March 2016

Family Accessibility of the Worcester Art Museum

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FAMILY ACCESSIBILITY OF THE WORCESTER ART MUSEUM

An Interactive-qualifying Project with Worcester Polytechnic Institute, the Worcester Community Project Center, and the Worcester Art Museum

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TABLE OF CONTENTS

TABLE OF CONTENTS .......................... 1
LIST OF TABLES AND FIGURES .......... 3
ABSTRACT .................................. 4
ACKNOWLEDGEMENTS ................. 5
EXECUTIVE SUMMARY .................. 6
CHAPTER ONE: INTRODUCTION ......... 8
CHAPTER TWO: LITERATURE REVIEW ... 10
  2.1 Museums and Child Engagement 10
     2.1.1 Family Learning ............. 12
     2.1.2 Children in Art Museums ..... 14
  2.2 Application to the Worcester Art Museum 15
CHAPTER THREE: METHODOLOGY ....... 18
  3.1 Surveys ................................ 18
  3.2 Interviews ............................ 18
  3.3 Focus Groups ....................... 19
  3.4 DATA ANALYSIS, ETHICS, AND TIMELINE 19
CHAPTER FOUR: FINDINGS ............... 21
  4.1 Content ................................ 21
  4.2 Amenities ............................. 23
     4.2.1 Tangible ....................... 23
     4.2.2 Intangible .................... 26
  4.3 Advertising ......................... 27
CHAPTER FIVE: RECOMMENDATIONS ... 28
  5.1 Content ................................ 28
  5.2 Amenities ............................. 29
  5.3 Advertising ......................... 30
BIBLIOGRAPHY ............................. 31
APPENDIX A: FOCUS GROUP SAMPLE QUESTIONS 32
APPENDIX B: INTERVIEW SAMPLE QUESTIONS 33
APPENDIX C: SURVEY QUESTIONS .......... 34
Family Accessibility of the Worcester Art Museum

APPENDIX D: SURVEY STATISTICS 41
APPENDIX E: PROBABILITY PROOF 42
APPENDIX F: FOCUS GROUP 1 QUESTION RESPONSES 44
APPENDIX G: FOCUS GROUP 2 QUESTION RESPONSES 46
APPENDIX H: LETTER TO PARENTS 48
LIST OF TABLES AND FIGURES

Table 1: Seven Characteristics of Family-friendly Exhibits 13
Figure 1: Helmutt’s House 15
Figure 2: Can Touch Sign with Helmutt’s Paw 16
Figure 3: Knight’s Gauntlet 16
Figure 4: Wall of Swords 17
Figure 5: Reasons to Not Visit with Children 21
Figure 6: Difficulty of Activities at WAM 24
ABSTRACT

The Worcester Art Museum (WAM) set a goal to attract more children of ages zero-to-four. To discover ways to reach this goal, this project established three objectives: gather information, analyze the information, and provide recommendations based on findings. The information gathered are the opinions from parents and guardians about WAM, via chosen methodologies: surveys, interviews, and focus groups. Three underlying themes were found in the opinions gathered: content, amenities, and advertising. Recommendations that arise from the findings are to increase the amount of hands-on child-focused content, install a family bathroom and other convenient amenities, and to advertise child-focused content to more parents.
ACKNOWLEDGEMENTS

We are grateful to the Worcester Art Museum for the opportunity to do our Interactive-qualifying Project with them. Adam Rozan, Casey Beaupre, Marcia Lagerway and Katherine Werwie, and the rest of the museum staff, have been friendly, supportive, and accommodating throughout the project.

We thank Worcester Comprehensive Child Care, Quinsigamond Children’s School, First Friends Child Care, Bright Horizons and the Mom’s Club of Worcester for allowing us to reach out to parents in contact with them. We thank all focus group participants, survey takers, and interviewees for sharing their opinions. Thank you to the staff of the Museum of Fine Arts and Boston Children’s Museum who were able to provide insight into the nature of this project.

Finally, we thank our advisors Dr. Robert Traver and Professor Jian Zou, the Worcester Community Project Center Director and Assistant Director, Corey Dehner and Laura Roberts respectively, and WPI. Thank you all for your positivity, help, and support.

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Executive Summary

WAM has set a goal to be a top cultural center by 2020. To achieve this goal, they partnered with WPI students on a project that aimed to find the opinions of parents and caregivers of young children, ages 0 - 4. WAM recognizes that in order to reach their goal, they need to evolve into an institution that is appealing to all ages. It is challenging for an art museum to mix well with children. Therefore, WAM needs to know what this demographic needs from them in regards to amenities and child content. The project used three methods to find these opinions: surveys, interviews, and focus groups.

The survey questions were designed to obtain the opinions of parents and caregivers, whether or not they’ve brought children to WAM. The survey showed reasons people are not bringing children to WAM, as well as current visitor experiences in regards to amenities and child content. The survey presents statistics on museum visitor-frequency, difficulty of amenity based issues, and how many people bring children to WAM.

One-on-one interviews were conducted with parents as a method to obtain similar information gathered from the surveys. Interviews gathered beneficial information in regards to amenities and content. Furthermore, interviews were held with staff from the Museum of Fine Arts and the Boston Children’s Museum. Their perspectives provided insight into issues parents have when visiting museums with young children, and the child-museum relationship.

Focus groups were another means to collect qualitative data. Focus group questions were designed to invoke deep thought into aspects of museum content for children, the amenities that parents need, and past experiences with WAM. Since the focus groups were conducted in person, obtaining qualitative data was easier than the surveys. Parents
pondered and expressed their past experiences with WAM to identify the amenities and content they need for their children.

The methodologies revealed several findings, but there are three overarching themes among them: children need more hands-on activities, parents and children need convenient amenities, and many parents are unaware of what WAM offers young children.

Recommendations in regards to content, amenities, and advertising are made. First, WAM needs more child-focused content that stimulates multiple senses, as well as animal-based exhibits. Second, WAM needs to build a family bathroom with child and adult-sized amenities; both should be hands-free. Third, there are child-care facilities in Worcester who WAM should be more involved with. WAM should also advertise child-focused content on social media. The recommendations made are a result of not only the findings, but the research conducted on child engagement, why museums should focus on children, family learning, and what WAM is currently doing to attract children.
CHAPTER ONE: INTRODUCTION

Art museums are an integral part of our society. They house the art that has inspired people for centuries. This art represents the history of hundreds of different cultures. Art museums preserve what represents and inspires both the global and local communities. But if a painting hangs in the middle of a gallery, and no one’s around to see it, what is its impact? In order to continue to represent and inspire their local communities, art museums are constantly searching for ways to reach more visitors. Two common approaches they take are having exhibits and programs that appeal to all ages and exploring means to improve their current situation. The Worcester Art Museum is no exception. WAM wants to connect more with its local community, as well as be a top cultural center in New England by 2020. Young families are a key population to attract in order to achieve this goal.

There is a generational gap present at WAM. The most common demographic for WAM visitors is people of age 40 to 65 (Murphy, Marvasti-Sitterly, MacLauren, Davis, 2015). In order to bridge this generational gap, this project found the opinions and needs of the zero-to-four year old population, and their caregivers, in regard to the amenities and content offered at WAM.

The museum is currently making advances to suit the needs of this demographic. There are youth art classes, programs, and a mascot that appeals to young children. WAM has many attractive offerings, but they need to know the opinions of the target demographic to make further changes.

The project goal was to provide the museum with data that informs the staff and aids them to make future decisions. The results of this research provided the museum with a better understanding of their current place in the community. The public’s opinion provided the museum with feedback that indicates effectiveness of their current efforts to accommodate
children and their caregivers.

It is important to know how museums attract visitors and young families. Researching how museums currently engage this demographic provided pertinent information that influenced the design of focus groups, surveys, and interview questions in this project.
CHAPTER TWO: LITERATURE REVIEW

This section provides background information. It outlines why there is a need for museums to focus on children, current methods being used to attract and engage children, and how these methods apply to WAM. The following provides information that will aid WAM with closing their generational gap.

2.1 MUSEUMS AND CHILD ENGAGEMENT

Since WAM is trying to attract a specific demographic, it is important to understand their current demographics. The demographics of museum visitors are diverse and every demographic has a different visiting frequency (Shewfelt, Ivanchenko, Menzer & Shingler, 2013). Recurring visitors are mainly retirees, since they usually are not working; and college students, because they need to do research. Caregivers of children might have more irregular visits: it is uncommon for these people to choose a trip to a museum for a leisure activity (Shelnut, 1994). A reason these families and their children would want to go to a museum is to get the child involved in an activity or event (Shelnut, 1994). Museums provide a friendly and positive environment and are educational. Parents and caregivers can get their children involved in educational activities that will spark their imagination. Since these young people do not usually come to the museum as often as people aged 40 to 65, museums desire their attendance.

In order to get the biggest return on their investment, museums focus on children, and through association, their families and/or caregivers (Silav, 2014). This concept helps bridge generational gaps in visitor attendance. If children are drawn to a museum, someone will need to accompany them: parent, grandparent, other relative, family friend, or neighbor. This results
Museums are constantly developing new ways to target the child audience: interactive child-focused exhibits, skill-specific programs and workshops, and a playful environment (Silav, 2014). Child-focused exhibits are more effective with an interactive element. These types of exhibits keep children engaged (Studart, 2000). Skill specific programs and workshops present an opportunity for children to be engaged, developing new abilities, while their caregiver(s) traverse the museum. A playful environment is essential for children (and caregivers) to enjoy their visit. It is important for museums to retain these attributes in order to be a cultural center in the eyes of children and their caregivers. While these attributes of a museum are important for success, other factors also play an important role.

Other crucial factors include program scheduling, cost, caregiver opinion, and measurable effectiveness. Appropriate program scheduling provides convenience for caregivers. Programs need to be available during times when caregivers and their children are available. Cost is important due to convenience accessibility (Geissler, Rucks & Edison, 2006). Cost-benefit relationships are vital to any business, so museums need to provide their programs at an attractive price (Geissler, Rucks & Edison, 2006). Caregiver opinion needs to be taken into account, if a program/exhibit is not beneficial to the development of the child(ren), the program/exhibit will not be utilized (Geissler, Rucks & Edison, 2006). Regardless of their experience, caregivers will talk about programs/exhibits, either negatively or positively with other people (Studart, 2000) (Larsen & Svabo, 2014). In addition, word-of-mouth marketing is one of the most significant factors in the decision making process of potential visitors (Geissler, Rucks & Edison, 2006). Museums need to know if their efforts are effective. For example, if a museum installs a new exhibit to attract more visitors, the museum wants to know if there are
more visitors. They often find a way to measure the effectiveness of a change. They often have surrounding colleges participate in research projects, such as this one, that aim to measure the effectiveness of their efforts. The measurement of the effectiveness of their efforts allows museums to be competitive with other art, science and history museums. Just as many businesses do, museums adjust their behavior based on customer opinion.

2.1.1 Family Learning

WAM plans to build a family art-themed room along with a family bathroom and a nursery. The purpose of building this room is to accommodate young families. This room will facilitate child engagement and family learning through the use of hands-on, art-themed activities. Knowing WAM is going to provide this room, research has been done to understand family learning, what constitutes it, as well the benefits from participating in it.

Sociologists and anthropologists often refer to a family as an educational institution. To add, the first learning group a person belongs to is their immediate family. A family doesn’t have to be a parent-child relationship. The general rule that defines a family is that if a group defines themselves as a family, they are one (Dierking, 2016).

Family Learning activities are implemented widely in art and science museums. As our society transitions into a Learning Society, with learning rapidly becoming the number one industry and leisure activity, museums often position themselves in a setting in which families can learn and build together (Dierking, 2016).

Children often learn from their parents and environment, so parents often take their young children to places that foster their child’s development. A problem arises when the parent or caregiver is forced to sit back and watch their child engage in activities. This could lead to parents to not want to return to an institution in fear of being bored. This is one reason
Family Accessibility of the Worcester Art Museum

for a museum to adopt family learning. Family learning keeps the parent busy and helps almost all children learn better (Dierking, 2016).

In order to effectively create a family learning activity, Philadelphia/Camden Informal Science Education Collaborative (PISEC) conducted a research project that aimed to discover factors that describe family learning. There were 3 phases of this project:

**Phase 1**: What is family learning and how can it be measured?

**Phase 2**: Do specific exhibit characteristics facilitate family learning?

**Phase 3**: Do exhibits that have the seven characteristics of family-friendly exhibits produce measurable increases in family learning?

As a result of their project, PISEC listed seven characteristics of family-friendly exhibits, shown in Table 1 below. Even though these characteristics were originally developed through an examination of science learning, they can be used to design an art-themed family exhibit.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-sided</td>
<td>The family can cluster around the exhibit</td>
</tr>
<tr>
<td>Multi-user</td>
<td>Interaction allows for several sets of hands</td>
</tr>
<tr>
<td>Accessible</td>
<td>The exhibit can be comfortably used by children and adults</td>
</tr>
<tr>
<td>Multi-outcome</td>
<td>Observation and interaction are sufficiently complex to foster group discussion</td>
</tr>
<tr>
<td>Multi-modal</td>
<td>The activity appeals to different learning styles and levels of knowledge</td>
</tr>
<tr>
<td>Readable</td>
<td>Text is arranged in easily-understood segments</td>
</tr>
<tr>
<td>Relevant</td>
<td>The exhibit provides cognitive links to visitors’ existing knowledge and experience</td>
</tr>
</tbody>
</table>

(Borun, 2016)

*Table 1: 7 Characteristics of Family-friendly Exhibits*
2.1.2 Children in Art Museums

The social fabric of art museums is changing as the presence of children is more commonplace than before. Once a place for whispered discussion, art museums are increasingly being filled with children’s chatter and laughter (Warwicker, 2014). Museums are welcoming children so they come back when they're adults, and they’re a place families want to visit. But do children and art museums mix?

Most children aged 0 - 4 aren’t going to learn about paintings such as Monet’s Water Lilies or Michelangelo’s Sistine Chapel; when these children are running around a museum, they are learning about the place itself. Ultimately, the children are taking away the experience of the museum (Warwicker, 2014). Contrarily, there are four or five year old children who can give meaning to a complex painting, this is rare. The reality is that museums are becoming places that serve the general public, not a select demographic.

Museums are traditionally a place to observe, ponder, and quietly discuss. Therefore, there are some art museum visitors who are not ready for the integration of children. Should children be running through art galleries? This is the question art museums struggle with. It’s a good argument to answer with a firm “no”, but the exclusion of children’s behavior from art galleries might not benefit a child’s learning and might send the wrong message about art. Parents often want to expose their children to art. If only some art museums accommodate children, the ones who don’t will be missing out on ticket sales and eventually will be pushed away. WAM decided to solve the problem by meeting the “nay and yea sayers” in the middle. They are building an art-themed family room in the second floor of their museum. This place will allow children to learn with their family through art related activities and play.
2.2 Application to the Worcester Art Museum

If WAM wants to be more child friendly and be a top cultural center in New England by 2020, they need to pay constant attention to factors mentioned: museum demographics, family-friendly environment, and guardian opinion. They also need to ensure that the children who come to the museum are enjoying their time. The museum currently has several methods to make the museum appeal to young children and their caregivers: their mascot, a children’s menu for their café, and youth classes and programs.

The newest addition in WAM’s child engaging features is their mascot Helmutt. Helmutt is a cartoon drawing of a dog that the museum uses to interest kids. He can be found all over the museum directing visitors where to go. WAM is using Helmutt in one of the child focused exhibits. In the back of the arms and armory collection is a sectioned-off area for kids to explore and wear plastic armor. Helmutt is there dressed as a traditional samurai from feudal Japan. In this armor, Helmutt teaches children the names of various parts of traditional samurai armor. Figure 1 below is a picture of Helmutt’s House.

Figure 1: Helmutt’s House
Furthermore, the knights and armor collection is the only exhibit that guests can touch. Kids like these exhibits because they can be touched. Figure 2, Figure 3, and Figure 4 below are examples of these exhibits.

*Figure 2: Can Touch Sign with Helmut’s Paw*

*Figure 3: Knight’s Gauntlet*
WAM has a café which is located outside the galleries. The café is not only to make money on food sales, but to provide a convenience for their guests. WAM provides food for children (and adults) so they don’t have to leave the museum to eat. The café has a children’s menu which has items kids like such as macaroni and cheese, PB&J, and grilled cheese. The café is also a place for adults to relax, enjoy coffee, and a snack.

WAM is working to be more child and family friendly. The museum plans to build a family room on the second floor of their building in time for an upcoming exhibit in the spring of 2016 that has a cat theme. This exhibit is going to be a child friendly exhibit with elements of family learning. Making new exhibits geared toward children is a way to stay competitive. They hope that this exhibit will attract more children to the museum and keep them interested.

It isn’t the case that WAM has nothing to offer children. WAM has youth classes and workshops for 0 - 17 year olds. These programs expose children to a broad range of ideas and art forms. The museum has family oriented programs that allow them to explore the museum, do fun activities, hear stories, and engage in family learning. Even though WAM has these things, they need to discover where they are lacking in regards to child and family satisfaction.
CHAPTER THREE: METHODOLOGY

This project sought to find the opinions of young children. The opinions were obtained through surveys, interviews, and focus groups, all directed at the parents and caregivers of the target demographic. These methodologies were used to get a wide range of opinions on amenities and content at WAM. In addition, interviews with staff members of two other institutions that have established a connection with our targeted demographic, the Boston Children’s Museum and the Boston Museum of Fine Arts, were conducted.

3.1 SURVEYS

Surveys gathered the current opinions and thoughts of parents about WAM and children. These questions found data such as, museum-visit-frequency and the subject’s awareness of WAM’s child-focused exhibits. The survey also found why parents and caregivers did or did not bring children to WAM. The surveys were taken by caregivers of infants and/or toddlers: parents, grandparents, siblings, other family members, neighbors, babysitters, and etcetera. The survey was comprised of twenty-six questions and Survey Monkey, a survey design tool, was used to generate the survey. Every survey was taken electronically through Survey Monkey. The survey data gives insight into the relationship the museum has with the public. A sample of the survey questions appears in Appendix C; some of the survey statistics can be found in Appendix D.

3.2 INTERVIEWS

The purpose of the parent interview questions was to gain an in-depth understanding of the concepts introduced in the surveys: “Is WAM child friendly?”, “Does WAM appeal to children and their caregivers?”, and “What issues are young families having when they bring
children to WAM?” These questions were designed to elicit detailed responses. Interviews were conducted over the phone and in person. A sample of the interview questions appear in Appendix B.

Interviews were conducted with staff members from the Boston Museum of Fine Arts and the Boston Children’s Museum. These interviews sought to better understand the child-museum relationship.

### 3.3 Focus Groups

The purpose of the focus groups was to investigate the nuances in the relationship between WAM and the target population. The groups were asked questions such as: “What are some reasons you bring your family to an art museum?” and “What issues arise when bringing children to WAM?” Focus group members were found by contacting child-care centers and daycares and asking if their parents may be interested in joining a focus group. People who do not frequently go to the museum gave us new information. This information gives a better understanding of WAM’s current reputation with local parents. The focus groups were held in a private room inside WAM and at a child-care center. The private room provided an environment that promoted hopefully, more thoughtful responses. Two focus groups were conducted. A sample of the focus group guiding questions is appears at Appendix A. The focus group notes can be found in Appendices F and G.

### 3.4 Data Analysis, Ethics, And Timeline

This project produced many findings. Data analysis needed to begin immediately in week two, as to maintain good “housekeeping”, so that potential flaws in the methodology can be found and adjusted. All gathered data was inspected for trends & purposeful information,
put into a report, and submitted to the museum staff.

The anonymity of all subjects who were surveyed and/or interviewed was respected. All participants in the interviews and focus groups signed a consent form before participating in the activity. They were informed that they can withdraw from any activity at any time. All questions were presented in such a way that they were respectful of the subject.

A timeline was created prior to the start of the project. In weeks one through four, letters were sent to daycares, to send to parents, that described the project and invited them to take the survey. The letters contained a link to the survey and an invitation to participate in an interview or focus group. A copy of the letter can be found in Appendix H. Permission was asked from the daycares if the students could visit and survey parents. When visiting daycares, parents and caregivers were asked if they were interested in participating in interviews and/or focus groups. The survey was also sent out to WPI faculty members and to WAM’s members list. Data analysis began in week two, and continued until the end of week six. In week five, interviews with staff members of the Boston Children’s Museum (BCM) and Museum of Fine Arts took place. In week six, interviews and focus groups with parents were conducted and the survey was closed. Also in week 6, the final presentation and report writing began. In week seven, finishing touches were put on the final presentation and report.
CHAPTER FOUR: FINDINGS

The methodologies revealed many findings. These findings are organized into three main categories: content, amenities, and advertising. Content refers to the programs, objects, and exhibits present at WAM. Amenities, tangible and intangible, exist for the convenience and comfort for families visiting the museum. Advertising is the marketing communication WAM uses to promote any galleries, exhibits, programs or other content.

4.1 CONTENT

A majority of the survey takers, about two-thirds, have not brought children to WAM. These parents were asked: Why have you not brought children to WAM? Figure 5, below, shows that two of the top three reasons these parents haven’t brought children to WAM are content related: “no child exhibits” and “child is too young.”

![Figure 5: Reasons to Not Visit With Children](image-url)
In reality, WAM does offer a child exhibit, but people are just unaware that it is offered. The parents in interviews and focus groups were also not aware of what is being offered for children at WAM. This suggests a lack of advertising of the content and programs for kids at WAM.

The parents surveyed, who have visited the museum with children and know about the child-focus content and programs, say they like what is offered: children are allowed to touch swords, try on knight’s gauntlets, and play with chainmail in the armor exhibit. Parents and caregivers like these activities for their children because they are interactive and fun. They also like the age-specific child programs offered because children get to interact with others in their age group.

The parents interviewed, a conglomerate of those who have been to WAM with or without children, yielded different results. Mainly, they don’t find WAM’s content child-engaging and that the art displayed in the galleries wouldn’t interest their kids. They suggested content relating to animals, sports, and music because these would attract more children to the museum. Puppet shows and scavenger hunts were a common request among interviewees. Parents also suggested that interactive content is more likely to attract families, because interactive content isn’t just pleasing to the eyes. Furthermore, parents want more inter-generational activities where the parent and child play and learn together: an element of family learning. Another parent comment worth mentioning: armor and Batman suit only appeals to boys and that girls would like different content, such as female clothing from the armor period. The content needs to not only be engaging, but educational as well.

Interviews with staff from the Museum of Fine Arts (MFA) and the Boston Children’s Museum (BCM) gave professional insight on child content in museums. MFA has many child
programs and neat looking objects that attract children. MFA staff said they always have activities available for children of all ages which relate to the museum’s art. Child art activities that relate to something that’s already been seen helps establish a connection and fosters learning. MFA’s activities teach kids basic concepts of art: color, line, and shape. These activities have proved to be effective for keeping both children and parents engaged. They suggested that WAM integrate the art in their galleries with fun and interactive activities for kids. Child activities that relate to gallery art cultivate learning because there is a connection between the physical world and the fun they create.

BCM stated they have exhibits that connect back to culture and community. For example, there was a lot of construction happening around BCM, so they decided to add an interactive exhibit that involved construction. They also have a 100-year-old house from Kyoto, Japan that children are allowed to play in. The addition of cultural and local exhibits was the major suggestion BCM had to offer.

4.2 Amenities

In this section, the findings in regards to amenities are broken down into two subcategories: tangible and intangible. Tangible amenities are physical such as elevators and bathrooms. Intangible amenities are environmental such as museum atmosphere and staff attitude towards visitors.

4.2.1 Tangible

WAM wants to know how to make their current amenities more convenient and comfortable for parents with young children. WAM knows that bringing young children places can be challenging if the proper amenities are not provided. The survey asked participants to
rank amenity-based activities from “not difficult” to “very difficult.” The hardest activities, ranked in Figure 6*, are finding a parking place and diaper changing.

![Figure 6: Difficulty of Activities at WAM](image)

*Activities from the survey question in Figure 6 were ranked on a 0-5 scale. The chart, above, ranks the activities on by weighted average.

In the interviews, it was expressed that if WAM offered family restrooms and a nursing room, it would be convenient. Interviewees desired items in the family restroom or nursery such as diaper changing stations and child sized toilets and sinks. Parents referred the outstanding amenities of other facilities, rather than the content of the venue. One parent pointed out that average amenities are sufficient but, if a place has a great family bathroom and/or a quiet/nursery room, they’ll take note of it and tell other parents. In the focus groups, there was a common idea that convenience matters very much. Family bathrooms are very comforting for parents because they do not have to be separated from their children. Parents will remember the convenience of a facility and likely come back to that institution.
Family Accessibility of the Worcester Art Museum

Interviews with program directors from museums other than WAM helped to confirm our findings on amenities. Staff members of MFA said they have a quiet space for mothers to nurse their children. BCM allows mothers to nurse their children anywhere in the museum in addition to private nursing rooms. Both MFA and BCM expressed that it is important to accommodate families by providing tools such as changing tables, quiet rooms, and family restrooms. A bad experience that is a cause of the facility itself can be detrimental to these institution’s reputation. Finally, BCM said that it’s important to “congratulate” families when they arrive after a potentially long and stressful trip.

WAM has shown interest in the development of a nursery. It was found that nurseries for breast feeding should have low light because it is very calming and can help the process. In addition, a variety of seating is needed because breastfeeding and pumping can be tiring and mothers want to be comfortable when breastfeeding or pumping, as this can take twenty to thirty minutes.

It is important for WAM to address issues with the convenience and availability of food. Currently, food is not allowed in the galleries. Parents in both focus groups said they would respectfully sneak food into a place that doesn’t allow it. Children tend to get grumpy when they’re hungry, a reserved space to have a snack would only add to the convenience of a family museum visit. The type of food offered at WAM was also a concern. It was expressed that the snack food at WAM is unhealthy. Some kids like healthy food and parents want their children to eat well. Furthermore, the cost of food was a concern to parents who had not brought their child to WAM, the other parents in the group told them it was expensive.

Navigating the museum can be a problem for children as well as the mobility impaired. Though WAM provides wheelchairs, sitting walkers, and elevators, how much they are utilized
is a concern to them. It was found that thirty-three percent of people are not aware of the amenities offered. Survey respondents have expressed that “the elevators are confusing and slow”, “using a stroller is frustrating and time consuming”, and “offering strollers isn’t needed because parents usually bring their own, due to hygiene concerns.” Addressing problems with amenities will increase the number of families visiting WAM.

4.2.2 INTANGIBLE

Parents and caregivers are concerned with how comfortable their family is while roaming the galleries. A common fear among parents who have not brought children to WAM is that children might break things, make too much noise, and bother other patrons. As shown in Figure 5, this fear is the second largest reason parents are not bringing children to WAM. Since most children make a lot of noise, many parents and caregivers think their child will not enjoy WAM if they are told to be quiet. Since kids like to climb, touch, run, play games, and learn through experience, they suggested family-friendly hours in the galleries. Parents of the focus groups expressed they do not want to pay admission for their family, then leave, because their children’s normal activity is disruptive. It was mentioned that there are kid-friendly movie theaters in which noise is accepted. Overall, WAM’s environment needs to be more inviting to children.

In order to encourage children and parents to be comfortable at WAM, WAM needs a more appropriately trained guard-staff. Although WAM employs trained guards to protect the art in the museum, parents are concerned with the guards’ averting presence. Parents expressed that they feel unwelcome when guards follow them through the museum. MFA stated their guards are trained to both protect the art and welcome all types of visitors. MFA expressed how their guards were trained to “flip a switch” between mature adult guide to
“camp counselor” when they encounter children. This attitude allows families to enjoy the museum together.

4.3 Advertising

After looking at all the data, it became clear that most of the study participants are not aware of what WAM offers young families. This is due to a lack of advertising. Lack of advertising emerged as a partial explanation for why WAM does not attract families with young children. Many parents use social media, such as Facebook and Twitter, or word-of-mouth to find activities for their families. The focus group members stated they never encountered WAM through a social media network or heard anything from other parents. Parents expressed that if they knew what was being offered, they would visit the museum more frequently with their child.

Several local child-care centers expressed interest in working with WAM to promote the programs offered for kids and families. These centers are willing to hang up posters, send emails to parents, and hand out pamphlets/flyers about the programs and content for kids and families.
CHAPTER FIVE: RECOMMENDATIONS

The findings demand certain recommendations to be made. The recommendations can be characterized by two major issues parents and guardians are concerned about: content and amenities. There are further recommendations about advertising.

5.1 CONTENT

In order to increase attendance of children ages 0-4, WAM needs to focus on content that this age group enjoys. WAM should implement the following to attract more children:

1. Child-friendly interactive exhibits that include:
   - Animals
   - Puppet shows
   - Characters that are small in size
   - Sculpture gardens
   - Changing themes and seasonal/cultural and local content
   - Projected outlines on the wall that kids can draw on
   - Basic art principles such as line, color and shape
   - An educational aspect
   - A family-friendly aspect (PISEC)
   - Elements that relate to a child’s everyday surroundings

2. Family-friendly programs such as:
   - Playdates
   - Family Days
   - Mommy-and-me activities
Family Accessibility of the Worcester Art Museum

- Scavenger hunts

3. Family-friendly programs should have:
   - A hand-on aspect
   - Engage the entire family

4. Child content that relates to art at WAM. For example, if Monet’s Water Lilies were in a child space, frogs should be on the wall. Kids can be asked: What animals live in this painting?

5. Play structures such as small jungle gyms, but with an artistic twist.

6. Attractions for girls. For example, a princess theme that ties in with the knights content.

7. Future IQP Projects: Create child and family friendly exhibits and programs

5.2 Amenities

Convenience is of high importance to parents and guardians. In order to attract more children WAM needs to attract parents. One way WAM can do this is by making all of the tasks that come with taking care of children easy. The following is a list of items that will make WAM a facility of convenience for parents and children.

1. Family bathroom with hands-free toilets, sinks, and child-sized facilities

2. Diaper changing areas with disposable paper

3. Nursery:
   - Different types of seating for breastfeeding and pumping
   - Low-intensity lighting and electrical outlets
   - Plenty of shelving and floor space
   - Big sink to mix formula
   - Snack food should be allowed
4. Food:
   - Snack food should be allowed in galleries
   - Healthy food should be available

5. Family-friendly time periods that allow children's behavior

5.3 Advertising

It is recommended that WAM advertise their child content through social media because many parents do not know what WAM offers for children. During the research, child-care centers asked that WAM contact them about promoting exhibits and activities for children. These child-care centers want to work with WAM to get more young children and families visiting the museum; therefore, a future IQP Project could build a network with local child-care centers and daycares. Since child-care centers and daycares are willing to promote WAM with posters and pamphlets, WAM should highlight their social media pages on the posters and pamphlets.
BIBLIOGRAPHY


Appendix A: Focus Group Sample Questions

1. What are some reasons you bring your family to an art museum?

2. What issues arise when bringing children to WAM?
   a. Do these issues prohibit you from visiting?
   b. What amenities would help alleviate or overcome these issues?

3. The museum is planning on putting a family art themed exhibit in the museum where they would hope that parents, guardians and caregivers can have a shared experience with their children. What are some things you need in that room? In regards to content? In regards to amenities?
**APPENDIX B: INTERVIEW SAMPLE QUESTIONS**

1. Do you think WAM is child friendly?
   
   a. What works/doesn’t work for WAM in this regard?

2. Do you think WAM exhibits/galleries are appropriate for a child audience?
   
   a. What sort of exhibits do you think would engage a child audience?

3. Do you think WAM is accessible to children, and their caregivers?
   
   a. Stroller accessibility, family bathrooms, stairs, and etc.

4. What would you like to see WAM offer for young families?

5. What did you like best about your visit as a family?

6. What did you like least?
## Appendix C: Survey Questions

### Worcester Art Museum: Family Accessibility

1. Have you ever visited the WAM (Worcester Art Museum) with a child?
   - [ ] Yes > Continue to number 2 after answering
   - [ ] No > Continue to number 22 after answering

2. How frequently do you bring children to WAM?
   - [ ] Once per month or more
   - [ ] Once per 6 months
   - [ ] Once per year or less

3. What are the ages and genders of the child(ren) you bring to WAM?
<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td></td>
</tr>
<tr>
<td>Child 2</td>
<td></td>
</tr>
<tr>
<td>Child 3</td>
<td></td>
</tr>
<tr>
<td>Child 4</td>
<td></td>
</tr>
<tr>
<td>Child 5</td>
<td></td>
</tr>
</tbody>
</table>

4. Do you have children you do not bring to WAM?
   - [ ] yes
   - [ ] no
5. If yes to 4, why not?
   - Unsure what is offered for children
   - Child(ren) are too young
   - Other (please specify)

6. If yes to 4, how old are they?

7. Of the children you do bring now, did you bring them when they were 4 or under?
   - yes
   - no

8. Why or why not?

9. What do your children like about the museum?
10. Why do you bring child(ren) to WAM?
   ○ Leisure Activity
   ○ Expose child(ren) to Art
   ○ Child Wanted to Come
   ○ Child Programs and Activities
   ○ Specific Exhibit/Gallery
   ○ Other (please specify)

[Optional space for specifying other reasons]

11. What is your relationship to the child(ren) you bring to the WAM?
   ○ Parent/Guardian
   ○ Grandparent
   ○ Other family member
   ○ Family friend
   ○ Babysitter
   ○ Nanny
   ○ Other (please specify)

[Optional space for specifying other relationships]
12. Rate from not difficult or very difficult.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not Difficult</th>
<th>Very Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crossing The Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting From Parking Lot To Lobby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding The Entrance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climbing the Stairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding Specific Exhibits/Galleries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using the Restrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diaper Changing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening Doors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding a place to park</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navigating the galleries</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Are you aware of the amenities offered such as sitting walkers, wheelchairs, and elevators?

- [ ] yes
- [ ] no

14. Have you used any of the amenities below? (Check all that apply)

- [ ] Sitting Walkers
- [ ] Wheelchairs
- [ ] Elevators
- [ ] Have not used the provided amenities
### Family Accessibility of the Worcester Art Museum

<table>
<thead>
<tr>
<th>15. How much do your kids like to come to the museum?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate from 0 to 5, 0 strongly dislike and 5 strongly like.</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. Are you familiar with the child-focused exhibits?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ yes</td>
</tr>
<tr>
<td>○ no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17. Have you visited the exhibits with your child?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ yes</td>
</tr>
<tr>
<td>○ no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>18. If you HAVE visited the child-focused exhibits, did your child(ren) enjoy them?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ yes</td>
</tr>
<tr>
<td>○ no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>19. If you HAVE NOT visited the child-focused exhibits, would you like to?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ yes</td>
</tr>
<tr>
<td>○ no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>20. Is WAM family friendly?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ yes</td>
</tr>
<tr>
<td>○ no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>21. Would you recommend the WAM to someone you know?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ yes</td>
</tr>
<tr>
<td>○ no</td>
</tr>
</tbody>
</table>

END - thank you for your participation, scroll down then press submit.
22. What are some reasons you have not visited WAM with child(ren)? (Choose All That Apply)
   - [ ] Never heard of WAM
   - [ ] Don’t know any children to bring
   - [ ] Child, Parent or Caregiver doesn’t like Art
   - [ ] Child is too young
   - [ ] Fear of making too much noise
   - [ ] Cost
   - [ ] There are no child exhibits or programs
   - [ ] Parking
   - [ ] Other (please specify)

23. Do you take your family on other outings?
   - [ ] yes
   - [ ] no

24. If yes to 23, where? (Choose All that Apply)
   - [ ] Zoo/Aquarium
   - [ ] Park/Camping
   - [ ] Movies
   - [ ] Science Museums
   - [ ] Children’s Museums
   - [ ] Amusement Parks
   - [ ] Commercial Childrens Entertainment (Chuck E. Cheese’s/Bowling)
   - [ ] Other (please specify)
25. Please briefly explain why you like these activities for your family.


26. What would make you feel inclined to go to the WAM?


END - thank you for your participation, press DONE


Done
The following shows some survey results. The raw data and remainder of the survey results can found on WAM’s survey Monkey account; the name of the survey is Worcester Art Museum: Family Accessibility.

- Survey statistics show that 67% of people who bring children to WAM only come once per year or less, 22% come once per 6 months and 11% come once per month or more.
- Parents were asked to rank, from 0 - 5, on how much their child likes to to come to the museum; 0 being strongly dislike and 5 being strongly like. Ninety people answered and WAM scored a 4.4 on average.
- Out of the people who have brought children to WAM, 40% are unaware of child-focused exhibits such as Helmutt’s House.
- 82% of those who go to WAM with children have visited the child focused exhibits said their child enjoyed them.
- 79% of those who go to WAM with children who have not visited the child focused exhibits said they would like to visit them.
- 82% of those who go to WAM with children think that WAM is family friendly.
- 96% of those who go to WAM with children said they recommend people to WAM.

Since it was found that 40% of people have taken children to WAM and 24% of these people have children they do not bring, it was found that the probability of the next family that comes to the museum has a 63% chance of leaving certain children at home. This was found by using a conditional probability. This proof is in Appendix E.
Appendix E: Probability Proof

Below is the calculation of the probability that the next family that comes to WAM has children they do not bring. The following calculation is based strictly on the survey data gathered from this project.

Conditional Probability equation: \( P(A \mid B) = \frac{P(A \cap B)}{P(B)} \)

\( P(A \mid B) = P(\text{probability that someone did not bring certain children, given they have children with them}) \)

![Pie chart showing visitation with children](image)

Found from figure above: \( P(B) = P(\text{proportion of people that brought children}) = 0.3801 \)
The survey question above was answered only by people who have brought children to WAM.

\[ P(A \cap B) = P(Proportion \ of \ people \ that \ have \ children \ they \ do \ not \ bring) = .2421 \]

\[ P(A | B) = \frac{P(A \cap B)}{P(B)} = \frac{.2421}{.3801} = .6341 \]

\[ .6341 \times 100\% = 63.41\% \]

Based strictly on the survey data, the probability of the next family bringing some, but not all, of their children is about 63%.
APPENDIX F: FOCUS GROUP 1 QUESTION RESPONSES

Person 1: Has brought their children to WAM, child is 2.5 year old
Person 2: Has brought their children to WAM, children are 3 years old and 9 years old

1. What are some reasons you bring your family to an art museum?
   - Learning through the creation of art
   - Armor from higgins armory
   - Educational
   - Expressive type experience
   - Parent and children experience art together

2. What issues arise when bringing children to WAM?
   - Not fun enough
   - Kids like to run and touch
   - Depends on kid

   a. Do these issues prohibit you from visiting?
      - Sometimes, it depends on the kid.

   b. What amenities would help alleviate or overcome these issues?
      - It depends on the kid, a family bathroom with place to work

3. The museum is planning on putting a family art themed exhibit in the museum where they would hope that parents, guardians and caregivers can have a shared experience with their children. What are some things you need in that room? In regards to content? In regards to amenities?

   Content:
   - Objects projected on the wall so kids can outline things
   - Activities that relate to existing exhibits
   - Changing themes is important
   - Activities for colder seasons, since people are inside more often
   - Classes for moms in which kids can join
Amenities:
- Low light
- Electricity
- Different types of seating
- A big size sink
- Shelving
- Diaper changing with disposable paper
- Family bathrooms are important for privacy and little kids don’t like to separate from parents.
- Convenience of amenities is important
- Food needs to be accessible
Appendix G: Focus Group 2 Question Responses

Person 1: Has brought children to WAM: Person has 3 girls all grown and 1 y.o. grandson
Person 2: Has not brought children to WAM: Person has a 10 and 13 year old
Person 3: Has not brought children to WAM: Person has a 9 and 5 year old
Person 4: Has not brought children to WAM: Person has a 2 year old and was pregnant
Person 5: Has not brought children to WAM: Person has a 14 month old
Person 6: Has brought children to WAM: Person has 1 grown child, many young nieces and nephews

Nursery:
- Sink
- Outlet close to chair
- Comfy seating
- Fish tank (calming)
- Private room (no half door)
- Books
- Lights/decorations on the ceiling

Content:
- Activities that keep all ages engaged so all ages of kids (and parents) are engaged
- Things at a young child’s level for them to touch (colorful, textures: rough, hard, soft, wet)
- Parents unaware of children’s exhibit opportunities, art carts and etc.
- No one knew of the library
- Scavenger hunt – good for school age kids
- Activities need to have tangible goals
- Need tours/guides geared toward the child audience
- MFA does a good job of tours geared toward the child audience, WAM tours are too adult.
- Biggest Issue: advertising, people forget it’s there and/or don’t know what’s being offered
- Parents are willing to pay for programs if there’s a bonding/interactive component with the child, as well as a take-away (build-a-bear).
- Parents bring their kids to other places:
  - Ecotarium: lots of hands-on stuff
  - BCM
  - Zoos used to be popular but now they’re too expensive
  - Make the museum affordable (family packages including tickets and classes)
Amenities:

- Everyone has their own strollers
  - Hard to navigate with a stroller
- Family bathroom is not a deal breaker but it’s nice:
  - Changing table, normal height w/ paper (like doctor’s table)
  - Clorox wipes
  - Children’s size amenities in addition to adult size things
- Quiet room would be a big help so families don’t just leave when a child has a tantrum
- Guards hover too much (specifically at a wedding)
  - Not friendly or inviting to the actual museum
- Guards hover too much (specifically at a wedding)
  - Not friendly or inviting to the actual museum
- Have designated areas for kids to snack


**APPENDIX H: LETTER TO PARENTS**

Dear Parents and Guardians,

Students at WPI are wondering if you would like to participate in a Research Study they are conducting, by taking an **online survey**. Their objective is to gather information for the **Worcester Art Museum (WAM)**. The museum seeks to increase their attendance of young children. Therefore, the students need to ask parents some questions that will let the museum know where they stand in the community.

The online survey takes about **5 minutes**.

A link to survey: [https://www.surveymonkey.com/r/XGVCH6Q](https://www.surveymonkey.com/r/XGVCH6Q)

In addition, if you would like to **participate in a focus group** or are willing to be **interviewed**, you may let the students know via the email address below. The students will be happy to let you know **when and where** they are going to be held.

Project Group email: **wam16@wpi.edu**

Thank you very much!

WPI Students:
Michael Caldwell
Sebastian Espinosa
Dylan Roche
Bruno Scherrer