the four observed permanent spaces. On average, visitors about 10 minutes in the Big Idea Gallery, 14 minutes in the

![Picture 19: The tree stumps and 3-D puzzles in the Wonder Room (Columbus Museum of Art, 2017b)](image)
Wonder Room, 13.5 minutes in the Creativity Lounge, and 5 minutes in the Community Gallery. There is a discernable trend of visitors spending shorter periods of time in each space on weekdays and longer times in each space on the weekends. This pattern may simply be reflective of visitors having more time overall to spend in the museum on weekends than on weekdays.

As demonstrated in Chart 18, these average times were reflected somewhat differently across age groups. The main exception was the Community Gallery, in which every observed age group averaged close to 5 minutes in the space. This uniformity is likely caused by the fact that many people who visited the Community Gallery did so with at least one other companion, often in larger, intergenerational groups. By virtue of its location by the stairs, these groups would leave the gallery all at once, which created a

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8 Times are rounded to the nearest .5 minute.
uniformity in average time despite age. The average times in the Big Idea Gallery was also fairly uniform across age groups, but it was the result of two different factors. First, the older visitors often took their time, walking slowly as they observed and discussed the artworks in these areas. Second, participatory visitors across the age groups would typically engage in only 1-2 activities, each for about five minutes a piece. There was an exception among many early childhood and middle childhood visitors who would try to engage with as many activities as possible before moving to the next space, thus elongating their average time in the gallery. Finally, caretakers—who often occupied the middle adulthood or early adulthood categories—typically had longer averages times in the Creativity Lounge and the Wonder Room. Again, this trend is another result of the play-pen effect in which parents would stay in these area as long as the children wanted to because it was an easy area to keep an eye on them. Those without young dependents—often late adulthood children and early adulthood adults—would spend much shorter periods of time in these spaces.

The play-pen effect is further illustrated when one considers the average amount of time in each area based on engagement type. As one can see in Chart 19, semi-engaged visitors of both the passive and participatory variety spent similar amounts of time in each space as those who were fully engaged in a participatory manner. Meanwhile, fully-engaged passive visitors actually averaged shorter times in each space. By choosing not to engage with any of the connectors, these times reflect approximately how much time it would take in each space to view the displayed art. Finally, disengaged visitors all averaged around 7 minutes in each space. They were often accompanying companions of
102 different engagement types, but were more apt to abandon these companions for another part of the museum if they were taking an extended period of time in any given place.

Conclusion

All in all, the CMA has been very successful in achieving the goals stated by its curator, Mostov. The permanent spaces of the CFC do attract people of all ages and engage them in a wide variety of experiences. In fact, it is nearly impossible to summarize what an average visit looks like in the CFC. For example, not every visitor visits all parts of the CFC. Some will linger in one area for a while and then leave, while others may visit two or three areas in rapid succession. Furthermore, there are often open studio activities or temporary exhibitions opened in the additional rooms of the CFC, which further complicates what an average visit might look like.
However, when considering programming, there is a potential conflict of interest between the goal of offering a wide variety of opportunities that engage visitor creativity and the goal of making the CFC appealing to all ages. Many programs offered by the CFC are age specific. For example, Surge Columbus is intended for teenagers, young child open studios state their intended audience, and Think Like An Artist Thursdays includes a Happy Hour, which requires visitors to be over-21 to enter. Thus, while the permanent spaces of the CFC attract visitors across generations, programming is often very targeted in nature. There are certainly merits to this approach. Some visitors may feel more comfortable in groups of a similar age, or some activities may simply not appropriate for all age groups. Thus, individual acts of exclusivity may ultimately create an overall hub of inclusivity because it creates homogenous spaces where visitors may feel most comfortable engaging in creativity. Nevertheless, if, as Mostov states, the adoption of creativity as a lens for learning means eschewing specific age groups as target audiences, then CMA leadership should carefully consider the purpose of any future age-based programming.
Chapter 6: Constructing a Framework for Hubs for Creative Engagement

Both postpositivist and interpretivist ontologies and epistemologies emerge in my data collection and analysis of both the Wonderkamers in the Gemeentemuseum, and the Center for Creativity (CFC) in the Columbus Museum of Art (CMA). Postpositivist procedures exist throughout the methodology of the study – I relied heavily on postpositivism for my quantitative analysis. My use of statistics to approximate the “truth” of the visitor’s engagement was influenced by postpositivism, and I was most comfortable with those methods throughout the data analysis. Interpretivism, however, was evident in my qualitative analysis. I was very cognizant of my biases and of the lens through which I interpreted the data. I also recognized that my observations may not exactly reflect what the visitors noticed or valued, so it became essential for me to juxtapose my observational notes and the interviews to get a complete picture of the visitor experience.

In considering practical implications of this research, I discovered three major categories of effect. First, as I compare the following aspects of each hub for creative engagement I will also relate how the following aspects connect to the relevant literature:

- the curator’s understanding of creativity and innovation as it informed the creation of these hubs
- the seemingly opposing techniques for exhibition design
- the similarity and differences regarding visitors and their behavior
The second section will consider the implications of these results for museum leadership at the Gemeentemuseum and the CMA and how it may inform their future goals for their hubs for creative engagement. The final set of implications I identified are relevant for the leadership of any large regional art museum that may want to implement a hub for creative engagement. Using these implications, I answer the primary research question of this study: How do art museums with primarily regional audiences implement hubs for creative engagement? The answers to this question will be used to adapt Sinek’s ‘golden circle’ into a framework describing the process, activities, and outcome for all hubs for creative engagement.

Part 1: Implications Based on Literature

Defining Creativity and Innovation Despite the fact that the CFC and the Wonderkamers both foster visitor creativity, their curators understand the role of creativity in very different ways. It is worth reflecting whether national conceptions of innovation and creativity correlate at all with each curator’s respective understanding and use of creativity and innovation. First, it was established in the literature review that both Dutch and American culture value innovation and creativity (Barlow, 2008; Didero, 2008; ‘European Digital,’ 2015; Fingleton, 2013; Herbig and Dunphy, 1998; Hisham, 2015; Kaufman, 2013; Lichtenberg, J., Woock, C., & Wright, M., 2008; Ministry of Economic Affairs, 2009). Then, it was found that the Netherlands and the United States understand innovation in largely the same way. This study relies Ezell and Marxgutt’s (2015) Litchberg et al.’s (2008) understandings of innovation. As I have defined, innovation is the implementation of a new or significantly improved idea that creates
value for business, government or society. In order words, innovation is not about formulating new ideas, but the strategy by which these ideas are enacted.

Van Overeem’s (2016) definition of innovation, or “an experience that is completely new for people,” focuses on how innovation affects the public rather than how it is generated (p. 3). Conversely, Mostov (2016) explains that at the CMA, “we don’t focus on the innovation word much but in general we think of innovation as a form of creativity that really changes the world as it is or brings a new value to something” (p.2). It is clear that van Overeem (2016) is concerned with how the Wonderkamers can be innovative for visitors. Meanwhile Mostov (2016) is attentive to how the CFC can foster the appropriate creative skills so that its visitors can enact innovation in the outside world.

In the literature review, I found that in both the United States and The Netherlands creativity is understood as the process of generating of new ideas. In America, many of the skills that can be used to foster creativity—brainstorming, problem-solving, collaboration, etc.—have historically been considered very valuable. However, it is only very recently that policymakers and employers have credited the process of ideamaking to creativity. Today, American definitions of creativity often focus more on how its informs the originality and utility of an idea (Kaufman, 2013). Meanwhile, the Dutch Ministry of Economic Affair’s (2009) consider creativity to be the tool that gives an idea significance and worth, often associating creativity with economic success. Because these national understandings of creativity are slightly different—idea worth versus idea originality—I chose to define creativity as a process that generates ideas that are both new and significant.
Mostov (2016) considers the fostering of visitor creativity to be the ultimate goal of the CFC. She defines it as the “process of imagination and critical thinking to generate new ideas that have value” (Mostov, 2016, p.2). This definition largely matches how I have defined creativity and how it is accepted in American culture. Van Overeem (2016) defines creativity somewhat differently by deeming it “the inspiration to make things yourselves or inspiration for new notions and ideas” (p.3). By acknowledging the idea making process, it can be inferred that Van Overeem believes that creativity is a factor that can contribute to innovation, but it does not seem that Van Overeem agrees with my definition of creativity nor the overarching Dutch understanding of the term. While she does explain that creativity can inspire new ideas, she does not attribute it to the idea-making process and does not discuss the value or worth of those ideas. Thus, it is unsurprising that Van Overeem does not consider visitor creativity to be the main objective of the Wonderkamers. Instead, Van Overeem (2016) explains that the Wonderkamers “stimulate engagement with the museum and art… it could change your notion of what a museum is or what art means to you” (p.4). While visitor creativity is a byproduct of the activities in the Wonderkamers, visitor learning and engagement are expressed as the space’s primary outcomes.

The curator’s different conceptions of innovation and creativity align with the specific missions of each hub for creative engagement. The goal of the Wonderkamers is to engage the visitor with the museum’s collection in an innovative way that will teach them to value the museum and its art. However, the strategies the museum used to make Wonderkamers an innovative experience often inadvertently foster visitor creativity. They necessitate the generation of new ideas and often rely on the creative skillsets that
are utilized in the process of creativity. Meanwhile, the CFC is very overt in its mission to be a space fosters visitor creativity. In its report to the Columbus Foundation (2015), the CMA explains that the CFC “celebrates the process and results of creativity and provides opportunities for people to discover the value of creativity in their own lives” (p.6). Thus, both hubs generate visitor creativity through play and other forms of engagement, but in one instance it is inadvertent and in the other instance it is purposeful. In either case, both the CMA and the Gemeentemuseum share the same long-term goal for their hub of creative engagement: community engagement. By providing a space to develop vital skills, or by using these vital skills to educate visitors about the value of art, both museums are demonstrating to their visitors their relevance to their community.

**Exhibition Design** The Wonderkamers and the CFC are both the enacted results of new ideas of how to use gallery space to educate and engage visitors. Thus, both can be considered innovative exhibitions. However, the Gemeentemuseum and the CMA took very different routes in the implementation of their hubs for creative engagement. The Wonderkamers are reliant on a highly directed form of engagement. Every participatory journey through the exhibition had a beginning and an end with clear instructions along the way. As soon as visitors receive their tablet, their experience was largely dictated for them. The tablet told the visitors each room they would visit, instructed them to do very specific activities in each room, and designated points based on the successful completion of each activity. With every activity, a visitor could be ‘right’ or ‘wrong.’ While this tendency often played out in trivia questions, the tablet would also report progress on more organic activities, like the visitor’s accuracy as they mimicked movement instructions in the ‘Dance the Victory!’ game.
Despite being an innovative exhibition design, the Wonderkamers largely represents Bradburne’s (2004) traditional understanding of the museum as a teacher. In this setting, engagement with objects is based on instruction and explicit learning. Bradburne (2004) notes that technology exhibitions often resemble textbooks with intrinsic ‘right answers’ which, “once discovered, exhausts the potential for further visitor interaction” (p.88). However, the Wonderkamers does defy Bradburne’s expectation that such learning will not demand any active participation. Furthermore, the activities in the Depot Gallery and the Miniature Museum in the Wonderkamers were slightly less directed. While these activities had an overall goal—choosing art and then curating a digital exhibition—visitors had more flexibility in how they could accomplish this goal. There were no ‘wrong’ answers regarding which pieces of art they chose or how they arranged them in their exhibition. By offering an open-ended activity, the museum facilitates indefinite learning and enables various ways of manipulation, but in the process it sacrifices the ability to enforce highly specific learning outcomes.

Meanwhile, all of the activities in the CMA were much more open-ended in nature. This point of view largely embodies Hein’s (1998) and Bradburne’s (2004) understanding of visitor-centered museums. Hein (1998) argues that exhibits function best when they relate to visitors’ prior interests rather than solely relying on the intention of a curator. While some activities featured a few guiding instructions, other activities—like a pile of blocks—would have no instructions whatsoever. The CMA also has no accountability mechanism for its visitors. Visitors could enter any part of the space at any time, choose to do any activity that they fancied. This open-ended experience embodies Bradburne’s (2004) principle that museums are meant to allow visitors to make choices.
rather than merely being presented with information. By taking the visitor’s competence and abilities seriously, the museum creates opportunities for the visitor to actively shape their experience.

What mainly dictates the choice between an open-ended or a directed choice for engagement is how much a museum wants its visitors to be explicitly aware of each activity’s learning outcome. Because visitor learning is the primary goal in the Wonderkamers, designers opted to enact checkpoints that ensure that the visitor is fully engaged in each activity and achieved the desired learning outcome by doing so. For example, the learning goal of the activity ‘Dress Up!’ was to understand the different design elements that defined each era of women’s fashion from the 18th to the 20th century. At the end, there was an activity to design an outfit for one’s self, but the outfit was graded on a scale of 1-4, based on its historical accuracy. Thus, a visitor must pick the ‘right’ clothes for an era for their avatar in order to ensure full points to later spend on art for their gallery. The CMA also has specific visitor learning outcomes for each activity. However, perhaps owing to its primary emphasis on visitor creativity over visitor learning, there are no incentives in place to force the visitor to achieve said visitor learning outcomes.

Despite opposing preferences for directed and open-ended activities, both museums included participatory and passive elements in their hubs for creative engagement. The curators often made design choices that associated participation with creativity. In fact, the most promoted components of each hub to the public were often the interactive ones. However, there were still galleries within each hub that were structured with a high proportion of static elements, such as galleries of paintings. There are many advantages
to have a mix of passive and participatory elements. First, the gallery spaces offer a fulfilling experience to visitors that would prefer passive engagement. Second, they provide a means for visitors who are uncomfortable with play to be surrounded by participatory activity and still have a gratifying visit. Third, it encourages visitors who prefer a participatory experience to become more comfortable with the passive museum experience and thus more willing to engage with the more traditional galleries located in the other parts of the museum. By providing a range of experiences in one space, visitors will learn that there is no singular way to learn about art and to foster creativity, which will hopefully teach them over time that there is value in both forms of engagement.

**Visitors and Visitor Behavior** Despite having differing goals for these hubs for creative engagement, the CMA and the Gemeentemuseum experienced largely similar results regarding participants and their behavior. First, both exhibitions were open to visitors of all ages. However, the Wonderkamers was designed with a target audience of the middle childhood demographic, while the CFC was designed with the intention of attracting all ages. The result was that the Wonderkamers were most successful in attracting the category being targeted, but also saw visitors from across all age demographics. In fact, the Wonderkamers saw nearly double the number of adult visitors in the middle and late adulthood categories than the CFC. Nevertheless, the Wonderkamers attracted very few children in the other two demographics. While the CFC also saw low numbers of late childhood visitors, this hub had a much higher rate of early childhood visitors. This trend is largely attributed to the choice for open-ended rather than directed forms of engagement. The Wonderkamers adventure was not developmentally appropriate for children of a very young age, while the CFC —
particularly in the Wonder Room—had activities that children as young as a year old could undertake.

When combined into the singular Chart 20, hubs for creative engagement are particularly attractive to adults in their early adulthood. Perhaps this trend is due to the fact that adults in this demographic have the most to gain for a hub for creative engagement. In addition to providing a space to bring any potential children or other young companions, participation in hubs for creative engagement can help adults to develop and cultivate essential life skills for inventive thinking—curiosity self-direction, higher-ordering thinking, and creativity (NCREL & Metiri Group, 2003). Inventive thinking is highly prized in the 21st Century business world and mastery of any of these skills will provide adults a cutting edge in the workforce. By being in a space that fosters both learning and creativity, hubs for creative engagement are even more vital for the working segment of a museum’s community.
Meanwhile, there was an extraordinary lack of children in their late childhood who visited these spaces. Are art museums missing an opportunity to reach the cross-section of young people aged between 13 and 18? The American Association of Museums found that in focus groups that discussed Nina Simon’s model of “participatory museums” and how modern museums are experimenting with innovative, engaging and participatory practices “these experiments in museum practice didn’t appear on the radar screens of either the college-educated or teenage participants” (Farrell and Medvedeva, 2010, p.26). However, these age demographics are representatives of the diverse American population of the present and the future. I support Farrell and Medvedeva’s (2010) later argument that as museums take on expanded roles as “community centers, leading civic institutions, informal learning environments and canopies that can stretch more widely to encompass diverse individuals and communities” this population is prime target for museums to attract. Perhaps this visitor age group lacks time or the necessary transportation by which to visit. However, I suspect relevant marketing may be a major factor: this age group may not know these hubs specifically target them or, do not even know the museum or hub exists.

After examining who was visiting each hub, it is now worth comparing how visitors participated in these spaces. By comparing Chart 21 and Chart 22, one can see that even the Wonderkamers employs highly directed engagement techniques and the CFC employs largely open-ended opportunities for engagement, the actual engagement demonstrated by visitors was almost identical. In both spaces, just over half of visitors were engaged in a participatory way, a little over a third were engaged in a passive manner, and between 7-8% of visitors were completely disengaged. This data reveals that
the majority of visitors will choose to participate, regardless of if that participation happens in a directed or open-ended manner. This finding supports growing evidence in the field of museum studies that visitors are eschewing the traditional model of the museum experience as passive observation and shifting to active, interpretive engagement (Farrell & Medvedeva, 2010; Liu, 2013; Savage-Yamazaki & Murrell, 2015; Simon, 2010).

Nevertheless, I assert that it is still important that these hubs for creative engagement embrace the needs of the passive visitor as well as the participatory one. Despite the fact that the traditional galleries found in the Wonderkamers were not as well-advertised as the hub’s interactive components, they still attracted an almost identical number of passively engaged visitors as the CFC. Play is not the only means by which new ideas can be generated, and having a mix of passive and participatory components can make a hub for creative engagement a more versatile and a more accessible space. It not only makes visitors with strong passive engagement tendencies
more comfortable entering a space primarily filled with participatory visitors, but it will also make more components accessible to visitors who cannot participate. For example, I observed an individual in a wheelchair who could not reach entire areas of the Wonderkamers and thus was relegated to navigating the passive galleries with a companion. While maintaining passive components is not an excuse to not continue to look for ways to make the participatory components more accessible to all, this example is a reminder that sometimes a passive experience best fits the needs of a visitor during that particular visit.

As demonstrated by Charts 23 and 24, the play that was demonstrated by participating visitors was not as consistent between the two case studies. Both hubs for creative engagement saw social play as their most popular form of play. However, in the Wonderkamers social play occurred more than any other type of play combined. This trend is again the result of the highly directed nature of the exhibition design. At the beginning of the participatory adventure, visitors are instructed to pair up if possible. While it is possible to complete each activity alone, each interactive component is
intentionally designed to accommodate the interactive play of two people. Meanwhile, in the CFC the grouping process was much more organic. Without any sort of directive to get from ‘Point A to Point B’ like there was in the Wonderkamers, visitors in the CFC seemed to largely be guided by self-interest. Groups would form and dissolve throughout the visit to the CFC. Sometimes visitors would come together to complete an activity like a board game, but then part ways because one member wanted to draw and two others wanted to do a puzzle.

Thus, the Wonderkamers employs social play as a primary tool for ensuring visitor learning and engagement, while the CFC treats social play on par with any other form of play. Nonetheless, both museums are intentionally creating activities that will tempt visitors into social interaction. The importance of social interaction between visitors is further supported by a study in Australia in which school age children were observed in order to assess the quality of interaction between peers, their supervising adults, and the museum exhibition they were visiting (Aubusson, Griffin, Steel & Watson, 2002). Aubusson et al. observed that interactions with their peers encouraged more exploration of the exhibition, increasing the possibility that learning might occur.

The CFC had five times more instances of object play than the Wonderkamers. This trend is attributed to the use of technology in the Wonderkamer’s exhibition design. The Wonderkamers are highly reliant on technology in the completion of its accompanying activities. For example, all drawing and design activities are completed either on the tablet or on other screen in the galleries. There are no usable artmaking supplies available. Because the Wonderkamers are committed to having a measurable outcome that can be tracked via points, it shies away from any activities that are not
trackable. Conversely, the CFC has very little digital technology incorporated into the exhibition. Many of the most open-ended activities are reliant on visitors manipulating objects. According to Rachel White (n.d.) in her report, *The Power of Play*, object play encourages visitors to “experiment with different behaviors—build new block towers, create new shapes in sculpting clay—which help them develop the creativity and strategies necessary to successfully tackle novel problems” (White, n.d., p.12). Thus, the CFC may have chosen to have a higher proportion of object-based activities because they contribute to the development of creative problem-solving skills.

When considering the types of play from the two case studies, as combined in Chart 25, it is clear that creative play also has a significant presence. While many of the other types of play help to develop the skills that are necessary for creativity, creativity play is the actual process of creativity and necessitates idea-making in order to be completed. Hence, even though visitor creativity was not attributed as a primary goal for
the Wonderkamers, it was being accomplished through individual activities, such as the visitor’s curation of a new digital exhibition. Arguably, story play also relies on the ideamaking process. However, there were markedly fewer instances of it being offered in the Wonderkamers and of people engaging with this play in the CFC.

Finally, there were very few instances of pretend and movement play in either hub for creative engagement. I think these are just more difficult types of play to curate. They require the highest levels of participation—either mentally or physically in order to be successful. These kinds of play are often resulted from open-ended participatory engagement initiated by the visitor. For example, in the Wonderkamers there were a few children who used the seating structures in the Entrance as a playscape for jumping around without any sort of explicit direction. Meanwhile, there were no directions in the CFC that encouraged visitors to move or to pretend. Instead, there were resources—such as a tree house—that was optimal for visitors that wanted to climb around or invent imaginary scenarios. However, I witnessed very few children and no adults actually engage in that kind of play of their own accord.

However, I am not sure that it can be argued that adults simply do not engage in movement or pretend play. In a recent study by Maria Robinson (2016), results showed that adults do play in participatory exhibits, and that “they engage in various types of play, typically favoring body/movement play” (p.3). Interestingly, two of the most-visited tasks in the games and tasks galleries—Dance the Victory! And The Catwalk—were based on movement and pretend play respectively. Thus, it seems that a museum needs to provide slightly more direction to convince visitors to engage in these more physically and mentally demanding forms of engagement.
Part 2: Implications for Future Goals of the Wonderkamers and the Center for Creativity

Most of the implications that reflect the effectiveness of these hubs for creative engagement emerged in the participant observations. However, at the end of my written interviews with Van Overeem (2016) and Mostov (2016) I asked the following question: Are there any aspects of the exhibition that you think could be improved? Both curators provided specific goals that they would like to implement in their respective hubs for creative engagement to increase visitor impact. The following discussion will examine these goals and how my observations can inform their future implementation.

The Wonderkamers Now that the Wonderkamers has existed in its current form for four years, Van Overeem (2016) is already thinking about new ideas for “Wonderkamers 3.0” (p.4). The first change that she would like to see highlights the highly directed-nature of the Wonderkamers: “a system that makes it possible to only play certain thematically linked rooms” (Van Overeem, 2016, p.4). Visitors could customize visits based on certain thematically-linked rooms, such as the Mondrian rooms or the fashion rooms. In the context of my observations, I think that shorter, thematic trips through the Wonderkamers are an optimal solution to the trend I observed of adult visitors without children being surprised by the existence of the Wonderkamers. These short thematic trips into the Wonderkamers could be tactfully advertised in on near their galleries in the museum’s permanent collection. In fact, I suggest that the Gemeentemuseum leadership consider tying these shorter experiences in the Wonderkamers to an advertised thematic tour throughout the museum. Such a tour may entice passively engaged visitors who are interested in the topic of the tour to try the
relevant participatory activities. Furthermore, it is a more focused opportunity for the Gemeentemuseum leadership to execute its goal for the Wonderkamers to stimulate engagement with the museum and art.

Van Overeem (2016) is also interested in introducing augmented reality features. While Van Overeem does not go into specifics of this new addition, Randy Rieland (2012) for Smithsonian writes that augmented reality is “the notion of enhancing objects in the real world with virtual sounds and images and additional info (para 2). Today, augmented reality is typically offered through smartphones and tablets, but Rieland predicts soon it will be through wearable tech. Overall, visitors who participated in the Wonderkamers responded well to its heavy use of technology—videos, tablets, digital games, digital galleries, etc. Consequently, introducing the latest technology as a tool for visitor engagement, will continue to meet the Van Overeem’s goal for the Wonderkamers to be an innovative space. It could also be a useful opportunity for Van Overeem to reconsider the current role of creativity in the Wonderkamers. Rather than treating creativity as a by-product of visitor learning, Wonderkamers 3.0 could introduce some open-ended augmented reality activities that will allow visitors to explore the new technology and develop related creative skills in the process.

Furthermore, Van Overeem communicated that she would like to harness the full potential of technology-based activities by programming them to quantify their own effectiveness. In essence, she would like to implement a “system that can generate data and statistics on the players as to exactly how many and their ages and the most popular days and times” (Van Overeem, 2016, p.4). Van Overeem does not specify exactly why she would like this data, but I posit that such data will be useful for future grant
applications and the formulation for a new exhibition design for the Wonderkamers. Given the fact that my four observations revealed a participating audience that was much more diverse in age than their target audience, I am certain this system will clarify who is actually using the Wonderkamers. Then, Van Overeem and her team can design a Wonderkamers 3.0 that meets the needs of this verified audience.

Finally, as a stated in Chapter 4, Van Overeem (2016) is also considering adding a tour for children aged 4-9 in the Wonderkamers. Based on my observations, the Wonderkamers are not currently attracting many children in the early childhood demographic. In part, I think that parents and caretakers are hesitant to bring children in this demographic to the Wonderkamers because many of the activities are not age appropriate for very young children. For example, the tablet and many of the tasks Games and Tasks gallery require the ability to read. Thus, if a targeted tour can modify activities to be accessible for young visitors, then I think it is worthwhile endeavor for the museum to undertake. I also recommend that more forms of object play and movement play be incorporated into the directed activities of the Wonderkamers. Many early childhood children in the CMA demonstrated a preference for these kinds of play, which is why I think they will attract and interest the young members of this new target demographic.

**Center for Creativity** Like Van Overeem, Mostov also has visions of how to evolve her museum’s hub for creative engagement. In fact, in the fall of 2017—Mostov (2017) and her team will be reinstalling the Wonder Room with “an entire different look/feel/art theme that utilizes works of art from many countries in a respectful manner” (p.3). After observing relatively high levels of semi-engagement and disengagement each day in the Wonder Room, I also support that this space is ready for a makeover. After
observing many instances of the play-pen effect in the Wonder Room, it is quite possible that caretakers bring their children to this area on a repeat basis. Thus, these caretakers may now be disinterested in participating with their children because the exhibition has remained largely unchanged for a few years. I also think that a participatory exhibition that relies on multinationalism is innovative because it will invite visitors to develop their knowledge of our globalizing society. While perhaps not an obvious tool, globalization is a lens to understanding creativity that is of growing importance for the 21st century (Renzulli, 2016).

Mostov also has many specific ideas for the improvement and expansion of the center itself. For example, Mostov (2017) lists three specific spaces she would like to use in “a more creative and imaginative way” (p.3). First, Mostov suggests that perhaps the Forum would benefit from an artist installation with more hands-on making space. I observed that such hands-on making activities—Legos, nest building, etc.—were often the most popular kinds of activities that visitors chose to do. I also observed that galleries with a more even mix of interactive and static activities—like the Big Idea Gallery—were more successful in attracting both participatory and passively engaged visitors than galleries with a low proportion of interactive activities—like the Community Gallery. Consequently, I think that artmaking activities are a sound idea to incorporate into a future artist installation, but will be most successful if there are multiple choices for interactive activities within the gallery as a whole.

Second, Mostov (2017) suggests adapting the middle hallway that connects the Community Gallery and the Big Idea Gallery with an artist installation as well. I think this area is a worthwhile space to address the observed lack of late childhood visitors.
Although the Innovation Lab is already a space for teen visitors to convene, it is shut off from the other parts of the hub. This small gallery space could be transformed into an area for teens to curate their own exhibitions, or display art that they create through their programming with SURGE Columbus. Teen arts councils are proving an effective way of cultivating young leadership in art museums (Neustein, Linzer, Waite, Horisaki-Christens, & Rogers, 2015). A small gallery, such as this space, would be a manageable responsibility for a group of teenagers and it would encourage them to develop a wide variety of creative skills—critical thinking, imagination, collaboration, etc.—in the process.

Third, Mostov (2017) suggests “hacking the vestibule spaces between the Center for Creativity and the Atrium” so that it can be used in an imaginative way rather than just a pass-through area. As demonstrated by the success of the Wonderkamers, technology and extended directed adventures have both proved to be successful means of engaging visitors in a participatory manner. Consequently, in this area outside of the CFC, Mostov and her team could introduce a permanent augmented reality activity. For example, there could be station to set up an app on one’s smart phone for some sort of scavenger hunt throughout the CFC. The more structured and directed experience would supplement the current open-ended experiences of the CFC and encourage visitors to navigate the CFC in an intentional way. Furthermore, by asking visitors to use an app in order to accomplish the experience, museum leadership would potentially have an avenue to collect data regarding who is participating in the activity.

Finally, Mostov (2017) would like to “improve acoustics in the Big Idea Gallery by adding ceiling additions or textiles to the floor” (p.4). Based on my observations, this
gallery was significantly busier and more crowded than any other observed part of the CFC. In fact, there were times during the Sunday observation that I felt a sense of claustrophobia in the space due to the cacophony of sound and the relative narrowness of the walkways. Although hubs for creative engagement should provide the space and the ability to foster many kinds of creativity—both loud and quiet kinds—the acoustic installation will not discourage more exuberant guests from expressing themselves, but it may help to alleviate feelings of sensory overload for guests that prefer a more peaceful environment. Therefore, I believe that such an acoustic installation will benefit this gallery by increasing its accessibility for guests of many sensory dispositions.

**Part 3: A Framework for a Hub for Creative Engagement**

I began this thesis with a definition for a hub for creative engagement as: a space that provides opportunities for visitors to foster creativity through participatory engagement. I then identified two case studies for further analysis that seemed to embody this definition. Returning now to Sinek’s ‘Golden Circles’ model from Chapter One, this information answers his first outer circle: *what* does a hub for creative engagement do? I then sought to review literature, collect data, and analyze results to uncover ways of addressing the middle circle/ my primary research question: *how* do art museums with primarily regional audiences implement hubs for creative engagement? Despite their differing goals, exhibition design, and geographic locations, I found clear commonalities between the Wonderkamers and CFC. To now answer this driving question, I have adapted Sinek’s model into a framework that illustrates *how* a hub for creative engagement is implemented. This framework is not just for the CFC and the Wonderkamers. It is applicable for any art museum that is interested in adopting one of
its galleries into a hub for creative engagement and meets the specific criteria that I have delineated.

**Conditions** First, I will consider the conditions that are necessary for a hub for creative engagement to exist. It is important to understand that this framework is intended for a large regional art museum with a primarily local audience. In a large, national museum like the Metropolitan Museum of Art, or the Rijksmuseum, most visitors are tourists. While tourists certainly can participate in educational programming, their visits are brief in nature and they are not a part of the surrounding community. As will be addressed later, the long-term outcome for a hub for creative engagement is community
engagement. Thus, this is a tool intended for museums who depend on, or want to increase their local or regional visitors who make repeat trips to the museum.

As Sandell and Janes (2007) explain, these national museums that are “steeped in tradition and relatively privileged as a result of their widely recognized social status within society,” may find it more difficult to enact second curve thinking (p. 7). Second curve thinking is a concept first created by Charles Handy (2014), who argues that organizations and businesses should initiate change at the point when everything appears to be still going well, rather than waiting for evidence of decline before acting. The comparatively smaller size and audience of regional museums like the CMA and the Gemeentemuseum made it easier to take risks through experimentation and customize a hub for creative engagement that ultimately benefits both the museum and its surrounding community.

Furthermore, creativity must already have cultural value to warrant an entire space in an art museum dedicated to its development in visitors. As discussed in the literature review, both case studies are situated in national cultures where creativity and innovation are already being promoted as vital attributes for classrooms, workplaces, and even the national government (Ezell & Marxgutt, 2015; Lichtenberg, Woock, & Wright, 2008; Ministry of Economic Affairs, 2009; Woodruff, 2013). In other words, a demand for creative skills must exist in the surrounding society. It will mean that visitors of all ages will be seeking opportunities to further engage and develop their creative skills. A hub for creative engagement can then supply visitors with these opportunities and in return the museum will reap the benefits of increased audience engagement.
For this exchange to be successful though, museums must already hold a degree of social significance to its visitors (American Alliance of Museums, 2016; DSP Groep, 2011). Hubs for creative engagement should be considered supplementary editions to museums, not the entirety of the museum. In both case studies, the hubs for creative engagement relied on the permanent collections of their museum for their static components and many of their interactive activities fostered the visitor’s critical appreciation for art, a skill that can then be employed anywhere in the museum. If visitors are not interested in visiting the rest of the galleries, then the full potential of the hub is lost. Like a heart, the hub may function as a central place of activity, but it ultimately needs to deliver visitors to the other parts of the body of the museum, otherwise the museum may not survive.

Finally, fostering visitor creativity must align with the institutional values of the museum. After reviewing their mission statements and observing their visitors in action, the hubs for creative engagement succeeded in both museums because they were manifestations of the museums’ values. Not every museum is built on a mission of fostering creativity, and so the introduction of a hub for creative engagement may lead to mission drift or hinder the success of the museum’s institutional goals. Furthermore, in order to erect and maintain a hub for creative engagement, a museum will likely need to solicit grants and donations. Many gifts are contingent on projects that demonstrate that they are fulfilling the mission of their organization. Hence, a hub for creative engagement may be both a financial and a strategic bust for a museum that is not the right fit.

**Problem + Goal** Any museum that is attempting to implement a hub for creative engagement is tackling the following problem: the museum needs to engage its
community by fostering creativity, but it is not currently doing so. When combined with the aforementioned conditions, any hub for creative engagement will then have the goal of creating a space in the museum that develops the creativity of all visitors through learning and play. To be a hub for creative engagement, the museum leadership must use this space to try to solve this problem. There are however two sub-categories for hubs for creative engagement: an overt hub for creative engagement and an inadvertent hub for creative engagement. The central difference is that an overt hub for creative engagement, like the CFC, has the goal of creating a space in the museum that develops the *creativity* of all visitors through learning and play. An inadvertent hub for creative engagement, like the Wonderkamers, has the goal of creating a space in the museum that develops visitor *learning* through creativity and play.

In this case, a museum with an inadvertent hub for creative engagement is most concerned with educating its visitors about why art and the art museum matters, and then does so through play and activities that develop creative skillsets. While an inadvertent hub is constructed in largely the same way as an overt hub, its understanding of visitor play/learning/creativity as outcomes is slightly different and may affect how its museum’s leadership implements the activities of a hub for creative engagement. Nevertheless, a hub for creative engagement has been defined in this study by its ability to foster creativity through participatory engagement. Therefore, this framework is intended for overt hubs for creative engagement, because they more closely fit the overarching definition.

**Activities + Outcomes** The process of achieving this goal is then delineated within the blue middle circle of this framework. Both activities and outcomes define the
process by which museums implement hubs for creative engagement. Outcomes, in this context, mean a certain, generally measurable, end result. Activities, however, are a set of tactics that are used to achieve that outcome. In no particular order, a hub for creative engagement must have the following five activities to succeed:

- Innovative exhibition design
- Mix of static and interactive components
- Clear educational goals
- Partnerships and sponsorships
- Marketing to attract all ages

I will consider the value that each activity brings to the success of the hub as a whole.

Because the hub for creative engagement is a new and pioneering idea, it is important that that when the exhibition is implemented it adds value to the museum. As soon as visitors enter the space, they should be able to recognize that the hub is innovative. However, they should also be able to understand how the space relates to the rest of the museum. Thus, an innovative design must feature a mix of static and interactive components. Too few interactive components and the hub will be indistinguishable from the other galleries of the museum, but too few static components from the permanent collection and the visitors will have no context for why the interactive activities relate to the rest of the art museum.

The activities themselves should have clear educational goals. The curator still has a choice between making an activity directed—i.e. included specific directions on how to successfully complete the activity—or open-ended—i.e. the visitor receives little to know direction on how to embark on the activity. The curator should have a clear
understanding of what happens when a visitor does choose to engage in an activity and what outcomes they hope will be accomplished by interaction with that activity. For example, a hub for creative engagement may decide to put in a place a puzzle that matches a work of art hung above it. This puzzle is not there to simply add aesthetic appeal. It is an opportunity for a visitor to observe a work of art, play with objects, and employ problem-solving as they deduce how the puzzle should be completed. Together, these skills represent an opportunity to develop the skill of critical thinking. By understanding the educational goals of each activity, the curators can ensure that the space does not develop one singular aspect of creativity, but fosters a wide diversity of creative skills.

Finally, the activities of sponsorships, partnerships, and marketing, all ensure that the hub for creative engagement serves many different kinds of visitors from the community. Although this study is primarily focused on the design of the space rather than the programming, it is worth acknowledging the role that its plays in attracting visitors. In order to truly engage the community, the hub for creative engagement cannot be solely reliant on visitors discovering them. They must also actively reach out to the community. For example, both the Gemeentemuseum and the CMA market their hubs for creative engagement to schools as an option for field trips. The CMA goes even further and offers many specialized workshops and classes with the CFC as well. Furthermore, marketing and branding can play an implicit role in whether a visitor feels welcomed to a space. For example, if a flyer for the hub is written in a bright childish font and only features pictures of children participating, adults may not think that the space is open for their participation. Finally, sponsorships can implicitly indicate the value of creativity to
visitors. For example, both case studies have naming sponsors for their hubs for creative engagement—The Wonderkamers sponsored by Samsung and the JP Morgan Chase CFC. I believe that by linking these centers to successful and innovative businesses, the museum is able to communicate to visitors that the skills being cultivated in this space are relevant and valuable.

When combined all together, these activities will lead to the visitor outcomes for the hub for creative engagement. These outcomes are linear in occurrence. First, the visitors must be attracted into the space itself. Once there, a notable minority who will opt for a passively engaged experience, but the majority of visitors will engage in a participatory manner. By participating, they are playing and learning. These actions lead to the overarching short-term outcome: visitor creativity is fostered or developed in some capacity. Over time, this space should attract visitors on a repeat basis, because they will consider it a valuable tool for their personal development. As visitors continue to return to the space for its value, the museum will succeed in its long-term visitor outcome of increased community engagement.

**Impact** Finally, I will speculate as to what kind of motivation may answer Sinek’s final circle: *why* do large regional art museums implement hubs for creative engagement? I hypothesize that creativity is valuable for the vitality of the art museum and its surrounding community. In other words, museum leadership recognizes that creativity is a mutually advantageous form of social capital for both their institution and the community it serves. It is a set of skills that community members value and want to develop in the 21st century. By offering an intentional space to foster and develop those creative skills, museums are making themselves more relevant in the process. There are
many scholars that support the theory that fostering creativity increases a museum’s relevancy in the community (Farrell & Medvedeva, 2010; Liu, 2013; Robinson, 2016; Savage-Yamazaki & Murrell, 2015; Simon, 2010). However, future research will be needed to substantiate this theory.
Chapter 7: Conclusion

Through combination of data collection and analysis, I established how two large regional art museums from two different countries implemented successful hubs for creative engagement and whether nationality plays a role in their formulation. In this conclusion, I summarize the findings for the primary research question, as well as the various sub-questions. Afterwards, I consider the personal learning outcomes that have resulted from this study. Finally, I consider the limitations of this study and how they inform my future research directions.

Answering the Primary Research Question

The central question of that guided this study is: How do art museums with primarily regional audiences implement hubs for creative engagement? Throughout this thesis, the Wonderkamers in the Gemeentemuseum and the Center for Creativity (CFC) in the Columbus Museum of Art (CMA) served as case studies to illicit an answer to this question. I dissected these cases by considering publicly available sources, interviews with the curators, and participant observations. The use of a mixed-methods approach has allowed me to gain an empirical understanding of the potential impact of these hubs on visitor creativity and visitor engagement. From my observations, I learned about who comes to hubs for creative engagement, how likely they are to participate, and what types of play they prefer when they participate. By comparing these observations to the
curators’ intentions for these spaces, I analyzed how effectively these hubs for creative engagement met their intended goals.

By comparing the two cases, I have generated a list of activities and subsequent outcomes that both museums utilized as they addressed the problem of visitor engagement through the solution of creating a space that develops the creativity of visitors through learning and play. This study primarily focused on the physical design of the hubs for creative engagement. These hubs were designed in an innovative manner, they relied upon a mix of static and interactive components, and they had clear educational goals for the interactive components. These activities and their goals can be conveyed to visitors in a highly-directed manner, or presented to visitors in an open-ended, undirected way. Rates of participatory engagement by visitors was almost identical in both museums, despite the fact that the Wonderkamers opted for highly directed methods and the CFC chose more open-end ones. Although they play a minor role in the overall study, I also acknowledge two non-design activities that played a role in getting visitors into these spaces. Museum leadership actively sought sponsorships for these spaces from influential companies and cultivated partnerships with schools and other organizations to generate fieldtrips and programming for the space. Finally, I believe that it is advantageous for the museum leadership to use marketing that resonates with every age demographic.

This is because the first outcome generated by these hubs for creative engagement is visitors of all ages. Even though one case study had a targeted age demographic and the other did not, both groups saw visitors from all age groups. Thus, I think it is worthwhile for museum leadership to capitalize on the universal appeal of the hub for creative
engagement. The second outcome is that there will be a *mix of participatory and passive engagement* in these spaces. Third, both types of engagement will encourage visitor learning, and participatory engagement will oblige visitor to play. Fourth, through the combination of play and learning, *visitors will foster creativity* and develop the many skills that are used in the process of generating new ideas. Finally, there will be a long-term outcome of *increased community engagement* at the museum. Visitors will be more likely to return to the hub for creative engagement because they can continue to practice and develop creativity and its related skills. They will want to do this, because creativity is a valuable skill in the 21\textsuperscript{st} century in many national cultures. Furthermore, the mix of learning and creativity that visitors acquire in this hub, will encourage them to further develop their creative skills like critical thinking by engaging with other parts of the museum.

**Answering the Secondary Research Questions**

In this section, I will briefly recap how the findings of this study addressed the following secondary research questions:

**Does nationality influence the understanding of creativity? What about related ideas such as innovation and play?** In my literature review, I found that scholars in the United States versus scholars in the Netherlands had largely similar understandings of innovation, and slightly different understandings of creativity. While both nations considered creativity a process that produced new ideas, scholars in the Netherlands focused on the worth and significance of ideas, while scholars in the United States focused on the originality of ideas. While Mostov’s understanding of creativity largely matched the American cultural definition of creativity, Van Overeem’s
understanding of creativity was somewhat different from the Dutch cultural definition of creativity. Furthermore, it was difficult to correlate the curator understandings of innovation and play with national cultural definitions for these terms. Van Overeem largely thought about innovation and how it informed the design of the Wonderkamers, while Mostov thought about it as an outcome happening outside of the CFC. The only correlation I saw between play in these spaces and national understandings of play related to the targeted ages groups. The literature review revealed that the importance for all ages in a much more established field of study in the United States than in Europe. Thus, it is not surprising that the Wonderkamers targeted children as opposed to visitors of all ages for its participatory activities.

Other than play, is there is no conclusive trend that national understandings of the concepts of creativity, innovation, and play held any bearing on how they were implemented in these hubs for creative engagement. However, nationality did seem to influence the value placed on creativity and innovation. In both the United States and the Netherlands, the process of creativity and the outcome of innovation have been established as valuable by the government, the education system, and many fields of work. Thus, even though the curators may not have defined creativity and innovation quite the same way as scholars or national agencies, everyone was in agreement about their overall value.

**What age groups of visitors are using hubs for creative engagement?** Both case studies received visitors from across all age demographics. Late childhood—or visitors between ages 13-18—had the lowest rates of attendance, while early adulthood visitors—ages 19-35—had the highest rates of attendance. The Wonderkamers
specifically targeted the middle childhood age group in its marketing and design, which resulted in more than two times the number of child visitors from demographic than the other two childhood demographics combined. Meanwhile, the CFC was almost evenly split in its rates of early childhood and middle childhood visitors. Finally, despite the fact that the CFC was meant to attract visitors of all ages, middle and late adulthood visitors were two to three times less likely to visit than early adulthood visitors. Meanwhile, the rates of adult visitors in the Wonderkamers from each demographic were fairly comparable. Thus, having a target audience for a hub for creative engagement plays a role in the rates of child visitors, but not the rates of adult visitors to these hubs for creative engagement.

**How do visitors engage with hubs for creative engagement?** Both hubs for creative engagement demonstrated almost identical rates of passive versus participatory visitor engagement. A little over one third of visitors in both case studies opted for passive engagement, or interacting with the static components of the space through passive observation. Meanwhile, a little over half of observed participants in each case study opted to utilize dynamic/interactive components of the exhibition. What is notable about these interactive components is that they necessitated that visitors engage in one or more form of play to complete them. Each activity was designed in such a way that it would encourage 1-3 types of play from Stuart Brown’s (2010) typology of play. When observing the play of visitors who opted to engage in a participatory manner, social play was the most common type of play to occur. Visitors also demonstrated high rates of creative play and object play in these hubs for creative engagement. Pretend play, movement play, and storytelling play were demonstrated in much lower rates, but this
trend was attributed to the lower number of activities that would necessitate such kinds of play.

What is a possible international framework for hubs for creative engagement?

By comparing the results of these two case studies, I generated a framework for understanding and implementing a hub for creative engagement. This framework is built upon Simon Sinek’s ‘Golden Circles’ framework. By identifying the necessary conditions, problem, and goal, I answered what a hub for creative engagement is. By identifying its activities and outcomes, I answered how a hub for creative engagement is implemented. Finally, I hypothesized the motivation as to why a museum might choose to implement a hub for creative engagement. Together, these circles operate as a blueprint that can be utilized by any applicable art museum.

How do my findings relate to the relevant literature regarding interactive and visitor-centered museum experiences? My findings from studying hubs for creative engagement generally support Nina Simon’s analogy with interactive exhibits. She argues that “interactive design techniques are additive methods that supplement traditional didactic content presentation…when successfully executed, [interactive exhibits] promote learning experiences that are unique and specific to the two-way nature of their design.” (Simon, 2010). However, within an art museum she believes that interactive exhibits play a supporting role. Within the hubs for creative engagement, this statement does not hold completely true. The interactive components are just as present as the static components. While the interactive components do encourage visitor learning about static art components, they also offer additional value by allowing visitors to develop a variety of creative skills through play. Furthermore, the majority of visitors in
these hubs will participate and utilize the interactive components rather than limit themselves to the traditional didactic content. However, within the entirety of the art museum, the hub for creative engagement largely represents Simon’s argument. In addition to fostering creativity, the curators of both case studies expressed a goal of using the skills and knowledge developed in the hub as a means of better appreciating the rest of the art museum. In other words, the hub serves the purpose of bettering the other galleries, thus making it a supplementary role.

My findings regarding play offer more nuance to Gordon & Esbjörn-Hargens’ (2007) statement that “freedom is a hallmark of play” (p. 65). Within each hub for creative engagement, there were certainly choices that visitors made regarding whether to play or not, and whether that play was solitary or social. However, in the Wonderkamers, once visitors committed to participatory adventure, they then had very little freedom in the choice in activities and the kind of play they necessitated. Although visitors could always skip an activity in the games and tasks gallery, the tablet would always decide the order of activities they were asked to complete. Meanwhile, freedom and choice define all the activities in the CFC. Nevertheless, visitors in both case studies opted to play in very similar rates despite that fact that open-ended freedom of choice was a hallmark of one, but lacking in the other. Furthermore, my research adds to the growing dialogue about how play benefits and attracts adults rather than just children (Cantini, 2015; Robinson, 2016).

Finally, my framework for how to implement a hub for creative engagement offers a concrete model for how to achieve Samis and Michaelson’s (2016) definition for a visitor-centered approach. As stated in the literature review, they define visitor-
centeredness as “[an approach] that puts collections/exhibitions and visitor experience on equal footing” (p.4). Like the hub for creative engagement framework, deepening and expanding the community’s engagement with the museum should be central to the museum’s mission. While Samis and Michaelson understand visitor-centeredness as a philosophy that should be integrated into every aspect of the museum, the hub for creative engagement offers a smaller scale by which a museum can implement their ideas. Despite being only one space in a museum, the hub for creative engagement can achieve visitor-centeredness goals by soliciting visitor input in crafting participatory experiences and increasing community engagement in the process.

**Personal Learning Outcomes**

I had two major personal learning outcomes of which I am most proud. First, I learned a great deal about the research process. Before beginning my research, I had very little experience in qualitative analysis. In previous studies, I avoided any research that involved a human variable. Unlike quantitative or textual analysis, I was intimidated by how these methods seemed more prone to error and how I as a researcher would have little control in a natural environment. As such, I did not value qualitative methods or analysis, and was initially hesitant to use them in this study.

After learning more about qualitative methods, I began to grasp them better and felt more comfortable employing them in my study. Admittedly, the execution of my qualitative methods, particularly my participant observations, was still challenging. During my first day of observations in the Wonderkamers, I realized I lacked an efficient yet effective way to take notes. I also grappled with how inherent biases were informing who I chose to observe in a crowd, particularly on the busy days I conducted participant
observations. For example, in the Wonderkamers I was drawn to observing visitors who were speaking English because I could fully understand their conversations about their experiences in the Gemeentemuseum. It will be essential for me to understand and counter those biases for future research endeavors.

In analyzing my study, I learned just how valuable a qualitative component to a study is. For example, the quantitative data told me how many visitors were in these hubs and perhaps what categories of engagement they represented. The qualitative observations and interviews enlightened me to the underlying narrative of these hubs for creative engagement. The numbers by themselves gave me no indication of the infectious joy that one father/son combo showed when they were grooving in the ‘Dance the Victory!’ activity, or the look of disappointment on a young girl’s face in the Community Gallery when her father yelled at her and her sister that is was time to stop wasting time and to leave. The addition of these small details to my research paint richer pictures than numbers alone. Thus, my research is that much stronger through a mixed-methods approach.

Second, I want to acknowledge the difficulty I had trying to unpack, understand, and ultimately define the concept of creativity. While it would have been easy to just choose one theorist’s definition for my literature review, I thought that it was important that I, as the researcher, had a firm grasp of what creativity meant to me before I analyzed what it meant to the curators of my case studies, or tried to identify creativity in my participant observations. First, I recognized that creativity is an idea that lacks a simple, universal definition. I noted that many of the scholars and academics I referenced for this study would define creativity as an idea making process at one point, then later define
creativity as a skill that can be fostered, and use them interchangeably without any explanation of why. This lack of consensus left me with three questions: How can creativity be both a skill and a process? How does innovation relate to creativity? How does creativity manifest in a hub for creative engagement?

In order to reach the definitions for innovation and creativity that ultimately guided this study, I generated a metaphor to help to answer these questions: Imagine you are an architect. You are asked to design the next big library for The Ohio State University’s campus. You brainstorm ideas, you research inspirations for your architectural design, and you ultimately generate an idea and put it on paper. The schematic you produce is creativity as an idea-making process. Then, you send those plans to construction company. They come up with a strategic plan of to erect your grand idea and then get to work building. This is innovation.

But where does creativity as a skill come into play? Well, you were not born an architect. You had to develop toolkit of skills to rely upon anytime you generate an architectural idea. As a child, you played with blocks so that you could understand how buildings stay up. You went to school and learned math and art. You had your first internship and were asked to collaborate with people who had drastically different points of view from you. All of these experiences introduced you to new creative skills, or allowed you to further develop the creative skills you already had. By the time you got your first job as an architect, you had had so many opportunities to try and fail and try again that you knew exactly what kind of skills you could call upon to generate a new idea.
Thus, a hub for creative engagement can address creativity in two ways. It can be a space for visitors of all stages of life to learn or to further develop the many skills that can be called upon in the process of creativity. It can also be a space that challenges visitors to practice generating ideas with a directed activity. In both scenarios, the hub for creative engagement serves its community by enabling them to practice creative skills and the idea-making process so that they can become more comfortable with using creativity in their lives outside of the museum.

Limitations of Study and Future Research Directions

The first limitation of my study I want to consider is that my definitions of community and community engagement are underdeveloped. In this study, I consider community to be the people who live in the local geographic region surrounding the museum. For instance, in the CMA this community would be the people of Columbus and Central Ohio. When the museum strives to increase community engagement, I do not perceive that as just increasing the engagement levels of their traditional core audience. I think it is important that the museum becomes relevant and accessible to a much broader array of neighbors who live within the museum’s community. Yet, for this study I only collected information about the perceived age of my participants. While this variable offered a rich dialogue for this study about the presence and behaviors of the different age demographics in these hubs, it is still a very one-dimensional conversation. In a dissertation, I would want to survey or interview visitors so that I could analyze a more intersectional understanding of their identity—Are they from the local community? How do they identify regarding race, gender, sexuality, socio-economic status, etc.?
A second limitation to this study is that I compared two very westernized cultures. White men of Western European descent overtook land that later became known as the United States. Thus it is unsurprising that four centuries later, both the United States and the Netherlands would both value innovation and share similar conceptions of creativity. Thus, it worth asking how would this study look if it included a hub for creative engagement from a non-westernized culture? Future research could expand this study to include case studies from a wider diversity of places, particularly museums from the southern and eastern parts of the world.

A third limitation to this study is that it only considered how art museums foster creativity. I think future research could also take the framework generated by this study and ask: can hubs for creative engagement be applied in the same way other types of large regional museums? For example, Simon (2010) acknowledges that many science and history museums already employ participatory activities. Like art museums, the number of interactive activities being utilized often depends on the individual museum and its mission and institutional values. Thus, a study could try to identify whether other museums designate a specific space at all for a hub for creative engagement, and if so, compare the exhibition design techniques and whether there are any similarities and differences in visitor behavior.

Finally, the most important limitation of this study is that it only answers the what and the how of Sinek’s model. If I were to expand this thesis into a dissertation, I would attempt to answer why large regional art museums implement hubs for creative engagement. Due to the limitations of the methods I utilized, it was impossible to do more than hypothesize what that answer might be. For example, although I observed how
people were using the hubs for creative engagement, I did not interview them. Through observations like conversation and perceived attitude, I could paint a partial picture of whether they were enjoying their experience. Yet, without an actual interaction with the participants, there is no way for me to definitively know what brought them to hub, what they might have gained from their experience, and whether they actually perceive creativity and the museum as relevant.
References


https://doi.org/10.1108/13527609810796844


Retrieved from http://lib.dr.iastate.edu/etd/13559


https://doi.org/10.1080/01490400.2013.761905


Museum Studies Thesis). Retrieved from https://lra.le.ac.uk/handle/2381/31158

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Appendix A: Floor Plans

Center for Creativity at the Columbus Museum of Art

(Columbus Museum of Art, 2017a)
Wonderkamers in the Gemeentemuseum

(International Design and Communication Awards, 2014)
Center for Creativity Self Reflections

Big Idea Gallery Activity Descriptions

Activity Name: Tag it!
Play: Storytelling Play
Activity: In this exhibition there are about 20 different ways in which dogs are depicted. Visitors are encouraged to take little tags from the bin at the start of the exhibition. Each tag has a descriptive adjective, such as “fierce,” “playful,” etc. The visitor then looks for a dog in a work of art that best represents the word on the tag and then hangs that tag on a hook by the art.

Activity Name: #dogscma
Play: Social Play
Activity: Visitors can post a photo of their dog to Instagram, Twitter, or other social media and tag it with #dogscma. The photo will then be added to the digital gallery.

Activity Name: Soda Jerk Puzzle
Play: Object Play
Activity: Underneath the original painting, Soda Jerk, by Norman Rockwell, visitors can construct a puzzle that is the same size as the painting. The painting features a soda foundation and includes a dog on a stool.

Activity Name: Dog Collar Connector
Play: Storytelling Play, Social Play
Activity: At a station with pencils and post-it notes visitors are asked to describe the kind of dog that would wear each of the following collars that are hung above the table: a black, leather collar with studs, a thin leopard print collar, and a cloth collar with a blue and brown plaid bowtie.

Activity Name: Dog Conversation Connector
Play: Storytelling Play, Social Play
Activity: At a station with pencils and post-it notes visitors are asked to answer the following question: What role do dogs play in your life?

Activity Name: Dogs in the City Board Game
Play: Social Play
Activity: There is a table with a board game, cards, and dogs as board pieces. The objective of this game is to be the first player to make it to the finish line at CMA. Each player selects a dog piece and a card from the “draw” pile. That card has a copy of one of the works of art featuring dogs that hang in this hallway. When it is your turn, the goal is to have the other players guess your painting. You can give a clue by finishing one of the following sentences based on your painting: “I see…”, “I hear…”, or “I smell…”. If someone guesses your painting correctly, then you both get to move.

Activity Name: Colorful Dog Puzzle
Play: Object Play
Activity: Underneath the original painting, *Untitled*, by Ralph Bell, visitors can construct a puzzle that is the same size as the painting. The painting is full of big colorful brushstrokes and features a dog in glasses.

Activity Name: Dog Coloring Activity
Play: Creative Play
Activity: There is a table with crayons, pencils, and pieces of paper. Visitors select a piece of paper and are encouraged to “use their imagination to complete the sentence” and draw a picture to illustrate their idea. Example sentences include: “A dog outside of…”, “A dog without…”, “A dog near some…”, “A dog in front of…”, and “A dog near…”

Activity Name: White Out
Play: Object Play
Activity: This activity is like “I Spy.” Visitors look through a large clear container on display that is filled with white packing material. Inside are hidden other white objects such as: a paint brush, a spool of thread, a USB cable, a cotton ball, a bar of soap, and a Tic-Tac.

Wonder Room Activity Descriptions

Activity Name: Castle Building
Play: Object Play
Activity: There is a table covered in a variety of wooden blocks. There are no instructions, but visitors often build castles and towers.

Activity Name: What does a tree look like?
Play: Creative Play
Activity: There is a table covered in paper, scissors, and glue sticks. Visitors are encouraged to look around the Wonder Room for some examples of tree shapes. Then they can use the materials on the table to make a picture of a tree. The pictures can then be hung off of a weeping willow-like tree in the room.

Activity Name: Tree House
Play: Pretend or Imaginative Play
Activity: There are no instructions, but the space involves multiple levels, different entrances, and places to hide. It is an open-ended space for exploration.

Activity Name: Build a Bird Nest!
Play: Creative Play
Activity: There are tables covered in many found objects such as photo strips, magazine pages, pipe cleaners, etc. and a variety of crafting supplies. Visitors are encouraged to build their own bird nest from the found objects.

Activity Name: Tree Stump Puzzles
Play: Object Play
Activity: There are piles of wood of different heights shaped like stumps. There are no instructions, but visitors often build towers.

Activity Name: Mirror, Mirror
Play: Object Play, Social play
Activity: There is mirror that switches into a window depending on whether the visitor switches on a light switch. There are stools on either side so that visitors can sit with a partner and see their faces overlap when the window aspect of the mirror comes to life.

Activity Name: Storytelling Adventure
Play: Storytelling Play, Object Play
Activity: There is a table covered in square tiles, each with a the illustration of part of a map, which looks cartoonish and bright like a game board. Visitors are encouraged to arrange the pieces a kind of path so that they can have a character go on an adventure from Point A to Point B on their map.

Activity Name: Who Is Living in this Old House?
Play: Storytelling Play
Activity: 4 Central Ohio artists created rooms for imaginary creatures within the walls of an old house fixture in the Wonder Room. Guests are invited to write and respond to the prompt: “How do these miniature rooms inspire your imagination?”

Activity Name: Cabinet of Curiosities
Play: Object Play, Creative Play
Activity: There is a classical cabinet of curiosities and at its base a wide range of object—bottles, pots, plates, letters, etc. Visitors are invited to curate the cabinet using the objects below.

Creativity Lounge Activity Descriptions

Activity Name: Drawing with Friends
Play: Storytelling Play, Social Play, Creative Play
Activity: There is a large wall with a 10 square by 40 square grid. Inside the squares of this grid are many 3inch by 3 inch pictures that are drawn by visitors. Next to it is a table with colored pencils and blank sheets. The activity is to think of the grid like Scrabble but with pictures. The visitor looks at the drawings and then uses the paper provided to create a drawing that will connect to the other drawings. When the visitor is done, they can hang it on the wall so that their drawings interact with the other drawings on the board. You are encouraged to enhance your drawing so that images and stories may cover multiple squares. For example, one visitor drew the head of a dragon, and then another visitor drew its body, and another visitor its tail.

Activity Name: Lego Building  
Play: Creative Play, Object Play
Activity: There are three tables with big containers of white Legos. Each table is accompanied by a sign that says “Imagine and experiment with white Legos.” There are approximately 50 shelves on the walls behind the tables on which visitors can place their finished creations.

Community Gallery Activity Descriptions

Activity Name: Poetry remix  
Play: Storytelling Play
Activity: There is a table covered with scissors, glue, papers, and strips that contain lines of songs or poetry. Some of the strips have red text and they come from Shakespeare plays, and some of the strips have blue text and they come from musical artists such as Outkast, Rakim, Chuck D, and Slick Rick. The activity is to cut and remix these samples of poetry to create your own poem. It is inspired by how the comic book artist featured in this gallery works by extracting elements from a variety of cultural sources and recombines them into something new.

Activity Name: Connector Question-Timeline  
Play: Storytelling Play, Social Play
Activity: there is a piece of art that is like a timeline of pieces of art that are then surrounded by tweets that question what these pieces mean. The timeline pieces are mostly related to stereotyping that has persisted in history in relation to race. The connector asks participants to post a post-it note answering: “What question does the work on the wall above raise for you?”
Wonderkamers Self-Reflections

Games and Tasks Gallery, Game and Rooms Descriptions

**Room Name:** A Peek into the Past  
**Play:** Object Play  
**Activity:** The room is filled with stylized furniture from different decades. I watched three films, each based on a different era, and then I completed a game in which I guess which three pieces of furniture did not belong in that era.

**Room Name:** Tell Me a Story  
**Play:** Storytelling Play  
**Activity:** The setting is a dimly lit room with low seating around a low table occupied by five very old looking decorative plates. I scan the label on one of them and it projects a video above me, telling the story depicted on the plate. The one I chose was the story of the Roman goddess Juno. I then answered trivia questions about the story.

**Room Name:** Berlage’s Museum  
**Play:** Creative Play  
**Activity:** First I went through an interactive slide show about the life and the style of famous Dutch architect, Hendrik Petrus Berlage. He was the designer of the Gemeentemuseum. Based on his style, I then designed an annex for the museum. It corrected me for any features I added that were not characteristic of Berlage.

**Room Name:** Table Service  
**Play:** Object Play  
**Activity:** I learned about different styles of art work for traditional Dutch dishware. Then, I am instructed to choose dishes from around the room and “place” them on my digital tray (the iPad) to put together a setting for hot chocolate and cakes. Every time I put down an incorrect dish it would break.

**Room Name:** Catwalk  
**Play:** Pretend Play  
**Activity:** First I walked in and picked an outfit on my iPad. Then I tried on the corresponding outfit in real life (a fur coat). I then got up on a catwalk and strutted back and forth while an audio recording explained to me the history of the outfit I had on. I then posed for a real life picture (later emailed to me) at the end of the catwalk. Finally, I answered a trivia question based on my outfit’s history.

**Room Name:** Like with Mondrian  
**Play:** Storytelling Play  
**Activity:** This exhibit told the life story of Mondrian and his evolution as an artist. However, the story was only in Dutch so I could only make a vague approximation on
what it was about. There was then a game in which I looked at a wall filled with miniatures of his different styles of art and I had to find one to embody each style.

**Room Name:** Copy Mondrian  
**Play:** Creative Play  
**Activity:** I was introduced to the “New Plasticism” style in which artists like Mondrian try to achieve balance without being boring. I then completed an activity in which I tried to recreate one of his paintings by memory, and then I could design my own picture in his style.

**Room Name:** Dance the Victory!  
**Play:** Movement Play  
**Activity:** A video project of Mondrian explains part of his life story and why he moved to New York City. He explains that he loves this new city and how busy it is and how its shapes inform his art. He also explains how the buzz of NYC shapes other art forms and teaches me the basic steps of the boogie woogie. I then stand on a platform like Dance Dance Revolution and copy his steps. The accuracy of my copying can get me more points, although as a poor dancer I receive a “Too Bad” and 0 points. I later realize in observations that I was copying the man on the screen when in reality I should have followed the blocks below me, because they were lighting up in a different pattern than his movements.

**Room Name:** Makers  
**Play:** Object Play  
**Activity:** This is an expansive artist’s studio with walls covered in tools. There is a table with 5 building materials: glass, clay, thread, metal, wood. I chose glass, which then caused a video to come up of two glass blowers, creating a work from start to finish. I then completed an activity in which I looked around the studio for the tools that the artists used. It was like eyeSpy.

**Room Name:** A New World  
**Play:** Object Play  
**Activity:** This room is stark white with a video playing. I learn about a utopian art project by Chance (?) in which he would create ambitious fantastical models of dream cities. Apparently he used to have a mantra of “play and be creative.” In order to embody that phrase I play a game in which I guide a small ball through a maze of one of his city’s blueprints on my iPad.

**Room Name:** Zoom in!  
**Play:** Body and Movement Play  
**Activity:** In this room I played a game in which I stood in front of a screen and on the floor in front of me was a picture to indicate a sliding scale. I played a game in which the screen showed me a highly zoomed in painting and then on my iPad I guess which painting it was based on a given selection. If I step forward on the scale it zooms out, but I won’t receive as many points. If I guess incorrectly the first time, I still get a second try.
Interestingly, on the walls of the exhibit are huge paints with lots of textured and chunky brush strokes. They are not part of the formal game, but visitors are still encouraged to touch the paintings on their own time.

**Room Name:** What’s it Worth?
**Play:** Pretend Play
**Activity:** This room is dark and features five illuminated pieces of art. I played three rounds of a game in which I tried to best approximate the price that the museum paid for that piece of art. When I was off a wide margin, the iPad would give me a hint based on the background or status of the artist.

**Room Name:** Dress Up!
**Play:** Creative Play
**Activity:** I watched a video on the evolution of women’s fashion from the 18th to the 20th century. I then had to create an outfit based on a chosen era (I picked punk chick) using a big projection screen that projected outfits onto me like a paper doll.
Appendix C: Curator Interviews

Merilee Mostov, The Columbus Museum of Art

1. What factors led to the formation of the Center for Creativity?
   
   Answer: The renovation of the historic Museum building. The need/desire to re-imagine an education/learning department and its role in an art museum. A decision to focus on imagination and Creativity as the lens for learning in an art museum.

2. What are the institution’s goals for the Center for Creativity?
   
   Answer: To be an experimental hub dedicated to champion, celebrate and cultivate creativity in everyone. The Center is the home to innovative exhibitions, a programming stream and a philosophy about the value of creativity in our communities.

3. What are the program components of the Center for Creativity?
   
   Answer: There are numerous ongoing programs that are a direct result of the philosophies of the center such as Open Studio, Art Lab, Connector Series, teacher professional development, and Young Child Studio. But this doesn’t begin to cover the list of one-time programs and experimental programs that are initiated and retired. It is not realistic to have one exhaustive list. That is the nature of innovation. We try new things all of the time.

4. How does the organization attract funders for this exhibition?
Answer: I think you are confusing two things. This question asks about an exhibition. The CCFC is more than one exhibition. It is programs, exhibitions and a philosophy. We target the same kind of funding as any other museum programs and exhibitions. Corporate dollars, grants, private donors.

5. How does the organization promote and market this exhibition?

Answer: Again are you talking about the Center? One exhibition? But our marketing strategy are simple and straightforward: Member’s magazine. Social media. Traditional central Ohio media markets. This is a question for the marketing dept.

6. Approximately how many people do you think engage with the Center for Creativity per year?

Answer: No idea. We don’t keep this data. We had approximately 200,000 visitors to the new CMA last year. It is a rough guess to say half of those people engaged in the Center in some way. That is a guess. Not real data.

7. What kinds of people do you think engage with the Center for Creativity?


8. What influenced the decision to make the exhibit participatory?

Answer: Learning theory teaches us that people learn by doing something with new information. That can be talking, making, manipulating, drawing, writing, etc. At CMA we are rethinking what learning experiences look like in all galleries including the CFC.

9. In what specific ways do you hope the people engage with the Center for Creativity?
**Answer:** We have specific visitor learning outcomes for each gallery. That means that we plan experiences in each gallery to support specific learning outcomes. For example, an outcome may be something like visitors think critically about __________ or visitors imagine and play in the gallery.

10. How do you define creativity?

**Answer:** Creativity is the process of imagination and critical thinking to generate new ideas that have value.

11. How do you define innovation?

**Answer:** We don’t focus on the innovation word much but in general we think of innovation as a form of creativity that really changes the world as it is or brings a new value to something.

12. How does this space encourage creativity and innovation?

**Answer:** In the Center we use many strategies to encourage imagination and critical thinking such as question prompts written on the wall or labels, drawing activities, puzzles that encourage close observation (a skill of creativity), costumes that encourage pretend play and imagining, design choices that promote wonder, surprise and curiosity, drawing activities that encourage critical thinking and imagination, etc.

13. Why is it important this institution has a participatory space dedicated to creativity?

**Answer:** We think of our entire museum as participatory. The Center is just more experimental so you see more one-of-a-kind and robust experiences. At CMA we acknowledge that an art museum’s value to a community must be more than just a warehouse for great works of art. Great art is important because it illuminates great human creativity. We want our community to see our museum as a place to see great
creativity and then be inspired to cultivate their own creativity in different ways. Everyone does not have to be an artist, but everyone does benefit from cultivating creative and critical thinking. To Think like and Artist.

14. Are there any aspects of the exhibition that you think could be improved?

**Answer:** Absolutely. We are always evaluating what we do using various visitor research strategies in order to evolve, expand, and improve the impact on our visitors.

**Amended March 8th, 2017:** Specific Improvements I hope to implement in the future in the Center for Creativity:

1. Using the hallway adjacent to the glass wall in a more creative and imaginative way. This may be a location for an artist installation.

2. Reinstalling the Wonder Room with an entire different look/feel/art theme that utilizes works of art from many countries in a respectful manner. (this is actually happening this Fall.)

3. Adapting the Forum and an adjacent storage room into an artist installation space with related hands-on making space.

4. Hacking the vestibule spaces between the Center for Creativity and the Atrium. Using that space in an imaginative way other than just a pass through area.

5. Improve acoustics in the Big Idea Gallery by adding ceiling additions or textiles to the floor.
Jet van Overeem, The Gemeentemuseum

1. What factors led to the formation of the Wonderkamers?

**Answer:** Wonderkamers version 1 (2013):

- The director’s wish for something new and ‘mind blowing’
- The possibilities of an ‘extra’ exhibition space ‘in the basement’ (the former function of that space had proved not to be successful in terms of number of visitors)
- The wish to engage youngsters/pupils secondary schools that find museum boring stuff most of the time

Added to that while making Wonderkamers version 2:

- The success of Wonderkamers 1.0
- The wish to engage families with children (we found out during Wonderkamers 1.0 that they were very interested)

2. What are the institution’s goals for the Wonderkamers?

**Answer:** One of the Gemeentemuseum’s main aims is to interest a wider public in classic modern and contemporary art. A few years ago, it developed the Wonderkamers as part of this outreach effort. The interactive displays offer an amazingly fresh and entertaining introduction to fine art, the decorative arts, architecture and fashion. The latest exhibition technology is used to bring the visual arts to life through a computer game that places the individual visitor at centre stage. Director Benno Tempel: “The Wonderkamers offer a totally different experience compared to a traditional museum. This is a fantastic outing
for parents or grandparents with children and an extended learning environment
for schools.

3. What are the program components of the Wonderkamers?

**Answer:** The central exhibition space displays thematic groups of items from the
collections of the Gemeentemuseum: paintings, sculptures, photos, furniture,
ornamental and everyday objects, and fashion. At its heart is a ‘floating’
Miniature Museum: hundreds of miniature artworks by artists around the world,
all from the Lex and Ria Daniëls collection, Amsterdam. Around the central space
are thirteen separate rooms: the ‘wonderkamers’. Each features a specific theme
relating to fine art, fashion, architecture or the decorative arts.

The Wonderkamers adventure begins with a film in which director Benno Tempel
asks for help to arrange displays in a unique building housing miniature artworks.
Twelve of the two hundred galleries in the Miniature Museum are brought to life
by ‘Pepper’s Ghost’ films. There are thirty virtual galleries in which visitors have
a free hand to create their own exhibitions after playing the exciting museum

game.

Visitors are sent off in pairs, electronic tablet (Wonder Guide) in hand to explore
thirteen spectacular display areas. Each features a specific theme relating to fine
art, fashion, architecture and decorative arts items in our museum collections. The
Wonder Guide sends them all over the exhibition, playing games, watching films
and earning points. People discover a wonderful world in which they can design
their own Berlage building, dance the Boogie-Woogie, ‘meet’ the great Mondrian,
and learn a lot about art on the way.
The central exhibition space, ‘The Depot’, displays thematic groups of items from the museum’s collections. At the end of the museum game, visitors swap their points for virtual artworks from ‘The Depot’, which they can then display exactly as they wish in their very own virtual gallery in the Miniature Museum.

Wonderkamers is the playful result of one of the museum’s main aims: to interest and educate a wide public, including children, in the fine and decorative arts and to do so in a creative, innovative and contemporary way.

4. How does the organization attract funders for this exhibition?

Answer: That’s a process of building contacts in the world of sponsoring and funding. Our deputy director worked on that and used his experience in that field.

5. How does the organization promote and market this exhibition?

Answer: Permanent: promotion film, brochure, website Wonderkamers, website of the museum. Temporary during the opening period: billboards in the city, advertising in national newspapers, advertising (TV spots) on national television.

6. Approximately how many people do you think engage with the Wonderkamers per year?

Answer: Visitors in Wonderkamers cannot be counted specifically because there are four entrances to the exhibition space and there’s no need for museum guards at the entrances. The only visitors we do count, since reservation is required, are visitors from secondary schools, in 2016 approximately 7,000.

7. What kinds of people do you think engage with the Wonderkamers?

Answer: adults with children, and grandchildren and secondary schools (students 12-16 appr.)
8. What influenced the decision to make the exhibit participatory?

**Answer:** The average museum visit lasts just 90 minutes. And many children never visit a museum or are simply bored by art museums. The Gemeentemuseum really wanted to change this; and not by making just the next paper scavenger hunt or workshop. The museum was keen to attract more youngsters and needed to really do something innovative and different. Therefore the museum thought they had to get really close to the perception of young kids. Furthermore the Gemeentemuseum really wanted to have kids participating in the arts world, because it strongly believes children are more keen in learning of arts by doing. Whole generation of kids have already grown or will grow up with interactive tools. They are already used to interactivity in their surroundings. We could even say, they are bored when something isn’t. That’s why the Gemeentemuseum made interactivity a priority.

Nevertheless interactivity and extraordinary design (concepts) have always been means to an end. Wonderkamers may be full of tablets, QR codes, virtual dressing rooms and touchscreens, but it’s really all about art. Gemeentemuseum director Benno Tempel: “Unlike many other educational projects, it puts kids in touch with genuine artworks. In its thirteen spectacularly designed display areas, youngsters discover a wonderful new world where they can design their own Berlage building or learn to dance the Boogie-Woogie, urged on by the great Mondrian himself. At the end of the game, they select their favourite artworks from the Depot and create their own exhibitions in the miniature museum. Kids
understand how unusual it is to be able to do things with real artworks. Where else can you put on a period costume and strut your stuff on the catwalk?”

Since the opening of Wonderkamers, the average length of a museum visit has doubled. And it’s the kids who can’t be dragged away. Youngsters have been returning three or four times. And not just that: they’re going on into the main museum to see the originals of works like Victory Boogie Woogie with their own eyes. As Tempel says, “When you’ve just created your own Mondrian on a touchscreen, it’s hardly surprising if you want to take a look at the real thing afterwards.” Since the section re-opened, no fewer than 30,000 games have been played.

9. In what specific ways do you hope the people engage with the Wonderkamers?
   Answer: see 8.

10. How do you define creativity?

    Answer: Inspiration to make things yourselves or inspiration for new notions and ideas.

11. How do you define innovation?

    Answer: an experience that is completely new for people

12. How does this space encourage creativity and innovation?

    Answer: I’m not sure that Wonderkamers stimulates creativity in the sense of wanting to make/produce things yourself. It stimulates engagement with the museum and art. And it could change your notion of what a museum is or what art means to you. It might prove you being more interested or moved by art than you would have known at forehand.
13. Why is it important this institution has a participatory space dedicated to creativity?

**Answer:** It’s important for a museum to constantly explore ways in which one can engage and facilitate visitors in a way that’s really interesting. In a way that it creates social connections and in a way it will create beautiful memories for people.

The museum is there for the visitors and not the other way around.

14. Are there any aspects of the exhibition that you think could be improved?

**Answer:** Many things in fact. I already have lots of ideas for Wonderkamers 3.0 in the future. Some of the things I would like to change or add are:

- A system that makes it possible to only play certain thematically linked rooms (for instance the Mondrian rooms or the fashion rooms)
- A tour especially for children aged 4-9.
- The use of augmented reality features (which was just in the beginning when we created Wonderkamers 2.0)
- A system that can generate data and statistics on the players as to exactly how many and their ages and the most popular days and times
Appendix D: Sample Participant Observation Form

Date: Time:

Museum:

Location in the exhibition:

Participant #1: Age Demographic

Time:

Play:

Engagement Type:

Conversation/Actions: