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GRADUATE SCHOOL OF SOCIAL SCIENCES



OBSERVING ART WORKSHOPS IN ISTANBUL MODERN
MUSEUM AS AN INFORMAL LEARNING ENVIRONMENT FOR
CHILDREN

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CHILDREN



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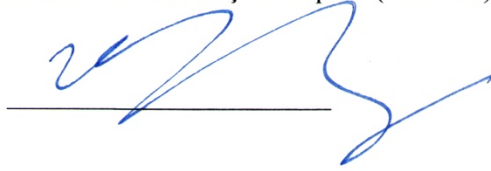
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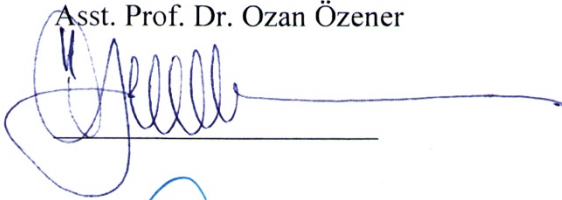
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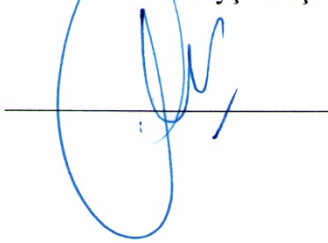
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“I, Berin Somay, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.”

A handwritten signature in black ink, appearing to read 'Berin Somay', written in a cursive style.

BERIN SOMAY

ABSTRACT

OBSERVING ART WORKSHOPS IN ISTANBUL MODERN MUSEUM AS AN INFORMAL LEARNING ENVIRONMENT FOR CHILDREN

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Master of Arts in Design

Advisor: Asst. Prof. Dr. Orçun Kepez

January, 2017

Museums do not only preserve artifacts based on historical events or exhibit unique artworks that is forbidden to touch, but also provide educational settings that are regarded as informal learning environments. Since the educational opportunities have become prominent, museums started to consider pre-school and school-age children. Although “education” is generally associated with formal learning, education programs are not only limited to school-based subjects. While children can learn new things about art, nature or science, they can also practice what they learn at the same time.

This study aims to understand informal learning experiences of children at art workshops designed for them, by observing their behaviors. A case study conducted at Istanbul Modern Museum including five different art workshops for children between the ages of 7 and 12 were observed. Workshops were two hours long and every fifteen minutes an observation cycle initiated. An observation cycle was consisted of filling observation charts, taking notes and photographs. Children’s behaviors were evaluated as part of the workshops based on their focus and activity levels. As a result of the analyses of five workshops, it was discovered that 1) when children had more control while they were learning, their active participation and focus levels increased 2) children actively participated mostly at the production process, 3) handicraft materials such as paper, paint and pencil, positively affected the performance of children.

Keywords: Informal Learning Environments, Museum Education, Art Workshops,
Children, Observation, Case Study



ÖZET

İSTANBUL MODERN MÜZESİ'NDEKİ SANAT ATÖLYELERİNİN ÇOCUKLARA UYGUN İNFORMAL ÖĞRENME ORTAMI OLARAK GÖZLEMLENMESİ

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Tasarım, Yüksek Lisans

Danışman: Yar. Doç. Dr. Orçun Kepez

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Müzeler sadece tarihi eserleri muhafaza eden veya dokunulması yasak olan sanat eserlerini sergileyen mekanlar değildirler. Müzeler, aynı zamanda eğitim alanında hizmet verebilir ve informal öğrenme ortamlarından biri olarak kabul edilebilir. Müzeler eğitim imkanı sağladıklarından beri, okul öncesi ve okul çağındaki çocukları da göz önünde bulundurmaya başlamışlardır. Her ne kadar “eğitim” dendiği zaman akla gelen ilk şey formal öğrenme olsa da, eğitim programları sadece okulda işlenen konularla sınırlı değildir. Çocuklar, sanat, doğa veya bilim alanlarında yeni şeyler öğrenirken, aynı zamanda da öğrendiklerini uygulayabilirler.

Bu çalışma, çocukların sanat atölyelerindeki informal öğrenme tecrübelerini onların davranışları üzerinden anlamayı hedeflemektedir. İstanbul Modern Müzesi'nde yürütülen vaka çalışması sonucunda, 7 ve 12 yaşları arasındaki çocuklara yönelik beş ayrı sanat atölyesi gözlemlenmiştir. İki saatlik her bir atölyede, on beş dakikada bir gözlem periyodu gerçekleşmiştir. Her bir gözlem periyodu, gözlem çizelgesi doldurma, not alma ve fotoğraf çekmeyi kapsamaktadır. Çocukların davranışları atölyelerin parçası olarak değerlendirilmiştir. Yapılan analizlerin sonucunda, 1) öğrenme aşamasındayken daha çok kontrol sahibi olan çocukların aktif katılım ve odaklanma seviyelerinin yükseldiği, 2) çocukların en çok üretim aşamasında aktif katılım sağladıkları, 3) kağıt, boya, kalem gibi el işi malzemelerinin çocukların performansını olumlu yönde etkiledikleri tespit edilmiştir.

Anahtar Kelimeler: Informal Öğrenme Ortamları, Müze Eğitimi, Sanat Atölyeleri,
Çocuklar, Gözlem, Vaka Çalışması



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Berin Somay

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List of Abbreviations

A4E Arts for Everyone

MCZAs Science Museums, Science Centers, Zoos and Aquariums

NoO Number of Observations

NoOC Number of Observation Cycles

NoP Number of Participants

Q&A Question and Answer

The US United States

W1 Workshop 1

W2 Workshop 2

W3 Workshop 3

W4 Workshop 4

W5 Workshop 5

CHAPTER 1

INTRODUCTION

1.1 Museums as Informal Learning Environments

Museums are places that addresses every generation with different backgrounds. Although museums can be perceived as historical, boring and didactic institutions, the concept of museum has changed remarkably since 21st century. “Until the end of the twentieth century the majority of museums functioned as the information and training centres on the past events” (Savicke and Juceviciene 2013: 75). Along with “the political, social, cultural, technological and economic changes”, modern and contemporary ones have come into prominence and “the role of museums has been expanded in the society” (Savicke and Juceviciene 2013: 75). As the concept of museum has changed, the motivations of museum visitors have evolved as well. Thus, the purposes of museum visiting can be identified with lots of reasons:

for leisure and enjoyment, to spend quality time with family/children/friends, to experience something unusual, to take part in a culturally enriching activity, to “learn new things”, and many more reasons, most of which can be summarized under “self-fulfillment” (Anderson et al., 2007: 198).

From this point of view, museums are directly connected with learning and can be accepted as environments that promote informal learning (Falk 2005). In contrast to formal school-based education, informal learning “may occur in institutions, but it is not typically classroom-based or highly structured, and control of learning rests primarily in the hands of the learner” (Marsick and Watkins, 2001: 25).

An informal learning environment can be consisted of indoor and outdoor places like houses, streets, parks where simple everyday life activities happen, or places like zoos, museums and botanical gardens where people spend their leisure time (Falk et al., 2007: 2).

Education programs available in museums are regarded as part of the informal learning environments and are focus of this study. To assess the impact of museum education in terms of informal learning, it is important to mention the learning activity in itself. Considering the fact that learning is not consisted of a one-way relation and learning “is highly personal and strongly influenced by an individual’s past knowledge, interests and beliefs”, the visitors’ perception should not be underestimated during a museum experience (Falk and Storksdieck 2005: 746). Thus, the learning process is only completed with learner’s contribution. To obtain the best efficiency, the collaboration of both the museum service and the visitor is equally important.

Apart from regular museum visits which are mostly non-scheduled, there are also other opportunities provided by museums such as “educational programs tailor-made to the individual”, “the programs related to art education” or “short-term educational programs focused on their main theme” (Xanthoudaki 1998: 188).

1.2 Aim

The aim of this research is to observe children oriented art workshops under the name of “Art Workshops in Summer” which took place at Istanbul Modern Museum and to understand learning experiences of children from 7 to 12 years old at art workshops by evaluating their behaviors. Finally, the motivation is to obtain an idea about how to design a beneficial workshop for kids by comprehending the characteristics of Istanbul Modern Museum’s children oriented art workshops.

1.3 Scope

The scope of this study is museums and their education programs directed for children. The target audience is museum coordinators and directors, art educators, museum experts, institutions that support art education, families of school-age children and finally, decision makers who play a role in inclusion of informal learning environments to curriculum.

1.4 Methodology

In order to understand the characteristics of each workshop, a case study research was planned and applied. Art workshops consisted of five different themes, were corresponding an embedded single-case study (Yin 2009). According to Yin, an embedded single-case study includes a single-case within a context, which is Istanbul Modern and within this case, there are embedded multiple units of analysis, which are the art workshops (2009). In his book *Case Study Research: Design and Method*,

Robert K. Yin explains that this type of design “ ... will include the desire to analyze contextual conditions in relation to the ‘case’, ... the boundaries between the case and the context are not likely to be sharp” and he adds that within a single-case study “there also can be unitary or multiple units of analysis” (2009: 46). Hereby, the possibility to analyze different units came true by selecting those five workshops.

The data collection process was consisted of five steps: coming to the museum, preparation for the observation, observation cycle, packing and finalizing, data comparison.

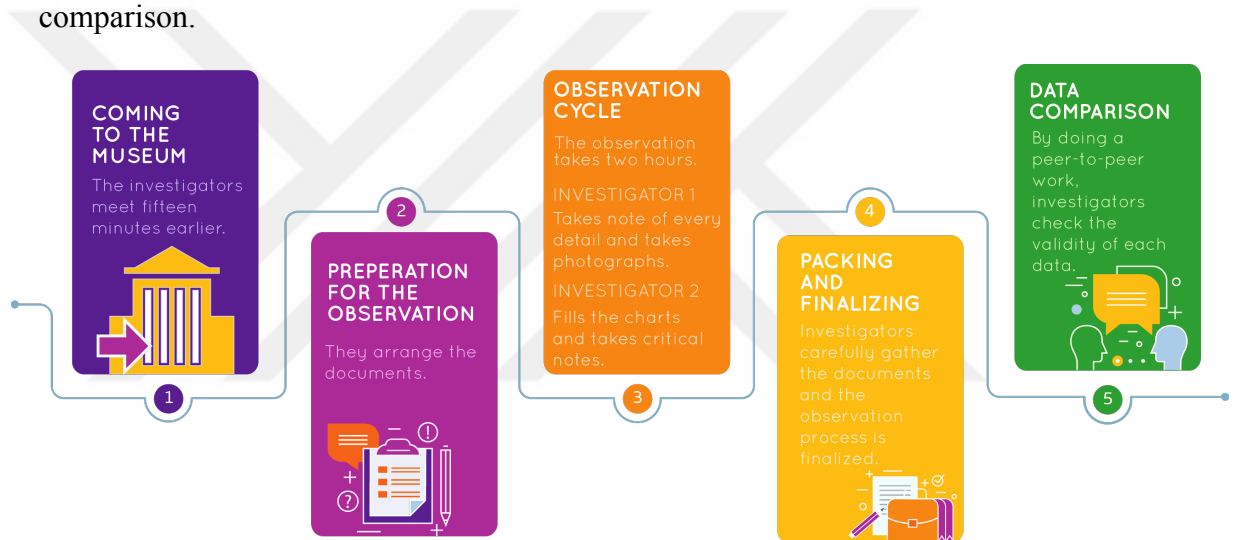


Figure 1.1 Data Collection Flowchart

A set of questions was prepared and answered by two investigators during the observations. Firstly, the demographic information about children such as their ages and genders were collected (Figure A.1). Then, the basic characteristics of workshops (like date, participation number and workshop title) were listed. During the observations, more detailed information including materials, concept, final products or environmental conditions were noted. Children were observed eight times every fifteen minutes during two hours by answering same set of questions at each of the five workshops (Figure A.2).

Every fifteen minutes, investigators initiated an observation cycle. At each cycle, the data collection process took approximately one minute. Therefore, the data collection and reporting was discrete. At all of the five workshops, the total number of participants (NoP) was 24, the total number of observation cycles (NoOC) was 44 and the total number of observations (NoO) was 210. Collected data was analyzed based on the sum of all workshops' observation cycles. In order to obtain the total outcome of each workshop, the number of observation cycles was multiplied with the number of participants.

$$\text{NoP} \times \text{NoOC} = \text{NoO}$$

The number of participants decreases to 5 after the 4th observation cycle

	NoP		NoOC		NoO
W1	6	x	4	=	59
	5		7		
W2	3	x	8	=	24
W3	4	x	8	=	32
W4	7	x	9	=	63
W5	4	x	8	=	32
total	24		44		210

Table 1.1 Number of Participants, Number of Observation Cycles and Number of Observations

Both analogue and digital resources were used for the investigation. The charts were filled and the notes were taken manually. In addition, natural setting of the scenes was photographed regularly by a smartphone and those photographs were kept as a source

of evidence. Handwritten notes, charts and photographs were transferred to the computer later on. Each workshop period was completed with eight observation cycles along with many photographs.

In order to assess the quality and validity of research, “trustworthiness, credibility, confirmability, and data dependability” were tested by the investigators after the workshops (Yin 2009: 40). Just before the data analysis, the internal validity of the observations was checked mutually and each data was compared if there was a logical match.

During the analyses, each workshop was separated into sessions and those sessions were illustrated as infographics in order to follow a seek patterns. With the help of the charts, infographics, illustrations and photographs, workshops were compared among each other by matching the observed patterns.

1.5 Limitations

There were various limitations for this study. First, the data collection was made during summer by only including art workshops conducted during the time when participating children were on holiday. Second, there were two factors affecting the order of the case observations. During seven weeks, the estimated number of repeated workshops was 35 in total. However, when the number of participants was less than three, the

museum had to make a cancellation and the cancelled workshops due to low attendance affected my study plan. Another reason why these workshops were not observed in a linear order was that permission from the museum was necessary for each activity. The required permissions were not provided in accordance with the regular order of workshops. Consequently, a time elapse occurred and the examination of these cases extended to four weeks, instead of one. Third, the video recording during the observations was forbidden and for this reason, it was not possible to report each detail and to perform a continuous data collection was challenging. In addition, the fact that workshops had relatively high participation fee limited this study to the children whose families can afford it. Because the interview permissions could not be arranged, only children's behaviors were observed. The investigators could not make interviews or interact with custodians and children. Therefore, the short-term impact could not be assessed. Lastly, even though the behaviors of the education team were observed, they could not be analyzed due to the limited time. The study contained only the behavior of children.

CHAPTER 2

LITERATURE REVIEW

2.1 The Contextual Model of Learning

According to Falk, it is challenging to define the term learning (2005). Referring to thirty years ago, he points out that the learning concept was previously considered as “a relatively simple process involving predictable changes ... determined by simple cause-and-effect relationships” (Falk 2005: 268). However, the learning process is not linear and does not have a precise starting or finishing line. Furthermore, a learning activity may not signify the same experience for everyone. In this case, Falk summarizes learning as “rarely linear and ... highly idiosyncratic” (2005: 269).

Since “learning is not some abstract experience that can be isolated in a test tube or laboratory but an organic, integrated experience that happens in the real world”, Falk and Dierking try to organize the complexity of learning “into a manageable and comprehensible whole” (2000: 10). Therefore, they suggest “The Contextual Model of Learning” and in reference to this model, “all learning is situated within series of contexts” that intersect and interact with each other (Falk and Dierking 2000: 10). There are three contexts positioned in a three-dimensional structure: personal, sociocultural and physical contexts. “Time” gives the third dimension and shows us how these three contexts interact in short or long-term. *Personal* context contains learner’s “prior knowledge, interest, and experience; motivation and expectations; choice and control”, *sociocultural* context contains “family sociocultural mediation”,

social interaction and “the role of institution staff as facilitators of learning”, and finally, *physical* context contains “advance organizers and orientation”, design of the learning environment, “reinforcing events and experiences” outside the institution (Falk and Dierking 2000: 147).

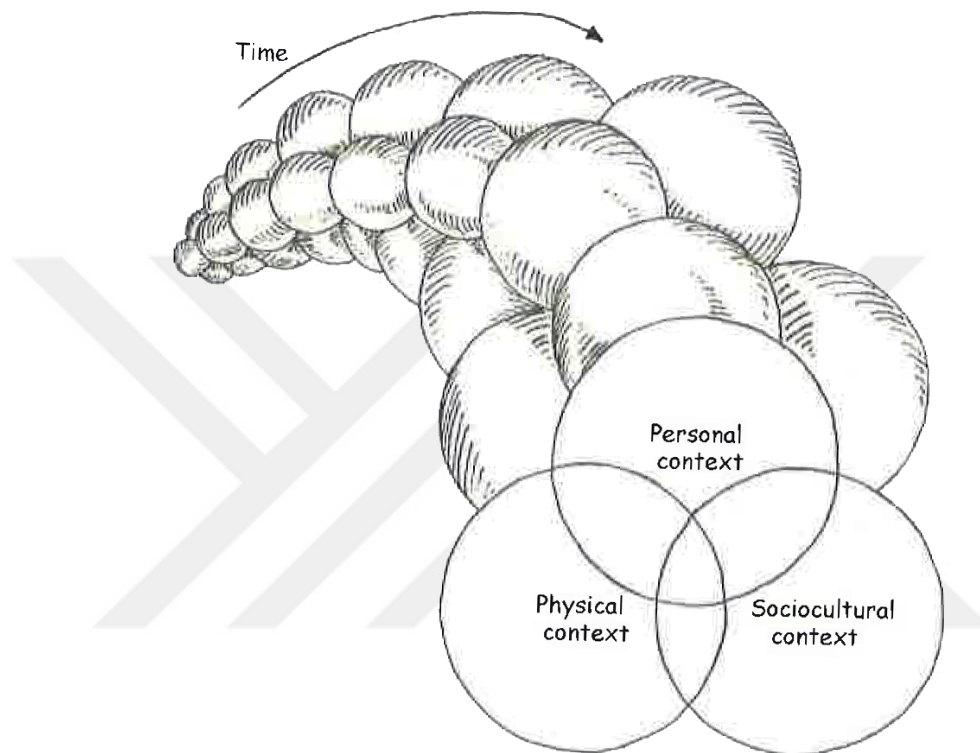


Figure 2.1 The Contextual Model of Learning (Falk and Dierking 2000: 12)

PERSONAL CONTEXT	SOCIOCULTURAL CONTEXT	PHYSICAL CONTEXT
<ul style="list-style-type: none"> ① Motivation and expectations ② Prior knowledge, interests and beliefs ③ Choice and control 	<ul style="list-style-type: none"> ④ Within-group sociocultural mediation ⑤ Facilitated mediation by others 	<ul style="list-style-type: none"> ⑥ Advance organizers and orientation ⑦ Design ⑧ Reinforcing events and experiences outside the museum

Table 2.1 Personal, Sociocultural and Physical Contexts (Falk and Dierking 2000: 137)

2.2 Types of Learning

In order to specify the types of learning, the concept of learning should be evaluated beyond the school-based education. Learning can occur at any time, at an out-of-school environment as well. Rennie et al. define out-of-school learning as “self-motivated, voluntary, and guided by learners’ needs and interests” (2003: 113). Considering the learners’ motivations defined by Rennie et al., it is appropriate to say that learning activity can be categorized based on having control over “making decisions regarding the goals and means of learning” (Mocker and Spear 1982: 1). By asking “what should be learned” and “how to learn” questions to different types of learners, Mocker and Spear identify four kinds of learning: formal, nonformal, informal and self-directed learning (1982). Basically, it is important to know who is in the control. Institution or learner?

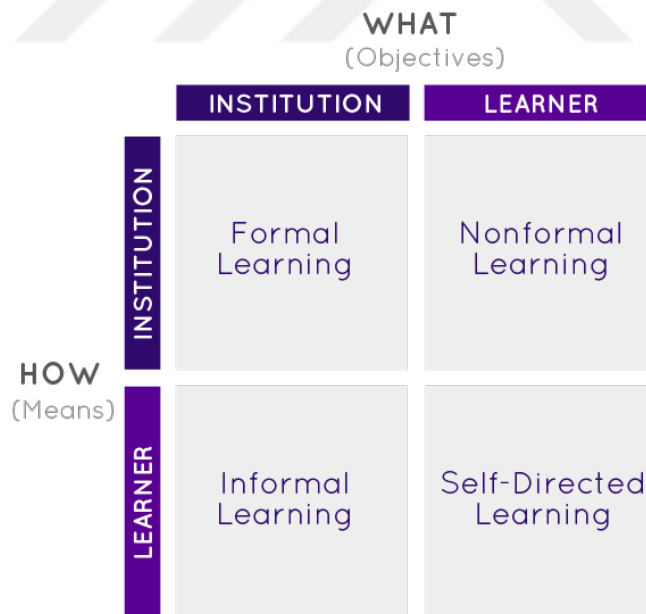


Figure 2.2 Categorization of Learning Activity in Terms of Having Control (adapted from Mocker and Spear 1982; Heimlich 1993)

	FORMAL	NONFORMAL	INFORMAL	SELF-DIRECTED
WHAT SHOULD BE LEARNED?	Learner has no control	Learner has control	Learner has no control	Learner has control
HOW TO LEARN?	Learner has no control	Learner has no control	Learner has control	Learner has control

Figure 2.2 (continues) Categorization of Learning Activity in Terms of Having Control (adapted from Mocker and Spear 1982; Heimlich 1993)

Based on learners' having control over their learning choices, Falk suggests the term "free-choice learning" (2005). He names the characteristics of free-choice learning as "non-sequential, self-paced, and voluntary" and he adds that this type of learning represents "individual-driven way" of thinking (Falk 2005: 272). While talking about free-choice learning environments, he compares the typical formal learning environments with free-choice learning environments. The mostly known and common learning environments are schools where the "curriculum-driven teaching" happens, but a free-choice learning can occur in other settings (Falk 2005). While talking about out-of-school and lifelong learning settings, Schwan et al. introduce the abbreviation "MCZAs" (2014). These initials stand for science museums, science centers, zoos and aquariums where an informal science education occurs (Schwan et al. 2014).

2.3 Museum and Education

While describing the definition of museum, Hooper-Greenhill mentions “the myth of the museum” (2000). She explains how the notion of museum have achieved the status of myth by being “authoritative, informative, and to be their own best judge of what counts as appropriate professional practice” and she defines many art museums “as rather special places, separate from the mundane world of the everyday, places that preserve best of the past, and places that are appreciated by cultured and sophisticated people” (Hooper-Greenhill 2000: 10). Along with the changes in social, political and cultural areas at the end of the 20th century, the value of museums has started to change as well and Hooper-Greenhill states that the “aim of the modernist museum is to enlighten and to educate, to lay out knowledge for the visitor such that it may be absorbed” (2000: 15).

Hein interprets the increasing role of the museum education as “a matter of survival for museums” (2002: 12). Then, he brings progressive education and museum education together (Hein 2006). He argues that “progressive education and museum education emerged at the same time” and they “both emphasize pedagogy based on experience, interaction with objects, and inquiry” (Hein 2006: 161). Hein especially emphasizes “Dewey’s version of progressive education” by stating that it is based on “practical experience- painting, cooking, building, shop work, gardening, field trips, museum visits” (2006: 163). Hein’s constructivist theory, that implies “all knowledge is constructed by the learner personally or socially”, reinforces the role of practical experience in education (Hein 2002: 25). Referring to Hein’s education theories, Savicke and Juceviciene remark that experimental learning “is activated through

practical ‘hands-on’ activities; however, priority is given to ‘minds-on’ activities that stimulate thinking and reasoning” (2013: 78).

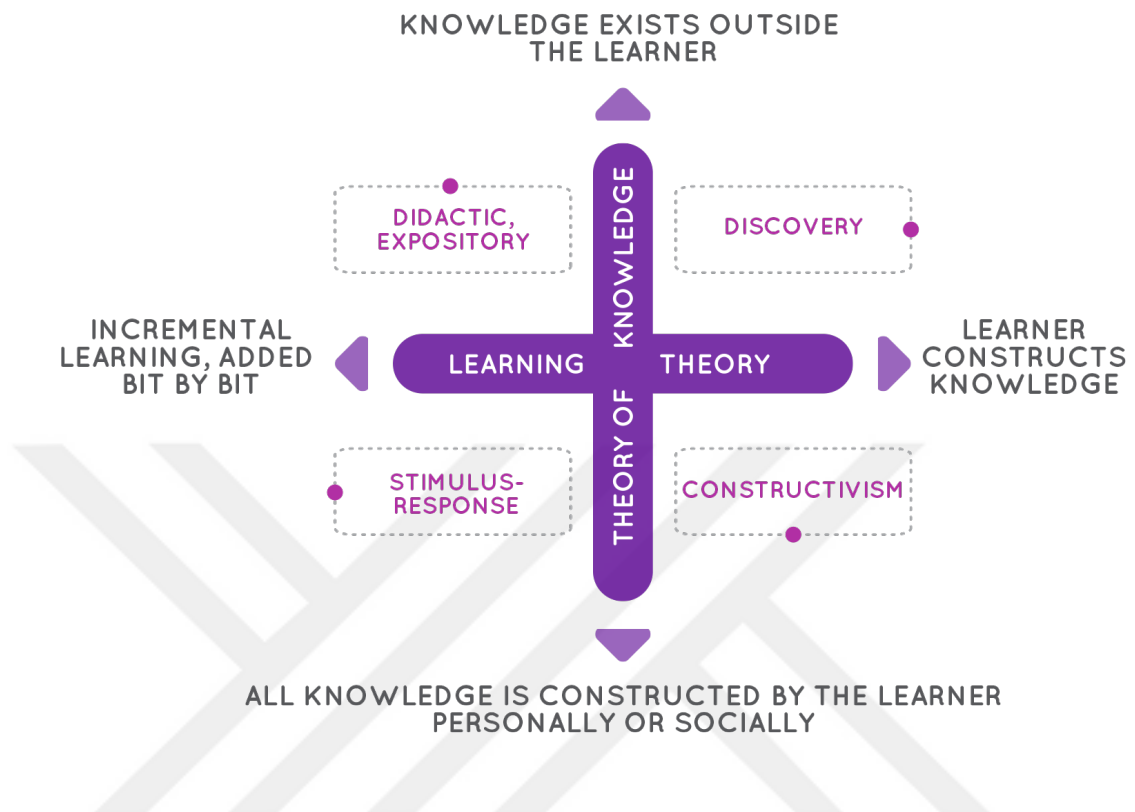


Figure 2.3 Education Theories (Hein 2002: 25)

Along with new approaches towards learning and education, the teaching concept has evolved as well. Savicke and Juceviciene move one step forward by saying that “learning process can be carried out without a teacher and teaching methods, ... the best teacher is experience” (2013: 78). Vallance states that teaching is much more complex in museum education and she adds that the visitor is included in the teaching action by “creating meaning through interaction with each other and with the museum materials” (2004: 345). For improving the quality of learning in museums, Savicke and Juceviciene offer the term “edutainment” by bringing “education” and “entertainment” together (2013). They argue that “the possibility to be entertained by learning encourages learners to actively participate” and they associate edutainment

with “children’s games accompanied by surprise, excitement, adventures and findings that become the main ingredients” (2013: 78). Especially for children, playing and having fun is an “essential mode of learning” (Waite 2011: 67).

2.4 Museums, Art Education and Children

In 1940’s, about how children were taken into consideration by museums at that era, Wittlin states that “children of all ages vividly appreciate facilities for touching and handling objects and opportunities for activities, in form of crafts, games or play-acting in connection with specimens” (1949: 213). In 1990’s, Kelvingrove Art Gallery designed a special area for children under eight years old named “Kidspace” in England (Fraser 1997). The intention of designing “Kidspace” was for that children could “learn about themselves in the context of a museum” and the most important thing was that “Kidspace” could make children realize that “a museum is a fun place to be and that there are things in it particularly for them” (Fraser 1997: 59). The purpose of Kelvingrove Art Gallery by designing such space was that “adults and children should learn and play together in safe welcoming and supportive environment” (Fraser 1997: 59).



Image 2.1 and Image 2.2 “Kidspace”, Kelvingrove Art Gallery (Fraser 1997: 58-59)



Image 2.3 “Kidspace”, Kelvingrove Art Gallery (Fraser 1997: 59)

In order to reach more young people, in November 1996, Arts Council of England launched “Arts for Everyone (A4E) lottery schemes” by aiming “to introduce young people to arts experiences and creative activity, encourage them to manage their own projects, develop skills and to support independent cultural expression” (Selwood 1997: 333). From this point of view, it is understood that art has a great importance in children’s education. Even in schools, teachers do not take art lessons seriously (Selwood 1997). Anning states that “in primary schools drawing used mainly as a low-level activity to keep children busy” (1999: 169). However, Winner and Hetland argue that “art programs teach a specific set of thinking skills rarely addressed elsewhere in the curriculum” (2008: 29). Art education does not only improve the skills of thinking, but also it helps to express the emotions in different ways. Ebert et al. suggest that “by

observing, discussing and making art, children can build their emotion vocabulary, learn about the benefits and drawbacks of different emotion states” (2015: 23).

2.5 Workshops as Alternative Education Programs

There are many ways to organize an educational program in informal learning environments. Workshops are very popular among other programs “because of their inherent flexibility and promotion of active learning” (Steinert et al. 2008: 328). In addition, Steinert describes workshops as “common educational format for transmitting information and promoting skill acquisition” (1997: 127). One of the distinguishing features of workshops from other programs is that workshops are mostly nourished from the participants’ involvement and their interaction. However, they “are often quiet, passive onlookers; the workshop coordinator gives a 'lecture' to the group; and questions and discussion are frequently absent” (Steinert 1992: 127). Sanoff and Demir Mishchenko suggest that workshops should “achieve a high level of interaction between people sharing a common purpose” and “an important component in the development of a workshop is that of building a group cohesion” (2015: 17). In order to conduct an efficient workshop, it is important to design each step before the workshop, especially if children are involved. Some suggestions like defining the target audience, determining the teaching methods, encouraging active participation and knowing the learning principles may be very helpful to organize a workshop of any topic (Steinert 1992).

2.6 The Theory of Affordances

A content and design of workshops can be evaluated within The Theory of Affordances (Gibson 1986). Basically, Gibson describes The Theory of Affordances through environments. He suggests that “the affordances of the environment are what it offers to the animal, what it provides or furnishes, either for good or ill” and he defines “the environment as the surfaces that separate substances from the medium in which the animals live” (Gibson 1986: 127). According to Gibson, “the composition and layout of surfaces constitute what they afford” and “to perceive them is to perceive what they afford” (1986: 127). The Theory of Affordances is not only applied within the physical context; it also has a psychological extent which asserts that “the other animal and the other person provide mutual and reciprocal affordances at extremely high levels of behavioral complexity” (Gibson 1986: 137). Thus, “behavior affords behavior” (Gibson 1986: 135). The human beings interact with both physical objects and each other. However, Gibson argues that the concept of affordance should be discriminated from the concept of quality by saying that “what we perceive when we look at objects are their affordances, not their qualities” (1986: 134).

The fact that “the affordances are properties taken with reference to the observer” and since the scope of this study is children, it should be considered how Theory of Affordances works for them as well (Gibson 1986: 143). By referring the differences between the quality and the affordance of an object, Gibson suggests that “an infant does not begin by first discriminating the qualities of objects” and “the affordance of an object is what the infant begins by noticing” (1986: 134). Thus, “the basic

affordances ... are perceivable and are usually perceivable directly, without an excessive amount of learning” (Gibson 1986: 143).

Considering each structure introduced above (informal learning, museums, art education, children, workshops and The Theory of Affordances) is in interaction with one another, the conceptual framework of this study was constructed as the design and content of informal learning environments (which are workshops) is in relation with the informal learning experience. They affect each other.

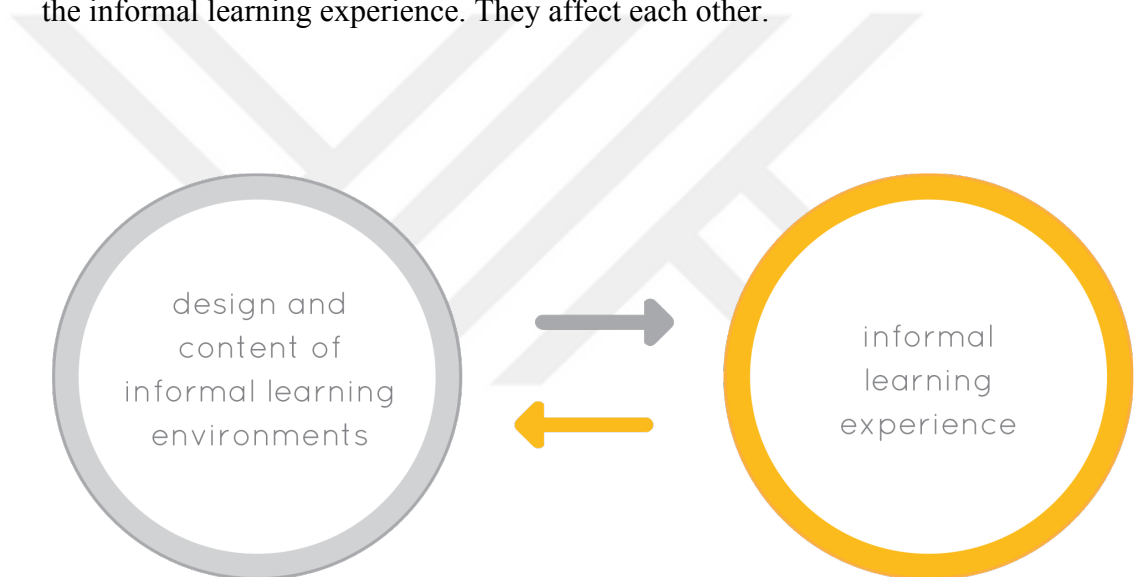


Figure 2.4 Conceptual Framework

CHAPTER 3

CASES

3.1 Brief Information about Istanbul Modern Museum

The fact that Istanbul Modern is Turkey's first modern art museum plays a significant role in terms of becoming an exemplary for other institutions. It is one of the most recognized museums in Istanbul as well. Apart from its permanent and temporary exhibitions, it also organizes educational programs for people at various ages. It was founded in 2004 and in a short span of time it became a prestigious museum. The mission of Istanbul Modern is to bring the contemporary and modern art together with a broad audience, to increase the comprehensibility towards art, to provide accessibility and to constitute an education platform in order to ingratiate society into art. Within this framework, Istanbul Modern was considered to fulfill my research as a non-school learning environment.

3.2 Art Workshops

Between the dates of July 11 and August 26, 2016, Istanbul Modern Museum organized art workshops associated with the museum's concept and exhibitions. There were two types of workshops under the same program. One was the two-hour long morning workshops realized by museum experts, the other was The Artist Workshops organized under the management of the selected artists, which lasted three hours in the afternoon. The overall content of art workshops was introduced as "Summer Vacation at Istanbul Modern" including two different age groups: one was between 4-6 years

and the other was between 7-12. The aim of these workshops was to enable children spend their summer vacation by mingling with art entertainingly, while learning at the same time.

For two months, there were workshops for each day of the week and within this period, each workshop was repeated regularly with different groups of children. For weekdays, the workshops named “Pictures and Costumes”, “Future Architects”, “Pixilation Short Film Workshop”, “Fantastic Accessory” and “Pictures from Microscope” were realized respectively by having one workshop for each of the weekday.

The entire observation period was between August 4 and 23 of 2016. The study started with “Fantastic Accessory” (August 4) and ended with “Future Architects” (August 23). The other three activities were “Pictures from Microscope” (August 12), “Pictures and Costumes” (August 15) and “Pixilation Short Film Workshop” (August 17).

Each workshop was realized under five artistic and interdisciplinary areas: fashion, architecture, cinema, accessory design and biology. In order to understand the nature of observed workshops better, it is important to mention some of their common characteristics stated below:

- The activities started and finished at the same time approximately.
- The number of participants varied between 3 to 7.

- It was possible to attend the workshops daily or children could register weekly as well.
- For every workshop, there was an instructor and based on the number of children, four interns attended alternatively in order to help the instructor.
- All of the workshops took place at the same location named Young Istanbul Modern. That place was reserved particularly for children and youth (Image 3.1, 3.2, 3.3).



Image 3.1



Image 3.2



Image 3.3

- Each workshop was consisted of 4 to 5 sessions.
- The order of sessions was not the same every time.

- Workshops had specific keywords related to the theme. Some workshops had mutual keywords. For example, the words “imagination” and “inspiration” were mentioned the most.
- Since children used several types of materials in accordance with the theme of workshop, they produced different products using various mediums.

3.3 The Theme and Content of Each Workshop

Fantastic Accessory (Workshop 1)

This workshop encouraged children to think and produce creative, crazy and fantastic accessories. Cooling head fountains for those who are exhausted from heat, glasses showing the past, earrings combing hair and many more fantastic ideas were just the few of the numerous ideas possible to immerse in the workshop. The program invited children to design and prepare the cardboard models of the tools that are not extraordinary, but can be needed as well.

<p>PARTICIPANT NUMBER</p> <p>Four Girls <i>The number of girls decreases to three</i> Two Boys Six in Total</p>	<p>INSTRUCTOR NUMBER</p> <p>One</p>	<p>INTERN NUMBER</p> <p>Three</p>
<p>SUBJECT / CONCEPT</p> <ul style="list-style-type: none"> ● Creating crazy things ● Pushing the limits of imagination ● Designing fantastic accessories ● Designing effective, functional but utopic products 	<p>MATERIALS</p> <p>Glue - Paperclip - Cardboard - Fancy Paper - Balloon - Straw - Packaging Tape - Wool - Scissors - Pencil - Aluminum Foil - Plastic - Balsa Wood Strip - Pipe Cleaner</p>	<p>FINAL PRODUCTS</p> <ul style="list-style-type: none"> ● Cooling fan with balloon ● Remote-controlled teleportation hat ● Mind reader hat and ice cream that transforms people to giant ● Teleportation hat ● A Glass with belt which prevents liquids from pouring while being on the move

Table 3.1 General Information about Fantastic Accessory

August 04, 2016
Workshop One

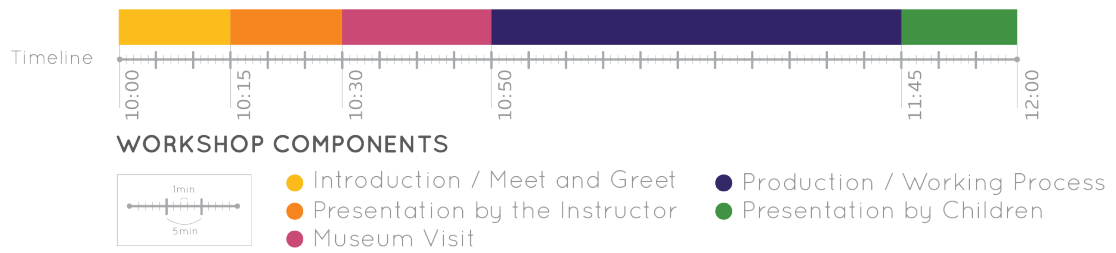


Figure 3.1 Components of the First Workshop

The first session started with meeting and greeting, finished with the instructor's presentation and lasted for half an hour. The presentation consisted of twelve photographs of unusual and bizarre accessories. This session was mostly a Q&A session between the instructor and children (Image 3.4, 3.5).



Image 3.4



Image 3.5

The second session took place in the museum and lasted for twenty minutes. The instructor took children to the exhibition area to see six pieces of art associated with the workshop's concept (Image 3.6, 3.7).



Image 3.6



Image 3.7

At the third session, children made their productions and the production phase lasted for fifty-five minutes. In this phase, children produced their accessories with the help of the interns by using materials (Image 3.8, 3.9).



Image 3.8



Image 3.9

The last and the fourth was the children's presentation phase. It lasted for fifteen minutes. One by one, children presented their products to their parents. They narrated how and why they designed such accessories (Image 3.10, 3.11).



Image 3.10



Image 3.11

Pictures from Microscope (Workshop 2)

The program which brought together the scientific research techniques and plastic arts started with the children observing how the frequently encountered materials looked under the microscope. Subsequently, based on the seen images, they produced pictures of this micro world using water based paints.

<p>PARTICIPANT NUMBER</p> <p>Two Girls One Boy Three in Total</p>	<p>INSTRUCTOR NUMBER</p> <p>One</p>	<p>INTERN NUMBER</p> <p>Two</p>
<p>SUBJECT / CONCEPT</p> <ul style="list-style-type: none"> ● Abstract painting ● Patterns ● Combining science and art ● Developing subjective point of view ● Perception / Perceiving ● Paying attention to details ● Inspiring from the nature 	<p>MATERIALS</p> <p>A3 Size Sketch Paper - 35x50cm Drawing Paper - Pencil - Gouache Paint - Brushes - Eraser -Microscope</p>	<p>FINAL PRODUCTS</p> <ul style="list-style-type: none"> ● Three pieces of gouache paintings

Table 3.2 General Information about Pictures from Microscope

August 12, 2016
Workshop Two

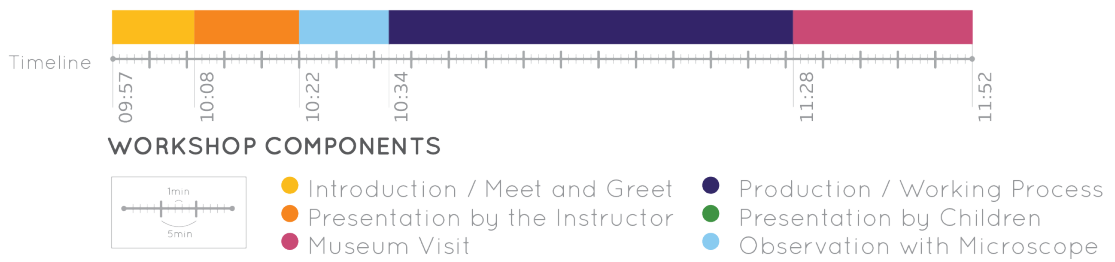


Figure 3.2 Components of the Second Workshop

At the first session, the instructor made her presentation along with meeting and greeting. Children saw different kinds of microscopic pictures on the laptop and they answered instructor's questions. The session lasted for twenty-five minutes (Image 3.12, 3.13).



Image 3.12



Image 3.13

At the second session, children made an observation with microscope. This session lasted for twelve minutes (Image 3.14).



Image 3.14

At the third session, children painted what they saw at the microscope. The session lasted for fifty-four minutes (Image 3.15, 3.16).



Image 3.15



Image 3.16

The last and the fourth session was in the museum. Children observed fifteen pieces of art for twenty-four minutes (Image 3.17, 3.18).



Image 3.17



Image 3.18

Pictures and Costumes (Workshop 3)

At the beginning of the workshop, children watched a presentation showing examples from art history and old master paintings. Then, they evaluated the eras and costumes described in the presentation pictures. At the production phase, they designed their own costumes on dress forms and later, they finalized the program by doing a painting activity for a figure wearing their costume.

PARTICIPANT NUMBER	INSTRUCTOR NUMBER	INTERN NUMBER
Four girls in Total	One	Two
SUBJECT / CONCEPT	MATERIALS	FINAL PRODUCTS
<ul style="list-style-type: none"> ● Clothes / Costumes ● Costume designers ● Fashion design ● Representations of clothes ● Identities of clothes ● Famous fashion designers ● Creating authentic designs 	Four Dress Forms - Pencil - Eraser - Sketch Paper - Kraft Paper - Crepe Paper - Tulle-like Material - Shiny Wrapping Papers - Scissors - Marker Pen - Wool - White Roll Paper - Stapler	<ul style="list-style-type: none"> ● Four pieces of costumes ● Four pieces of collages

Table 3.3 General Information about Pictures from Costumes

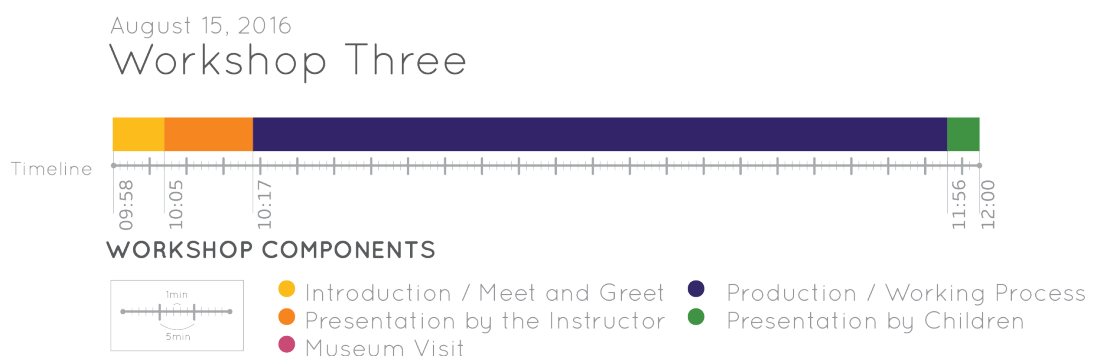


Figure 3.3 Components of the Third Workshop

The first session lasted for twenty-two minutes and the instructor made her presentation along with meeting and greeting. The instructor showed children local clothes from several countries on TV and then, they looked at some clothes worn by people in old master paintings. The presentation ended with famous designers' fashion show videos on YouTube (Image 3.19, 3.20).



Image 3.19



Image 3.20

At the second session, children sketched the costumes formed in their minds for eleven minutes (Image 3.21, 3.22).



Image 3.21



Image 3.22

The third session lasted for fifty-six minutes and children produced their costumes with various materials. Each child got help from interns and the instructor (Image 3.23, 3.24).



Image 3.23



Image 3.24

The fourth session was the session where children made collages from the photos of their costumes. It lasted for twenty-nine minutes (Image 3.25, 3.26).



Image 3.25



Image 3.26

The fifth session just took three minutes. The instructor gave children their certificate of participation and children showed their designs to their parents in person (Image 3.27).



Image 3.27

Pixilation Short Film Workshop (Workshop 4)

In this workshop, children prepared their own short animation film by gathering in groups. At the workshop where different interpretations of a story were produced, children completed their common animation by taking special roles in activities like script writing, acting and photography.

PARTICIPANT NUMBER Five Girls Two Boys Seven in Total	INSTRUCTOR NUMBER Two one major, one assistant	INTERN NUMBER One
SUBJECT / CONCEPT <ul style="list-style-type: none"> ● Animation production ● Pixilation ● Stop motion video ● Theater / Acting ● Tale enactment ● Creating video from pictures ● Painting your own stage 	MATERIALS Apron - Oversized Drawings Hanging on the Walls - Brushes - Gouache Paints - Acrylic Paint - Costumes - Animal Figures made from Styrofoam - Cellophane Tape - iPad - Viva Video Application	FINAL PRODUCTS <ul style="list-style-type: none"> ● 33 seconds long collectively produced stop motion video

Table 3.4 General Information about Pixilation Short Film Workshop

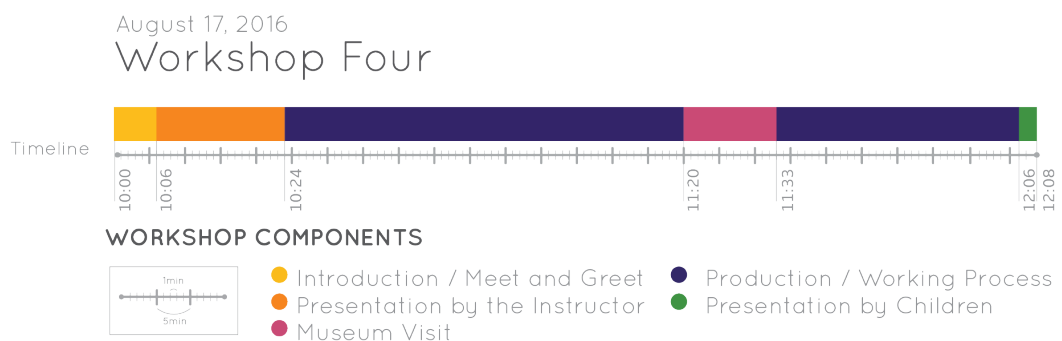


Figure 3.4 Components of Fourth Workshop

The first session started with meeting and greeting, then continued with the instructor's presentation. The instructor showed children some example videos about stop motion on YouTube. It lasted for twenty-two minutes (Image 3.28, 3.29).



Image 3.28



Image 3.29

At the second session, children painted their own stage where they were going to portray the characters. Three walls of the room were covered with oversized black and white paintings that were previously prepared. With the help of the instructor and interns, children painted the pictures in fifty-six minutes (Image 3.30, 3.31).



Image 3.30



Image 3.31

At the third session, children visited the museum with the assistant instructor. They only viewed two pieces of art and spent thirteen minutes there (Image 3.32, 3.33).



Image 3.32



Image 3.33

The fourth session was composed of photo shooting and video production. Following the instructions, children enacted the story named “Jack and the Beanstalk”. That session lasted for thirty-three minutes (Image 3.34, 3.35).



Image 3.34



Image 3.35

At the last and the fifth session, children watched their thirty-three-second long video. The video was prepared by the instructor with an iPad application. The last session lasted for two minutes.

Future Architects (Workshop 5)

In this workshop, children created a green city full of playgrounds by gathering and painting specially prepared geometric shapes. The study aimed children to develop the city notion and strengthen their environmental consciousness.

PARTICIPANT NUMBER	INSTRUCTOR NUMBER	INTERN NUMBER
One Girl Three Boys Four in Total	One	Four
SUBJECT / CONCEPT	MATERIALS	FINAL PRODUCTS
<ul style="list-style-type: none"> ● Architecture ● Future ● Cities ● The evolution of cities over the years ● Creating your own city 	35x50cm White Cardboard - Crepe Paper - Fancy Paper - A4 Size Cardboards in Color - Glue - Scissors - Craft Knife - Pipe Cleaner - Sticker - Marker Pen - Aluminum Foil - Cellophane Tape - Custom Sized Boxes - Kraft Paper	<ul style="list-style-type: none"> ● Four miniature city models

Table 3.5 General Information about Future Architects

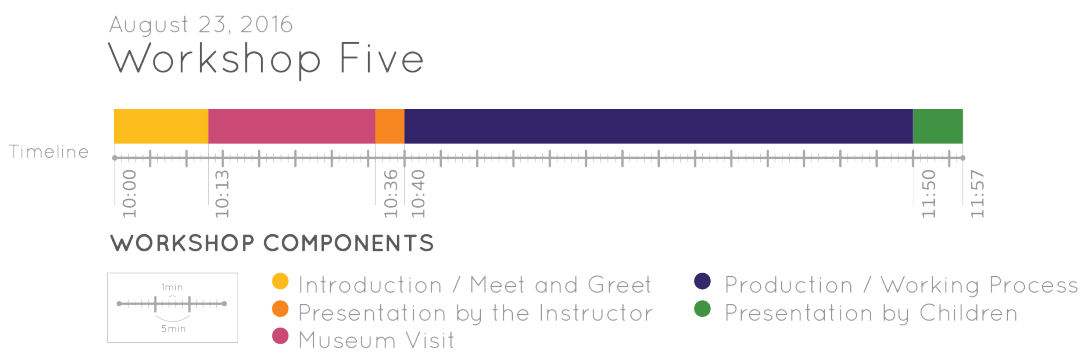


Figure 3.5 Components of Fifth Workshop

The fifteen-minutes long first session was composed of meeting and greeting (Image 3.36).



Image 3.36

At the second session, the instructor took children to the museum. They visited four artworks and spent twenty-one minutes there (Image 3.37, 3.38).



Image 3.37



Image 3.38

At the third session, the instructor made a TV presentation and showed children unconventional building photos to inspire them. The presentation lasted for four minutes (Image 3.39).



Image 3.39

At the fourth session, every child matched an intern and produced miniature mockup cities (Image 3.40, 3.41, 3.42).



Image 3.40



Image 3.41



Image 3.42

At the fifth session, children presented their model cities to their parents in seven minutes (Image 3.43).



Image 3.43

CHAPTER 4

DATA ANALYSES AND FINDINGS

In consequence of data analyses, it was discovered that the design of workshops affected the behavior of children. The design elements were specified as the usage of workroom, materials/equipment, education team and museum visits, while the behavioral elements were specified as children’s active participation and focus levels, their social interaction and final products.

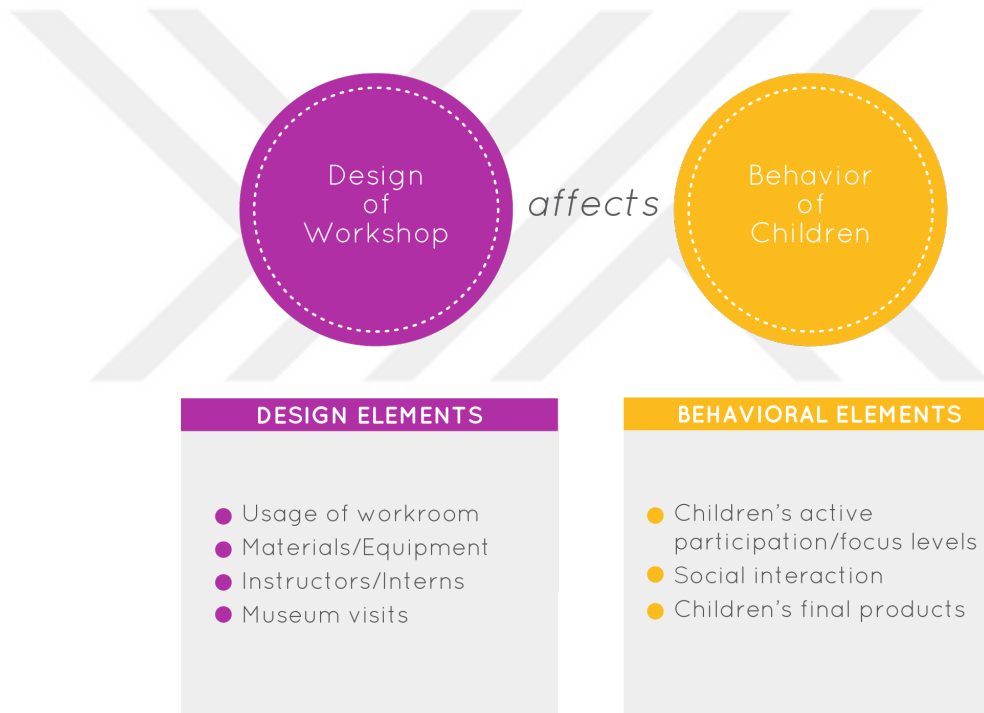


Figure 4.1 Design and Behavioral Elements

First of all, each data was evaluated within The Contextual Model of Learning. Falk and Dierking’s model was adapted to design and behavioral elements. Participants’ backgrounds, their active participation/focus levels and their final products constituted “the personal context”; education team and the social interaction constituted the

“sociocultural context”; the usage of workroom, materials/equipment and museum visits constituted “the physical context”.

<i>original</i>	PERSONAL CONTEXT	<i>adapted</i>
<ul style="list-style-type: none"> ● Motivation and expectations ● Prior knowledge, interests and beliefs ● Choice and control 		<ul style="list-style-type: none"> ● Participants' background ● Active participation/focus levels ● Final products
SOCIOCULTURAL CONTEXT		
<ul style="list-style-type: none"> ● Within-group sociocultural mediation ● Facilitated mediation by others 		<ul style="list-style-type: none"> ● Social interaction ● Education team
PHYSICAL CONTEXT		
<ul style="list-style-type: none"> ● Advance organizers and orientation ● Design ● Reinforcing events and experiences outside the museum 		<ul style="list-style-type: none"> ● Workroom ● Materials/Equipment ● Museum visits

Table 4.1 Adapted Version of Contextual Model of Learning

Secondly, each context was evaluated within The Theory of Affordances (Gibson 1986). Since the fundamental necessities of informal learning is learner’s free-choice and having control over how to learn, “choice” and “control” issues will be looked for by applying The Theory of Affordances to The Contextual Model of Learning. In the next paragraphs, it will be found out if these five workshops afforded the infrastructure where participants made their free-choices and had the control. Within the personal, sociocultural and physical contexts, these questions will be directed:

- Did the fact that participants had to pay a certain fee for each workshop afford the attendance of children from a specific sociocultural background?
- Did participants' free-choice and having control over how to learn lead to increase of their active participation and focus levels?
- What were the affordances of children's final products?
- What elements afford the different combinations of social interaction?
- How was the education team's background?
- Did the usage of workroom and the objects in it afford and support children's free-choice and having control?
- What did the materials/equipment afford for children?
- Did museum visits afford the physical interaction in order to give the control to the participants?

PARTICIPANTS' FREE-CHOICE AND HAVING CONTROL OVER ALL CONTEXTS

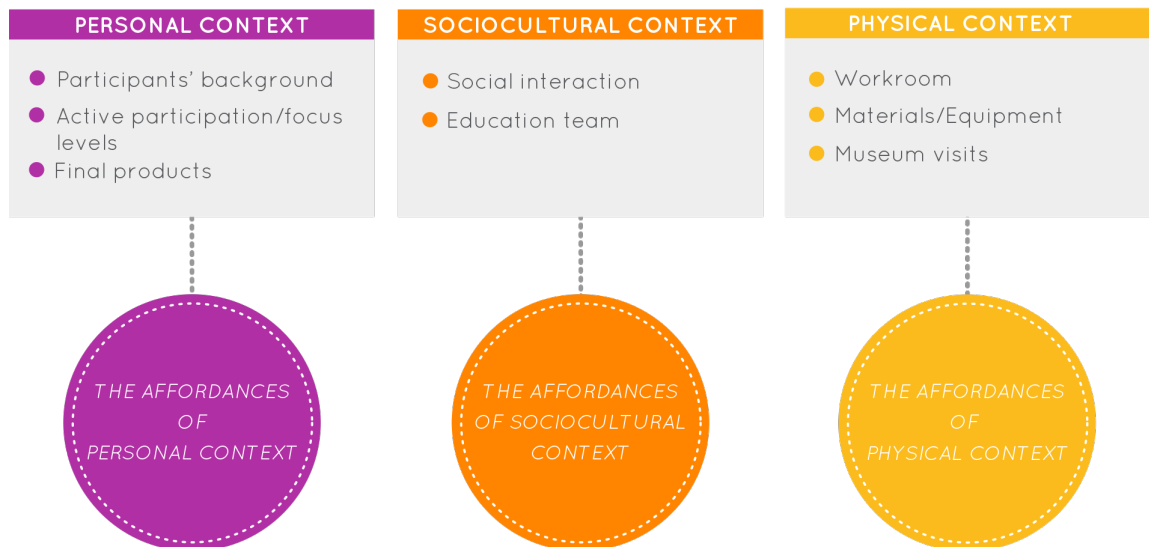


Figure 4.2 The Illustration Showing the Interaction Between “Choice and Control”, “Contexts” and “Affordances”

During the data analyses, first of all, each workshop was evaluated within itself and then, all workshops were compared among each other. At each workshop, in order to assess children's behaviors, same questions were answered by investigators at every observation cycle and each answer was evaluated regarding the number of participants. As result of the comparison of five workshops, some similarities and differences were discovered. The analyses were done in accordance with the number of observation cycles and number of observations. Number of observations was equal to multiplication of the number of participants and the number of observation cycles.

4.1 Personal Context

Due to the limitations, children's prior knowledge, beliefs and expectations could not be evaluated. Within the personal context, participants' background was specified and children's motivation was observed through their active participation and focus levels. As a result of their performances, their final products were taken into account as well.

4.1.1 Background of Participants

Overall, 24 participants (16 girls, 8 boys) attended the workshops. Mostly, the children aged 9 and 8 preferred to come. In order to register daily or weekly, children had to pay a certain fee. Therefore, their families were from similar economic and social status. For example, among the custodians, there was a mother who was reading a book while waiting for her child, a father who brought her daughter with a motorbike,

a parent who sent her child with private driver to the workshop and a family who had lived in the US for a while.

WORKSHOP 1		WORKSHOP 2		WORKSHOP 3		WORKSHOP 4		WORKSHOP 5	
Gender	Age	Gender	Age	Gender	Age	Gender	Age	Gender	Age
Girl	9	Boy	10	Girl	12	Girl	9,5	Girl	11
Girl	9	Girl	9	Girl	9,5	Boy	9	Boy	8
Boy	9	Boy	9	Girl	9	Boy	8	Boy	8
Girl	8			Girl	9	Girl	8	Boy	8
Girl	7					Girl	8		
Boy	7					Girl	8		
						Girl	7		

Table 4.2 The Distribution of Gender and Ages at Each Workshop

4.1.2 Active Participation and Focus Levels Based on the Observation Cycles

During each observation cycle, the behaviors of children were observed and it was stated if children actively participated and focused at that time. Through looking at these two major criteria, children’s interests and behaviors were evaluated at each workshop. The procedure of deciding whether a kid was actively participating or focused was based on the learning activity. Being active “does not mean that all learning must be physically challenging or kinesthetically based, but that learning must come from within the learner” (Heimlich 1993: 5). When an observation cycle started, if a child was occupied with doing the relevant activity related with that session, s/he was accepted as “actively participated”. If a child was focused on learning and interested in discovering during the activity, s/he was accepted as “focused”. Hooper-Greenhill describes the state of being “active” by arguing that “learners are active in the process of making sense of experiences (including the formal or informal experience of learning). Both mental and bodily action are important in learning processes” (2000: 24).

ACTIVELY PARTICIPATED	FOCUSED
<ul style="list-style-type: none"> ● Responding the instructor ● Asking questions ● Watching the presentation ● Examining the artworks ● Using the relevant materials 	<ul style="list-style-type: none"> ● Looking interested ● Listening carefully ● Shows her/his curiosity ● Producing without being distracted

Table 4.3 The Table of Indicators Showing If a Participant is Actively Participated and Focused

During the instructor’s presentation at all workshops, children were observed as focused in total. However, their peak activity level in participation was not observed at that time. It means that, children listened to the instructor carefully but not participated or responded frequently. At all museum tours, boys were more actively participated. However, both girls and boys were observed as disengaged at the beginning of the museum visits. Their interest increased through the second half of the tour. Nevertheless, the highest participation and focus rates were not observed during the museum visits. As a result of evaluating five workshops together, children’s both participation and focus levels were observed very high at the production process. Creating handmade products with various materials affected the children’s performance positively. This situation can be explained through Nicholson’s Theory of Loose Parts and Anning’s approach towards handicraft materials. According to Nicholson, “all children love to interact with variables, such as materials and shapes; ... sounds, music, motion; ... plants, words, concepts and ideas. With all these things, all children love to play, experiment discover and invent and have fun” (1972: 5). He thinks that “both the degree of inventiveness and creativity, and the possibility of

discovery are directly proportional to the number and kind of variables in it” (1972: 6). In other words, “movable elements, otherwise known as loose parts” increase creativity, afford interactivity and inventiveness (Nicholson 1972; Sutton 2011). Based on The Theory of Loose Parts, Anning explains why children enjoy using various materials and she says that “when resources are at hand –food, sticks, crayons- young children explore mark making for the kinesthetic pleasure it brings” (1999: 163). (Figure 4.3, 4.4, 4.5, 4.6, 4.7)

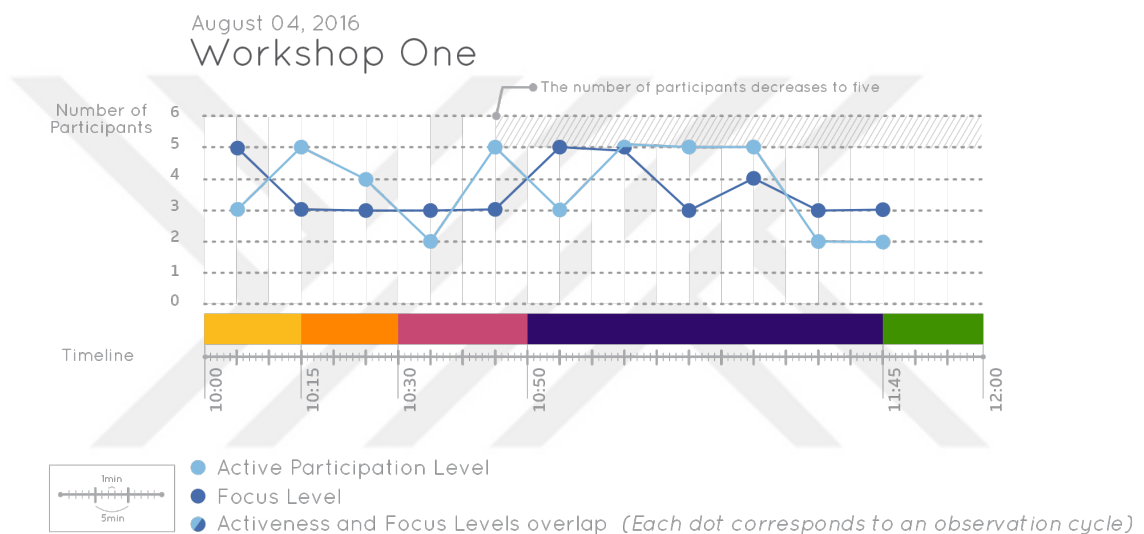


Figure 4.3 Active Participation and Focus Levels Based on the Observation Cycles

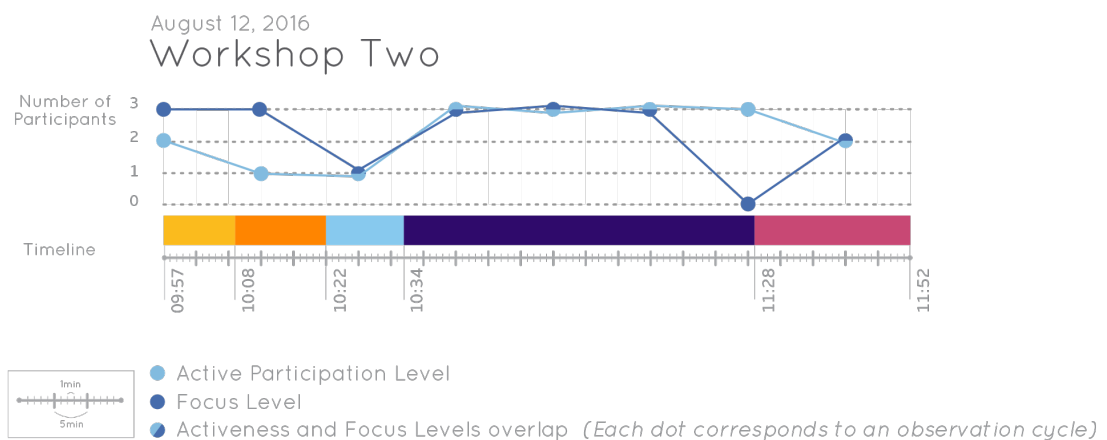


Figure 4.4 Active Participation and Focus Levels Based on the Observation Cycles

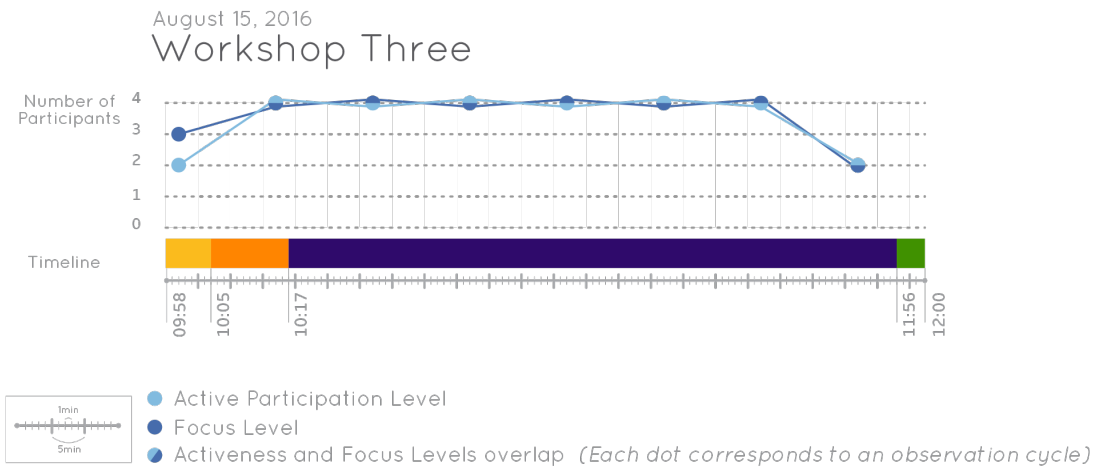


Figure 4.5 Active Participation and Focus Levels Based on the Observation Cycles

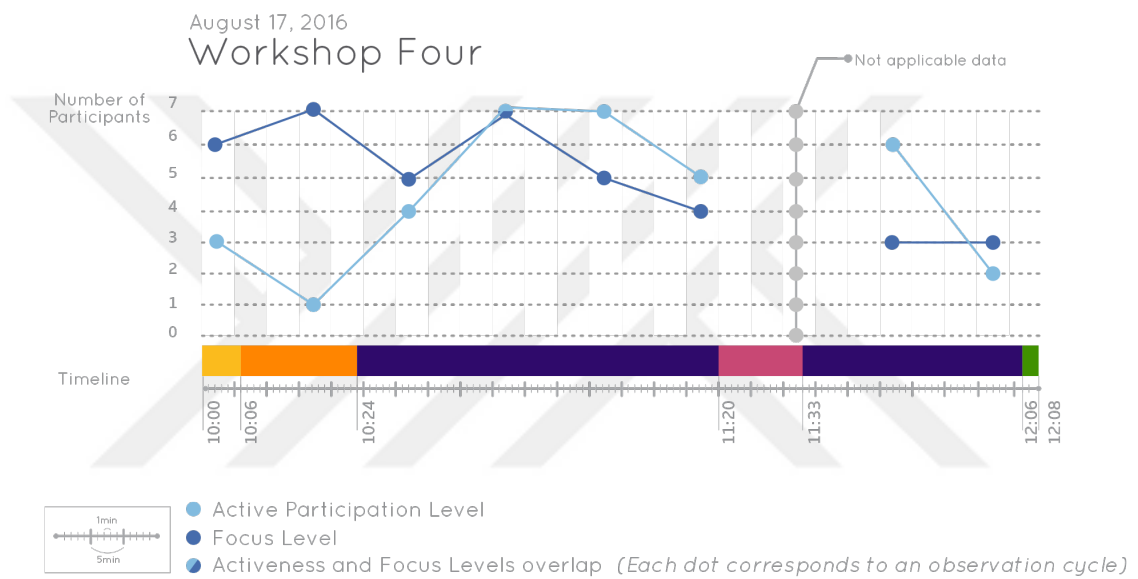


Figure 4.6 Active Participation and Focus Levels Based on the Observation Cycles

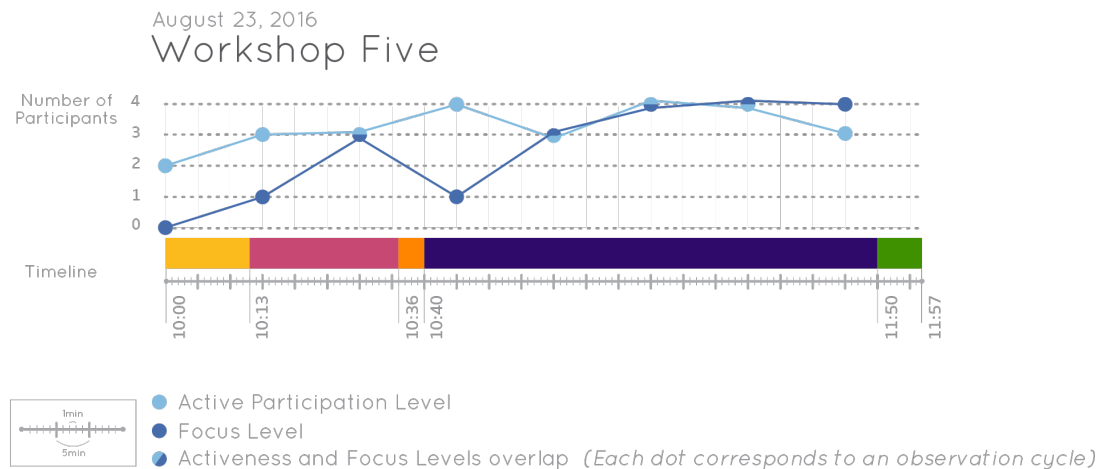


Figure 4.7 Active Participation and Focus Levels Based on the Observation Cycles

When the sum of all workshop components was considered for each workshop, the lowest active participation percentage (59%) was seen at Workshop 4. Many reasons can be put forward. For instance, children were participating actively at the first production session. They painted the pictures on the walls almost for an hour without being interrupted. This can be explained in terms of Nicholson’s Theory of Loose Parts and Anning’s explanation towards “pure kinesthetic pleasure” (1972; 1999). At the second production session, the instructor had the control and directed children to pose in front of these paintings. Children had to wait each other’s turn and the waiting process distracted them. In addition, at this session only an iPad was used by the instructor and children did not make a handmade production collectively. (Figure 4.8, 4.9)

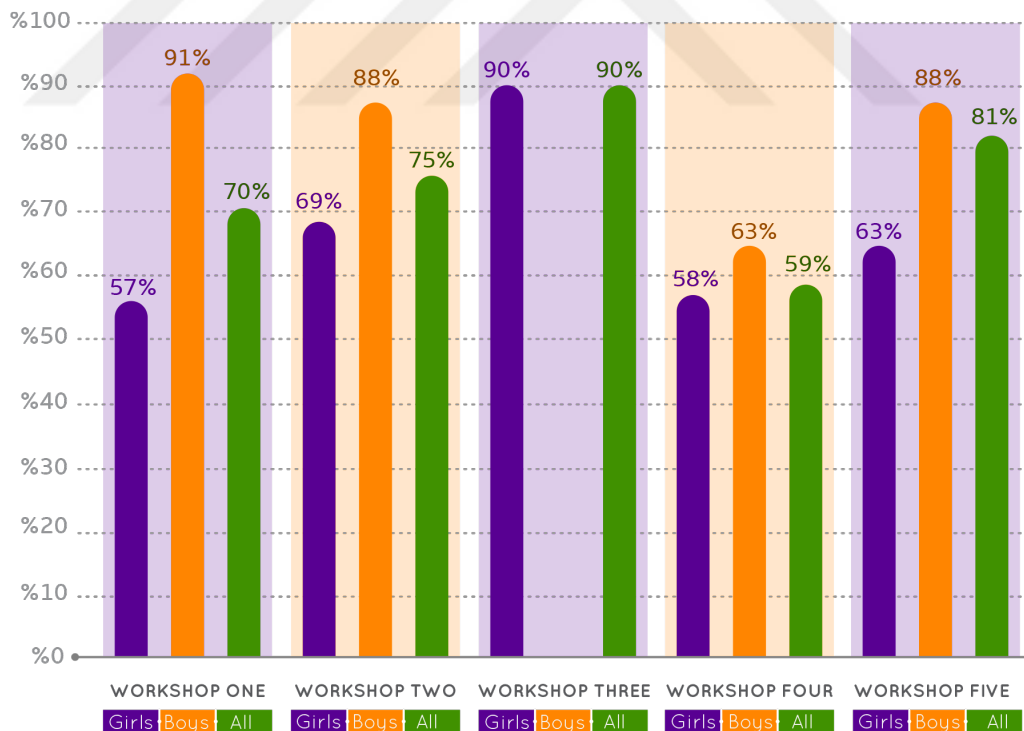


Figure 4.8 Active Participation Percentages of Children
Based on the Sum of Observation Cycles

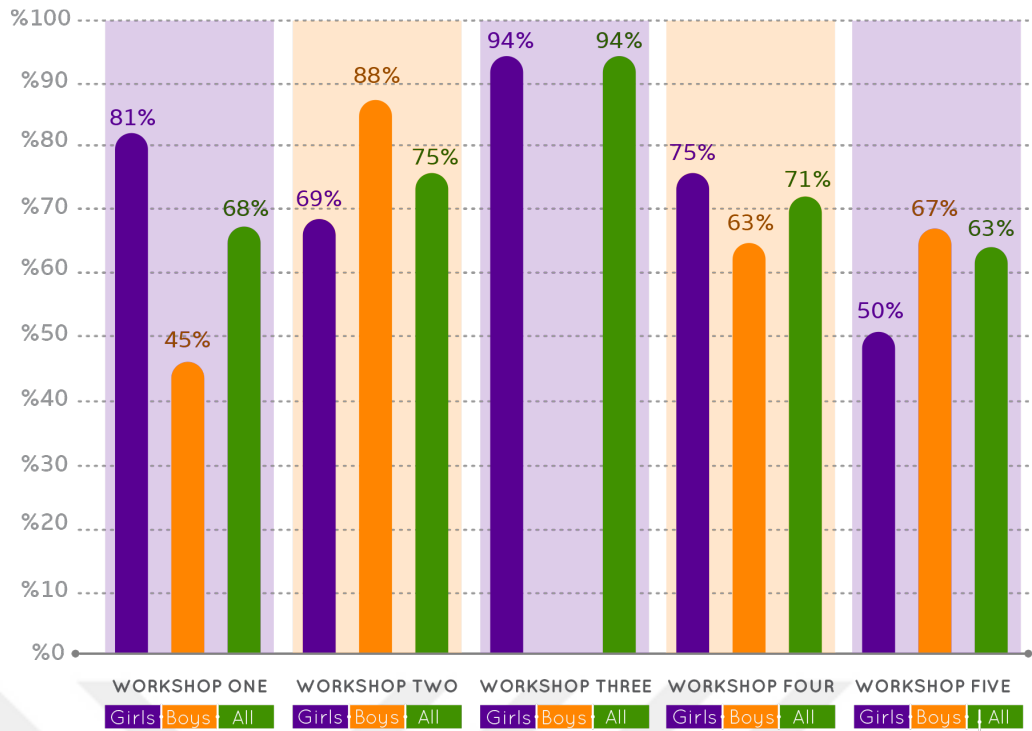


Figure 4.9 Focus Percentages of Children Based on the Sum of Observation Cycles

Along with Nicholson’s, Sutton’s and Anning’s suggestions, children’s free-choice and having control over learning may have affected the active participation and focus levels. It was obviously observed that low levels of participation and concentration were observed at the sessions where children did not own the control. Except the production phases, children did not have the control neither while instructors were making presentation, nor they were visiting the museum. Only when they were producing with their free wills, children’s participation and focus levels increased visibly. Therefore, it can be said that The Theory of Loose Parts affords children to interact with materials and produce freely by owning the control. This affordance leads them to participate willingly and increases the creativity.

4.1.3 Children's Production and Final Products

At all workshops, every product was unique, handcrafted and needed an effort. Children made products that had particular details. Children's creating an intangible product rather than having a ready-made object at the end of the workshops was one of the essential concepts. Designing something personal with greater value would lead children to keep it as a memorable experience.

At the end of Workshop 1, Workshop 2 and Workshop 5, children could take their products to home. However, they could only keep the collage works at Workshop 3 because it was not possible to remove the costumes from the dress forms. At Workshop 4, since children produced a stop motion video, they could not instantly get the output. The instructor promised children to send the video to their parents via e-mail. Anyhow, they could own a final product at the end of each workshop.

4.2 Sociocultural Context

Falk and Dierking state that "humans are at once individuals and members of a larger group or society; learning is both an individual and a group experience" (2000: 50). Therefore, the social interaction is an important component within the sociocultural context. In addition, Falk and Dierking take museum programs as part of the communication media that "represent a socially mediated form of culturally specific conversation between the producers of that medium and the user" (2000: 50). While observing the five workshops, the producers of medium were considered as the

education team and their background was evaluated along with the social interaction percentages.

4.2.1 Instructors and Interns

There were five different instructors for each workshop and four interns. In accordance with high or low attendance and the difficulty level of workshops, number of interns who assisted was varied. Three questions stated below, were directed to both instructors and interns after each workshop, in order to get a brief information:

1. What is your profession and education?
2. How long have you been working with Istanbul Modern Museum?
3. How did you decide to work there and how did you get information about the job position?

As a result of the collected information from instructors and interns, Istanbul Modern Museum's selection criteria of training team were identified. Considering the content of each workshop, instructors' professions were not directly related to the topic of the workshop they conducted. Their background was based on art history, art direction or museum management. Four of the five instructors had master's degree and all of them had pedagogical formation. Their average age was 31. The most experienced one at Istanbul Modern had been working there for twelve years while the newest one had been working for a year. During the workshops, instructors made presentations to explain the workshop topic and took children to visit the museum. While kids were in the process of design and producing, mostly interns helped them effectively.

Instructors observed children all the time and gave their opinion if any of them needed help. Only at Workshop 3 and Workshop 4, they directly gave a hand and intervened the children without inferring to their performance.

Interns were working for museum voluntarily to fulfill internship requirement by their university. They were still studying or already graduated from the visual arts, art history and fine arts departments. Their ages ranged from 22 to 23. During the workshops, the assistance of interns was observed especially when children were at the production phase and the participant number was more than four. They helped children to finish their work in a limited time. Except these circumstances, interns were not involved directly in the whole process of workshops.

When the backgrounds of both instructors and interns were considered, Istanbul Modern Museum emphasized on two criteria:

1. Having an artistic profession
2. Having ability to work with children

4.2.2 Social Interaction Between Children, Instructors and Interns

According to Schwan et al., a museum is not only a place which provides an exploration, “but also a place that facilitates and shapes social interaction” (2014: 80).

Thus, the social interaction has a great impact on learning. In this study, the social interaction category included whom the children worked, talked and interacted with.

SOCIAL INTERACTION
● Talking/Chatting
● Producing together
● Declaring opinion
● Getting opinion
● Receiving help
● Helping someone
● Sharing materials

Table 4.4 Indicators of Social Interaction

Whether children knew each other before the workshops or not, made some differences. Based on the collected data, at Workshop 2 and Workshop 5, where children did not know each other worked either with the instructor, interns, as a group or individually. These two workshops did not afford peer-to-peer interaction. However, at Workshop 1, Workshop 3 and Workshop 4, where at least two participants were friends, there were more varied combinations in matching. Children who knew each other beforehand matched naturally and easily. They preferred to work together till the workshop ended. At these workshops, children also talked among each other during the sessions. (Figure 4.10)

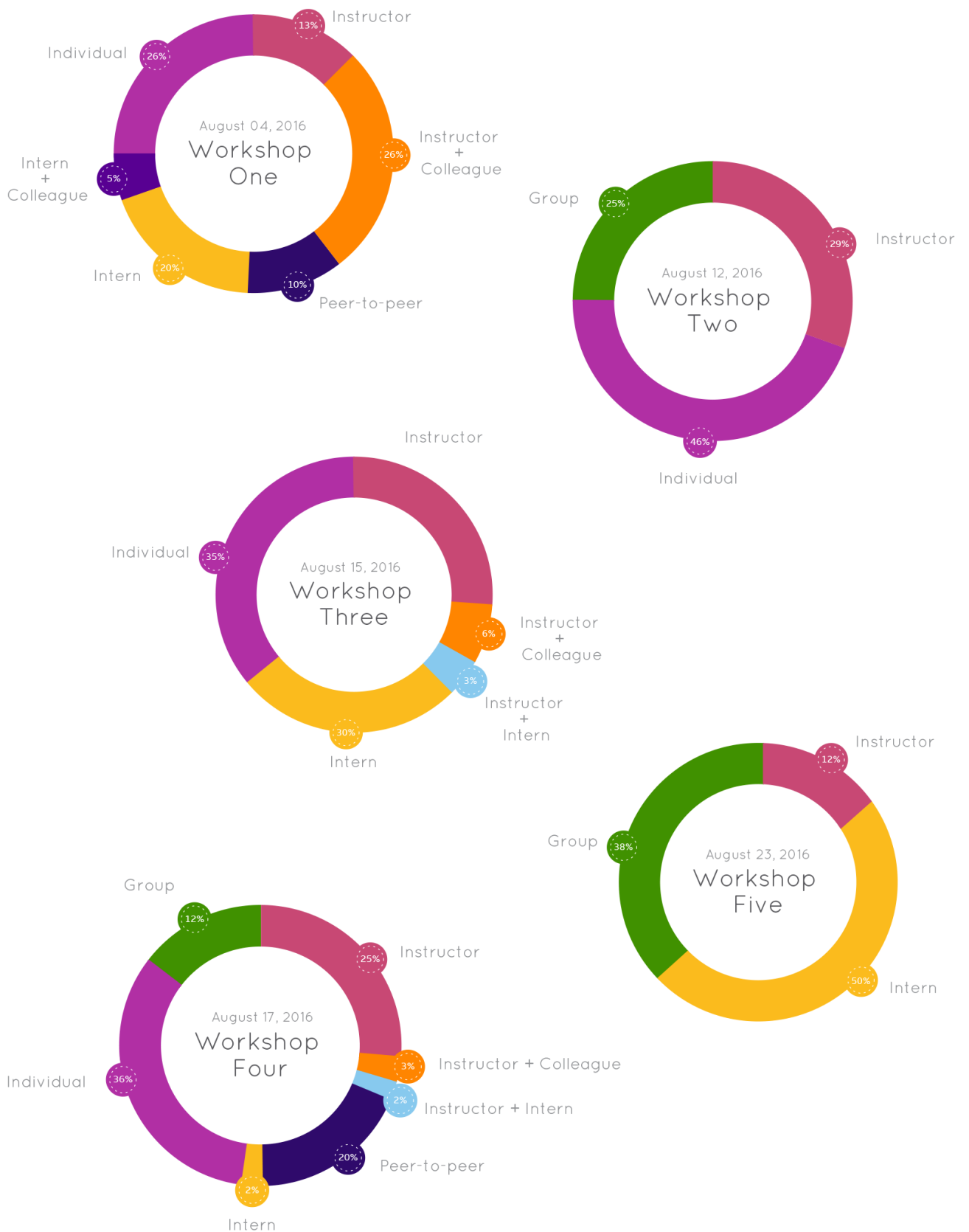


Figure 4.10 The Distribution of Percentages Showing with Whom the Participants Interact

4.3 Physical Context

According to Falk and Dierking, the physical environment is one of the significant components during the learning activity. They argue that “learning appears to be not just ‘enveloped’ within a physical context but rather ‘situated’ within the physical context” and “all learning is influenced by the awareness of place” (2000: 65). There are three factors that affect learning within the physical context: “advance organizers and orientation”, “design” and “reinforcing events and experiences outside the museum” (Falk and Dierking 2000: 137). Due to the limitations, the contribution of advance organizers and experiences outside the museums cannot be observed but the usage of the workroom, materials/equipment and setting of museum visits were evaluated as design elements.

4.3.1 The Usage and Efficiency of the Workroom

In accordance with the workshops’ extent, the space usage of Young Istanbul Modern differed. There were two combinations for children to use. The first combination took place at the entrance of the workroom and participants made their production sitting around the low tables. The second combination was placed in the middle of the room and participants made their production using a wider area by sitting or standing. Both of the combinations afforded enough space to move easily for everybody. (Figure 4.11, 4.12)

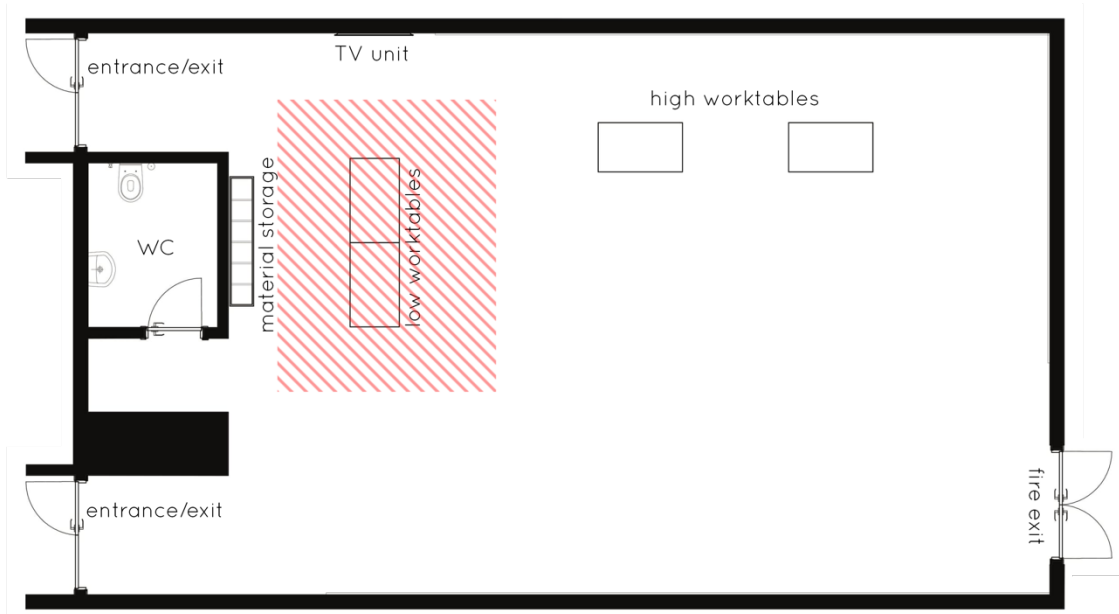


Figure 4.11 First Combination Highlighting the Entrance of the Room

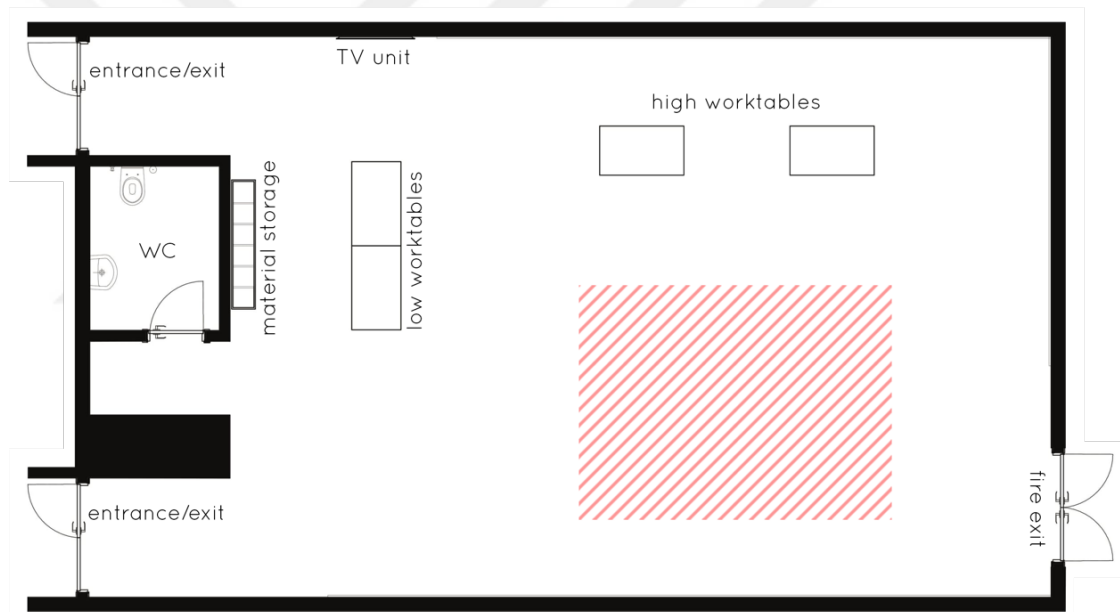


Figure 4.12 Second Combination Highlighting the Middle of the Room

There were also other objects located in the workroom. These objects were mostly related with other workshops or they remained from the previous activities. It was observed that objects independent from the workshop at that time, distracted children's attention from the activity and aroused their interest. This distraction may be based on The Theory of Loose Parts. According to Sutton, "the loose parts take several forms;

... realistic animal puppets, cast critters or illustrations of animals populate the setting” and “kids actively move the loose parts, especially the costumes they may be wearing” (2011: 412). Thus, a hula hoop, a wig or a costume from another workshop may invite a child to touch it, move it and experience it.

4.3.2 Materials, Equipment and Their Storage

There were two main material categories. The first one was the stationery category including materials like pencil, paper and paints. The second one was the handicraft category including various materials like fabric, crepe paper and aluminum foil. Children used these materials in accordance with the workshops’ content. Both categories can be accepted loose parts. Sutton describes the loose parts as “any collection of fully movable elements that inspire a person to pick them up, to re-arrange or create new configurations, even realities, one piece or multiple pieces at a time” (2011: 409). Including loose parts in workshops is important in terms of inviting participants in an “open-ended interactive environment that allows them to make an imprint of their intention” (Sutton 2011: 409). (Image 4.1)



Image 4.1 Materials

All materials were being stored in a bookstore located at the entrance of the workroom. The area of storage was convenient in terms of the bookshelf design and its location. However, there was not a systematical categorization and the shelves were disorganized. In addition, the materials were only provided by the instructor or interns. Children did not choose what they wanted from the storage area. They used previously specified materials. In terms of The Theory of Affordances, both the capacity of storage and the opportunity of choosing materials did not afford participants' having control over what to choose. Gibson discusses The Theory of Affordances through the relation between the observer, the objects and the environment around them. According to him, "terrestrial surfaces, ... are also climb-on-able or fall-off-able or get-underneath-able or bump-into-able relative to the animal" (Gibson 1986: 127). Since the perspective of the observer matters, "the affordance is relative to the size of the individual" and for example, "knee-high for a child is not the same as knee-high for an adult" (Gibson 1986: 128). The bookshelf was "store-able" but not "inviting" for children. Even though the shelves were full of loose parts, the storage area did not afford children to choose any material. If storage was planned differently earlier by considering children's physical aspects and possible interests, participants could have owned the control and interacted more easily.



Image 4.2 Storage

At Workshop 3 and Workshop 4, alongside the analogue equipment, the instructors used digital equipment as well. An iPad was used by the instructors in order to produce both photography and video. Even though photography and video production was part of the workshop content, only the instructors used that equipment. Children had permission to use other materials as stated above.

There were also two other equipment related to Workshop 2 and Workshop 3: a microscope and dress forms. Children made an observation with microscope at Workshop 2 before starting the production phase. Although the instructor made a presentation about microscopic formations before the observation, children had the chance to see the real-time images and got an idea about how they really looked like. A similar process took place at Workshop 3 as well. Children experienced how to design a costume by gathering materials on dress forms. Hereby, children's designs were actualized from the sketches to the real life.

4.3.3 Museum Visit

Since the workshops were organized by Istanbul Modern, instructors introduced the museum at the beginning of every workshop and asked children questions about it. As a part of the workshops, children also visited the permanent exhibition at the museum accompanied by the instructors. The locations of museum and workroom were at the same area but not in the same building. So, children had to leave the workroom for the museum tour. Once they arrived the exhibition area, instructors carefully explained the museum rules, what not to do and how an appropriate museum tour should be.

Overall, the framework of each museum tour resembled each other. The visited artworks were related with the workshops' content. Instructors mentioned different art mediums and especially, the art medium named "installation" was emphasized many times. In the meantime, they saw sample installations at the permanent exhibition area. There were also common artworks visited during different tours.

On Mondays, the museum was closed to the visitors and workshops which fell on the Mondays did not contain tour of museum. For this reason, children did not visit the museum at Workshop 3 within the context of fashion design.

At other four workshops, the order of museum visit differed. These visits occurred before or after the children's production process. Only at Workshop 4, children visited the museum between two production processes. When they finished the painting, the assistant instructor took them to the museum and when they returned, they started to shoot the stop motion video. In accordance with the order of visits, motivations of museum tours differed as well. For example, at Workshop 4 it was observed that the major factor to bring children to the museum between two production processes was to be able to prepare the workroom for the photo shoot. Some visits occurred before the production to inspire children or independently from the production to spend time at the museum. In addition, among the children who visited the museum before, it was observed unwillingness to see the exhibitions one more time.

There was not a direct connection between the museum visits and the workshops. The museum visits were part of the workshops, but the museum experience was not

involved in the production phase. In other words, there was not any interactivity between the artworks and children's performance. They did not produce anything about or during the exhibitions. They only analyzed the artworks by listening the instructors and answering their questions. Through Nicholson's expression, the environment of museum did not "work" in terms of human interaction and involvement" (1972: 6). Nicholson describes such places as "clean, static and impossible to play around with" because "they do not meet the 'loose parts' requirement" (1972: 6). Common museum settings afford mental interactivity but "there are more ways to interact with art than to be solely contemplative" (Nicholson 1972: 10). Therefore, physical interactivity should trigger other senses along with the visual one. Sutton argues that when there is "no boundaries" between children and the setting, and involving loose parts afford children to "see the whole place, not just the exhibit components" (2011: 420).

CHAPTER 5

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

While specifying the types of learning, two questions are directed: “Who has the control over *what* to learn?” and “Who has the control over *how* to learn?”. In chapter 2, it was discussed that if the institution has control over what to learn and the learner has control over how to learn, it is informal learning (Mocker and Spear 1982). Since museums offer educational programs, they are accepted as one of the informal learning environments. Within the scope of this study, Istanbul Modern Museum’s educational program for children between the ages of 7-12 was observed and the design of workshops they conducted was analyzed in order to understand how the design affects informal learning experiences of children.

According to Falk and Dierking, whatever the type of learning is, the learning activity occurs within The Contextual Model of Learning (2000). The personal context, the sociocultural context and the physical context interact with each other while the individual is learning (Falk and Dierking 2000). Hence, Istanbul Modern Museum’s five different art workshops that took place in summer were evaluated by following the steps of Falk and Dierking’s learning model.

5.1 Conclusion

In consequence of discussing five art workshops as part of free-choice learning environments, informal learning, museum education, art education and children, the major finding is that the design of workshop (including workroom, materials, museum tours, museum facilitators and sequence of phases) affects the behavior of children and their informal learning experiences (including their active participation and focus levels, social interaction and final products).

At all phases of workshops, children's active participation and focus levels were observed in order to understand when the child was responding the instructor, asking questions, watching the presentations, examining artworks, using the relevant materials along with looking interested, listening carefully, showing her/his curiosity and producing without being distracted. The highest active participation and focus levels were observed during the production phases where children had control the most over "how to learn" and produced with the loose parts. At the phases like instructor's presentation and museum visits where facilitators had more control than children, it was observed that the active participation and focus levels decreased. In addition, it was noted that instructor's presentations and museum visits did not trigger children's physical interaction and children could not involve directly. Briefly, three factors were taken as essentials in order to promote the active participation and focusing in children: giving the control, including the loose parts and making the physical interaction possible.

Social interaction between children and education team was one of the important indicators showing how children's behavior was affected. Considering "when" and "with whom" questions, children were observed while they were talking/chatting, producing together, declaring/getting opinion, helping someone, receiving help and sharing materials. It was observed that at workshops where at least two participants knew each other previously matched easily and more combinations in matching were noted. However, at workshops where children did not know each other preferred working with the education team, as a group or individually. Peer-to-peer interaction was observed only at other workshops where acquainted children attended.

5.2 Discussion in the Light of Literature Review

In a free-choice learning environment, "what makes learning opportunities different is partially the physical setting and institutional philosophy, but equally important, and perhaps even more so, are the underlying motivation and interest of the learner" (Falk 2005: 271). Therefore, the content, the environmental settings and the visitors/participants are inseparable components in a museum. According to Allen, a museum should provide "immediate apprehendability, physical interactivity, conceptual coherence, and diversity of learning modes" (2004: 29). Most importantly, "physical interactivity, the ability of an exhibit to respond to visitor actions, is considered a cardinal feature of science (and children's) museum" (Allen 2004: 24). Hope argues that "museum experiences should reflect the multi-sensory ways in which young children experience new things" and she adds that only in this way, the experience will have more educational value (2016: 13). Thus, there are two key factors that should be considered in order to increase the educational experience for

children in a museum: 1) A museum setting should be interactive and should not be separated from the educational experience, 2) Museums should design special areas for children and more children museums should be founded.

Along with the museum settings, it is also important to provide an appropriate workspace for children. Young Istanbul Modern was suitable in terms of having enough space to work efficiently. Still, there could be some improvements. Sanoff and Demir Mishchenko's recommendations can be taken into consideration while thinking about how an arts and crafts studio should be (2015). They suggest rearrangeable worktables instead of the immobile ones and "storage for materials, works in progress, completed crafts, ... raw materials and incomplete projects" (2015: 56). Through these improvements, every area of the workroom can be used effectively and irrelevant materials would not distract children's attention. In addition, Young Istanbul Modern can integrate the open area in front of the building with the workroom and use it as an opportunity. This may increase the productivity of children. Sanoff and Demir Mishchenko offer that "studios should open to an outdoor area to allow artists to work in good weather" (2015: 57).

Another important thing is that informal education should be more accessible and affordable for everyone. For example, in the US, *Artspace* is "one of the largest open studio environments" and "it is a non-profit visual art centre that presents exhibitions and education programs". It addresses adults, youth and children. The citizens should not pay any fee and they "witness the creative process, as well as interact with the

artists and purchase pieces from them directly” (Sanoff and Demir Mishchenko 2015: 69).

In terms of being renovated and converted into a modern museum from a historical building, Istanbul Modern serves as a role model. Southeastern Waterworks Community Arts Center in North Carolina is also an encouraging example because “the Water Filtration Plant has been vacant since 1990 to be renovated and serve as a hub of the downtown revitalization” (Sanoff and Demir Mishchenko 2015: 81). The most important aspect is that their aim is to reach entire citizenry and introduce them art. By conducting this project, the coordinators will spread the art and reach varied audiences.

As it was stated in the previous paragraphs, informal learning should be accessible by people with diverse backgrounds, at different ages. Sanoff states that “today’s youths are more tolerant, accepting, and open to diversity of race, ethnicity, and gender than those of previous generations” (2000: 19). If it is intended to access and gather different people in informal learning environments, it should be started first with gathering young people with different races, ethnicities, genders, economic conditions and social status.

Informal learning should be appreciated equally with formal learning, especially for young generations. An out-of-school program may be a “career exploration” for a

student and unsuccessful students may be successful in an informal learning environment with a great “enthusiasm and interest” (Jones 1997: 665-666). Informal learning environments should be supported more.

According to Falk, “the vast majority of the learning that occurs within formal education settings involves ... learning that is driven by external authorities in order to fulfill predetermined requirements” (2005: 272). While talking about progressive education, lifelong learning model and informal learning environments, it is important to mention how teachers and learners approach to the teaching and learning methods in Turkey as well. Emmanouil notes that “countries with different cultures vary in the emphasis placed on constructivist practice on the one hand, and on traditional teaching and learning practices on the other” and she adds that Turkish students “are conditioned from an early age to respect authority and to conform to laws and institutional procedures” (2015: 361). She also highlights the fact that especially in art education, “critical thinking is not encouraged or supported; rather, an authoritarian and submissive view is inculcated from an early age” (Emmanouil 2015: 361). This leads students to get their teacher’s approval at every stage of the production. As Falk supported with what he said, it is not possible to create the infrastructure of free-choice learning with “mass-produced, curriculum driven educational agendas of institutions and public authorities that are typical of formal settings” (2005: 272).

Since each individual has different characteristics, educators should not evaluate children on the same scale. Their special interests may not correspond with their

abilities. For instance, someone who is interested in art may not have the talent. Consequently, workshop contents should be universal and flexible, not talent-focused. In this sense, the instructors should criticize in a constructive way. Otherwise, “children who are not ‘good’ at drawing soon abandon it as a mode of representing their ideas” (Anning 1999, 171).

5.3 Recommendations: Research Based Design Criteria for Art Workshops for School Age Children

Considering each data and analysis, various design criteria categorized under “cost”, “participants”, “physical setting/environment” and “materials/equipment” can be put forward in order to affect children’s behavior positively during an informal learning experience.

- **Cost:** For reaching more children and increasing the attendance rate, workshop fees can be lower and therefore, workshops can target more people with different sociocultural backgrounds.
- **Participants:** In order to enable more varied combinations in matching, museum facilitators can start the workshops with icebreaking games or activities. It is recommended to encourage the social interaction between the participants before initiate the production phase.
- **Physical Setting / Environment:** Since children’s active participation and focus levels increase when they have control over “how to learn”, workshop settings and content should be designed by means of encouraging both mental and physical interaction. “Interaction” has a significant role in the sense of stimulating children’s participation and it was observed that children showed

tendency to participate more willingly when they interacted with the physical settings (including both materials and the workspace). By enhancing the interaction, participants will feel that they have more control over their choices and how to learn as it should be a part of the informal learning activity.

- **Materials / Equipment:** It is recommended to increase the usage of loose parts during the production. The display and storage of materials should be inviting and easily perceivable for children.



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Appendix A: Sample Observation Charts

workshop process			participant information											
workshop	number of participants	materials used at the workshop	subject/concept	how are the participants working?	participant	gender	age	daily participant/ weekly participant.	with whom did s/he come to the workshop?	do participants know each other?	is s/he informed about Istanbul Modern Museum?	does s/he have knowledge about the workshop subject?	arrival time	departure time
					no									
the date and time of workshop	did the participants complete the workshop?													
did the workshop start on time?	did the participants create any product(s)?													
did the workshop finish on time?	observation hours													
location information		final products												

Figure A.1 Information Chart about Workshop and Participants

