

ABSTRACT  
Museums and Exercise: A Smart Workout

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In 2010, First Lady, Michelle Obama launched an initiative to combat childhood obesity called *Let's Move!*. One year later, the First Lady expanded the initial idea to *Let's Move: Museums and Gardens*. Many museums were motivated to become a part of the initiative by stepping outside of traditional education programs and exhibit topics and exploring new methods to help meet the challenge. For museums of health, this idea fits nicely within their missions; however, some museums may find that such a program falls too far outside of their mission.

This project focuses on the creation and implementation of two pilot programs with the specific goal of incorporating exercise program offerings based on the museums exhibits and collections. This approach opens opportunities for more types of museums to offer such programs staying true to their missions. As background, numerous museum programs and exhibits that have incorporated exercise, both before and after the inception of the *Let's Move: Museum and Gardens* program, are described.

The results of this project provide recommendations for museums looking to incorporate a quality exercise program that uses exhibits and collections as the core of the educational experience. The pilot programs may also serve as a model for other museums hoping to create similar exercise programs and how existing programs may be further developed by embracing this approach.

Museums and Exercise: A Smart Workout

by

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A Project

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Submitted to the Graduate Faculty of  
Baylor University in Partial Fulfillment of the  
Requirements of the Degree

Of

Master of Arts

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This project is dedicated to my wonderful family, for always believing in everything I do,  
and supporting me the whole way through

## CHAPTER ONE

### Introduction

#### *Rationale*

There were two reasons that led me to create programs that combined museums and exercise. First, as a former personal trainer, I believe exercise, or working out, to be an important part of living a healthy lifestyle. Secondly, as a museum studies graduate student, I believe it is important for museums to have programs that teach the public and make ultimate use of the collection. What brought the two together was the belief that there should not be a separation between a healthy lifestyle and museum programming opportunities. I strongly believe, that as a public entity, museums should be concerned for the health of their community, as well as for providing other educational opportunities. I saw the opportunity for this need to be met by combining an exercise program with museum education. I am aware other museums have done this type of programming, but I believe the most important part of the exercise program is that it relates to the museum's mission and collection. The workout should be inspired by the artifacts or exhibits. In this way, the museum does not lose sight of the main goal: to educate with a focus on the objects it collects and exhibits. It is the object that makes a museum a unique learning environment.

Halfway through my project, First Lady, Michelle Obama's *Let's Move!* program partnered with the Institute of Museum and Library Services to form the *Let's Move! Museums & Gardens* branch of the *Let's Move!* program. At first, many museums were very excited about this. But, with my past experience as a personal trainer, I wondered what museums were planning for the exercise option of the program. I wanted to see,



after a little more than a year, what was happening with this program, and what effect it was having on museums. Many museums were implementing programs and exhibits, but frequently the programming did not relate to the museum's mission, collections, or exhibits. This made me want to introduce programs with a broader, more movement focused purpose, based on what each museum has in their collection or exhibits.

### *Methodology*

I needed to find museums that would work with me to implement exercise programs alongside their existing educational programs. The Mayborn Museum Complex (MMC), in Waco, Texas, and the Log Cabin Village (LCV), in Fort Worth, Texas, both had staffs willing to let me execute a program, pending reviews of my plans. While there were many different options for setting up a program and targeting a particular audience, I decided to focus on the visitors I saw most frequently at both museums; mothers and children. I decided to put together a workout plan for these busy moms that would correspond with an educational program for the children. This idea soon expanded to parents, guardians, grandparents, babysitters, and other adults and the child(ren) in their care. The program had specific goals: (a) to use artifacts and themes as inspiration for the make-up of the program, (b) to offer a program that was enjoyed by participants, and (c) to show other museums that exercise programs are possible in a museum setting.

After deciding on an audience, I combed through the collections to see what items could inspire exercise or movement. Having the background in personal training made

this easier for me than it might be for staff without that particular background. I then looked into the educational programs that were already being taught at the museums. This way I could highlight movement- or exercise-based references and add a few more, based on what I found in the collection, without requiring staff to learn a completely new script. I then started to work on the workout program for adults after I had finished the educational program, which was already intended for an audience of children. An aerobic exercise program was created using the same objects, or ideals, about which the children were learning. The adult program used only body weight, as not to incur extra costs on the museum. Both programs flowed very well and were definitely within the mission of each museum.

I compared my programs to some of the exercise based programming that had been created before and as a result of the *Let's Move! Museums & Gardens* program. I wanted to see how other museums were making use of their collections or exhibits to put into practice programs that were meant to encourage people to be more active.

## CHAPTER TWO

### Review of Literature

#### *Lifelong Fitness and How Museums Can Help Be a Catalyst for Change*

The scientific community agrees that the consequences of obese and overweight Americans threaten to significantly reduce their lifespan, something that has risen steadily for the past two centuries (Wexler 2006, 29). As recently as 1980, just 15% of adults were heavy enough to be defined as obese. By 2008, however, 34% of American adults were classified as obese.. No state has a prevalence of obesity less than 20%. The trend towards unhealthy weight levels has quickly risen; 1985-2006 saw the obesity rates in adults double and in children, triple (Wexler 2006, 1). These, however, are just obesity statistics; it does not include overweight Americans.

Combating obesity would not be considered as part of the mission of most museums. Even museums focusing on health would not likely have a staff properly trained to address this issue. This is a job better left to health professionals. However, museums can create what President and CEO of the National Health Museum in Atlanta, Georgia calls “a culture of health” (Roland 2010, 170). Roland believes that, instead of working towards wellness after one has been diagnosed with serious health conditions, a person should practice life-long wellness. In other words, museums can help to, as Robert Salis, co-director at Fontana Medical Center in Southern California told the Wall Street Journal in early 2010, “refocus the national message on physical activity, which can have a bigger impact on health than losing weight” (Landro 2010).

### *The Benefits of Working Out*

Contrary to what many may think, exercise does more than build muscles and trim waistlines. Working out has many benefits, both preventative and advantageous. Research has shown regular exercise can prevent and greatly lower health risks later in life and create beneficial effects for those who choose to be non-sedentary. Different types of exercise induce different changes. Aerobic exercise usually is a lower intensity activity performed over a longer amount of time, a few examples being jogging, biking, and zumba. Aerobic exercise tends to build endurance. Anaerobic exercise is physical activity that causes one to become exhausted in a matter of minutes because the intensity of the activity being performed. Anaerobic exercises can include sprints and heavy or intense weight training, among others (Harvard Health Publications 2008).

The aim of aerobic exercise is to improve the body's oxygen intake. One of the most valuable aspects of aerobic training is the cardiovascular benefits. In an article published by *International Journal of General Medicine*, cardiovascular disease is identified as the leading cause of death for men and women in the United States. According to the American Heart Association, by the year 2030 these diseases will increase by 9.9% and actual heart failure cases will increase by about 25% (Agarwal 2012, 541). These numbers can be lowered with exercise. Studies have shown that aerobic exercise can reduce the risk of many cardiovascular diseases (such as high blood pressure and cholesterol), heart attack, and even premature death. (Agarwal 2012, 542) This reduction of risk is due to the effects of cardiovascular exercise- an increase in maximal oxygen intake, which in turn, can cause the heart to pump blood more efficiently.

Anaerobic exercise may also have some cardiovascular benefits; however, the prevalence of positive effects on the heart resulting from aerobic exercise are undeniable. Overall, both types of exercise are linked to a list of an incredible variety of benefits. These include: a lower risk of certain cancers, reduction or maintenance of body weight or fat, muscular, bone and joint benefits, including a decreased risk of arthritis, especially in women, better stress management and depression or anxiety control, function in older adults, a more favorable blood pressure and cholesterol improvement, a lowered risk of stroke, a better confidence in self, improved sexual experiences, better sleeping, boosts in energy, and mood improvement.

Exercise is also linked to better brain and memory function. Physical exercise, such as aerobic conditioning and working out, assists in memory by training your brain to respond to challenges more rapidly; the most powerful way of stimulating brain growth is through exercise (Jenson 1998, 86) (Barrett 2007, 61). When you exercise, you are not only exercising the muscles on your body, you are working out the “muscles” in your brain. Museums can help people strengthen their minds in more ways than just the traditional methods of exhibit scripts and programming. In *Thinking with the Brain in Mind*, author Eric Jensen summarizes that exercising could help to create a greater number of connections among neurons in the brain and increased number of capillaries among those neurons. This builds the brain, in turn preparing the brain for the introduction of more knowledge (Jenson 1998, 85).

Results of research in 2002 at the California Department of Education directly linked the number of physical education courses being taken by a student to his/her academic achievement. The more physical education classes taken, the higher the

student's level of academic achievement (Barrett 2007, 61). Exercise does not just affect the brain now. When one becomes older, working out is associated with lower risks of cognitive impairment such as Alzheimer's (Barrett 2007, 61). Museums may want to consider exercise classes not only because of the great health benefits, but also because the classes can lead to better retention and learning about whatever topic museums would like to teach visitors.

So, with all of the benefits of exercise, and not at too time consuming of an amount (the U.S. Department of Health and Human Services recommends sixty minutes a day for children, and a total of two and one half hours a week for adults) why are only one in three Americans meeting the minimal recommendations (U.S. Department of Health and Human Services 2008) (Agarwal 2012, 543)? Leisure time activities are varied, and unfortunately, many people are choosing to remain sedentary during this time, watching television, using computers, or playing video games, among other sedentary activities. There are many factors that can affect a person's choosing to exercise or not to exercise which are discussed in the next section, but museums may find the opportunities to create fun and new ways to engage and aid their public by incorporating exercise into programming.

### *Exercise and Museums*

Bob Rogers, founder of BRC Imagination Arts, exhibit design partner to the National Health Museum, stated why he thought it is important for museums to teach health . He said, "Museums can provide high impact emotional experiences with the ability to change the way people behave. So, if we have that kind of power, let's use it to

change behaviors and guide people in healthier directions” (Roland 2010, 173).

Museums could create exercise programs for the public considering what is known about who goes to the museum, people’s criteria for choosing their leisure time activities, and how to appeal to different types of learners. The following will discuss what we already know and how it can be applied fitness programs.

John Falk and Lynn Dierking, in their book, *The Museum Experience*, discuss what motivates people to go to the museum. The main reason someone will go to a museum is that what is offered matches his or her personal and social interest. Museums must be deemed worthy of visitor time and money; the visitor must think the activity offered is important to him/her, as well as convenient to access (Falk and Dierking 1992, 13). Museums often serve as social environments for their visitors. Many people visit museums for social, recreational, and/or educational reasons. A group exercise class could thrive in such an environment. The overall museum setting, not necessarily the content within, is what many people cite for choosing the museum as the place in which they engage in a social or recreational activity for amusement, fun, or social concerns (Falk and Dierking 1992, 14). This supports considering a workout program at a museum, as it is highly social and recreational. Combine it with an educational program and the appeal broadens. However, what gets someone to a museum in the first place starts at home as he or she decides how to spend their leisure time.

Marilyn Hood, a museum consultant and author specializing in audience research, describes six major criteria involved in choosing a leisure time activity: being with people, doing something worthwhile, feeling comfortable in one’s setting, the challenge of a new experience, opportunities to learn, and actively participating. She says people

look for a combination of these when choosing how to spend their leisure time. Those who do not normally visit museums are interested in active participation, being with people, and ease of surrounding more than those who choose to go to a museum frequently. Occasional visitors look for this. Frequent museum goers usually choose leisure activities because they are seen as worthwhile, educational, and the challenge of a new experience (Falk and Dierking 1992, 16).

The proposed exercise program could easily influence both groups. Frequent visitors are looking for an experience that is worthwhile, educational and a new challenge and could also attract people who do not visit museums, or only occasionally visit them. Two of the criteria, active participation and being with people, can directly relate to working out in group exercise programs. Exercise programs in museums could both bring in and retain museum visitors; as such programs can meet more people's expectations for being deemed meaningful to them and a desirable way to spend their leisure time.

Combining exercise programs with programs that are relevant to the museum's mission may be one way for museums to try something new and healthy for their visitors. People are not used to seeing a combination of museums and fitness—this is just an up and coming trend, making it new to many.

### *Appealing to Different Types of Learners*

Many museums are effective in appealing to different types of learning modalities or preferences such as the auditory, visual, kinesthetic, and symbolic/abstract learners. The best programs and exhibits appeal to more than one style at a time. Appealing to



more than one type of learner at a time allows interpreters to have an audience that will better understand topic at hand. Each different modality is explained in a 1994 issue of *Legacy*.

The symbolic or abstract modality includes those who learn best by reading, writing and arithmetic. These learners are the least likely to benefit from a workout program, unless there are handouts that explain what the workout will be doing, or something along those lines. Those who fall under the visual modality category learn best from picture, slides, props, or anything that can be explained via sight. These learners will benefit from having a trainer in front of them, explaining and using physical examples to illustrate what exactly it is the participant is to do. Auditory learners will benefit from the speech involved with the workout, as most is directed verbally, and from music associated with the workout, if it is present. Exercise programs in the museum are most likely to appeal to the kinesthetic learner, as this type of learner is taught best by participating in physical action. Author of the *Legacy* article, Joel Christensen, says the best way to make sure your program addresses many learning styles is to become familiar with your program and with how each different type of person prefers to learn (Christensen 1994, 18).

One example of the use of the kinesthetic learning style is Shelley Weisberg's innovative programming, "Museum Movement Techniques" (MMT). According to the MMT website, MMT is an "original approach using movement strategies to learn about museum objects. Based on theories supportive of using movement as a catalyst to learn, MMT integrates kinesthetic learning and museum education principles" (Weisberg, Museum Movement Techniques 2006). Weisberg has consulted with museums (e.g.,

Victoria and Albert Theatre Museum, the Corcoran Museum of Art, the National Trust for Historic Preservation's Lincoln Cottage) through workshops and collaboration. She has also presented at many museum and educational conferences about her teaching technique in museums.

In a personal interview with Weisberg spoke about the importance of documenting the steps of what she had done in regards to her type of programming at museums. She does this in order to be able to show other museums how successful such a program can be. Her pedagogy includes systematically analyzing what she wants to do with certain programs in accordance to what their objectives are (Weisberg, Museum Movement Techniques 2011). This kinesthetic type of learning enhances the potential of learning from objects and exhibits, while bringing something new to the museum.

Weisberg's instructive technique has worked well at museums. What I propose is almost the next step to this physical process within museums. Weisberg uses movement to help people learn, but the movement is not athletically based. I would like to make the movement purposeful and beneficial to one's health, while still learning about the objects or exhibits. Museum movement technique is very close to the kind of programming I am proposing. In applying museums movement technique, movement is used to express an understanding of an object or exhibit. I would adapt this process by having this expression become a repeated and specific movement with physical benefits to the body.

Kinesthetic learners are the group that would apparently benefit from this type of learning. However, museums that integrate exercise programs with objects and exhibits can activate other modalities such as: (a) visual, looking carefully at objects and instructors (b) learning facts and abstract ideas about the people who used the objects or

performed the movements being taught (c) auditory learners can listen to what the instructor is teaching. That is to say, they use exhibits and objects, not by having people physically use the objects, but by using information about the objects and themes represented to teach exercise, or vice versa. There are many variables that determine how the programs could be taught, the subject matter being the main determinate. Creative thinking by museum staff during the design of a program will help determine what type of learners can be reached in that program. Museums have recognized there are different types of learners, and many do appeal to kinesthetic learners. This may be why some of the early exercise programs in museums were created. Until 2011, there were a small number of museums implementing physical activity through group exercise routines, and even fewer that used objects or exhibits to inspire these classes. More recently, the government, specifically First Lady, Michelle Obama, has noticed the unique qualities museums have for encouraging learning about health. The *Let's Move!* program was created to combat childhood obesity. Eventually merging with the Institute of Museum and Library Sciences, this program has given validity to museums as places that can encourage healthy living. The number of museums with health-based programs has dramatically increased in the last two years. However, each museum should be sure it stays faithful to its primary mission while providing this type of program. The next section will discuss the *Let's Move!* program and how it has influenced programming in museums.

## CHAPTER THREE

### Early Exercise Programs in Museums

Although relating artifacts to a workout routine is a fairly new concept, there is some early evidence of physical education in a museum setting. A gymnasium exhibit can be seen in photo documentation of the World's Columbian Exposition in 1893. Although this is not at a museum, fairs were early precursors for museum development. This shows that public education of exercise in a museum-related setting has an early connection. This photo is described as the interior of the children's building gymnasium (Appendix A) (Badger 1979).

As far back as the early 1900s, Anna Billings Gallup, the Director of the Brooklyn Children's Museum, realized that the "keynote of childhood and youth is *action*. Any museum ignoring this principle of activity must fail to attract them" (Genoways and Andrei 2008, 158). This remains true even today. Action keeps children interested; I even venture to say it keeps adults interested, as well. Exercise programs are a great way to teach and to encourage healthier habits in youth and adults. Museums can instruct about their artifacts and exhibits using physical workout routines as a means of enabling visitors to have an interesting and beneficial learning experience.

Workout programs in museums were few before the *Let's Move!* program inspired many museums to implement health related programs. Of these few earlier programs, most did not relate to the museums' collections or exhibits. Although general workout programs are beneficial to the public, they do not really relate to museums' educational mission. If the workout programs do not teach from the museum's objects and exhibits, the class might as well be held at a local gym. Relating the program to the

collections or exhibits makes better use of what museums already have and gives participants a chance to learn about the objects or themes within the museum.

Many science museums talk about the importance of health and fitness. For example, *Expedition Health* at the Denver Museum of Nature & Science is a wonderful exhibit about health and the exhibit encourages fitness and the museum provides post-visit fitness activities for teachers to discuss with students. However, I was unable to find a program that uses the museum for a place of physical exercise with special emphasis on education about the artifacts. *Expedition Health*, or a take-away sheet, could be used to inspire people to exercise on their own outside of the museum, or an educational exercise program could be developed around this exhibit.

In contrast, the Children's Museum of Houston has ample amounts of exercise and exercise education in their *PowerPlay!* and *Run!Jump!Fly!* exhibits. The *PowerPlay!* exhibit encourages children to “push your limits and discover how your body reacts to a variety of physical challenges in *PowerPlay!* This monumental, three-story installation lets you leap up and down different levels as you discover new ways to get active! Take it to the next level tracking your heart rate and strength, rating your experience, and comparing your performance like a real fitness athlete” (PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston 2012). *PowerPlay!* lets children be active in the museum, but it also explains the benefits of doing so. The website is extremely elaborate and web visitors can click on the different muscle groups or cardiovascular benefits different movements will produce and find what section of the exhibit to visit to do the movements that receive the benefits.

Similar in its theme is the *Run!Jump!Fly!* exhibit. The museum advertises themselves as combating childhood inertia and provides exhibits that are “designed to build strength, coordination, balance and endurance” (PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston 2012). These exhibits are cutting edge when it comes to museums and fighting childhood overweightness and obesity. Children are placed in “adventure scenes” where they can mimic action scenes seen in popular books and movies. There are four scenes and each “provides an imaginative setting in which you can try out a high appeal physical activity and highlight a specific physical challenge of balance, strength, coordination or cardiovascular endurance” (PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston 2012). This is a great way to make exercise fun.

The Children’s Museum of Houston uses the internet to advertise these two physically active exhibits. Information from the museum’s website supplements the information in the exhibits, demonstrating how physical education and exercise can come together in the virtual and the real world. In the *PowerPlay!* section of the website, each muscle group or body benefit is depicted with a symbol. When the user clicks on this symbol, they are able to see all of the activities in the museum exhibit that works that muscle group or achieves that type of benefit (Appendix B). This same technique is also used in the exhibit. *PowerPlay!* boasts that it “is an adrenaline rushed experience, which turns familiar physical activities and presents them in an exciting new way to get kids moving. Kids will be surprised to find getting healthy is easy and fun because play is one of the greatest forms of exercise!” (PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston 2012). The *Run!Jump!Fly!* section of the site is not as

interactive, but still lets the visitors know exactly what the potential benefits of participation are. As the different sections of the exhibit are described online, a short description about the physical hurdle to be overcome, such as strength, balance, or coordination, at each is listed.

The Boston Children's Museum has a similar exhibit. *Kid Power*, according to the museum, will "inspire families to lead healthier, more active lives. It's all about power in and power out. Whether you're power pedaling, lighting up the interactive dance floor, climbing the walls, or on power pump seats, families will find new ways to get exercise, and learn about super foods, good breakfasts, and other ways to eat and drink right. Getting healthy is easier when your family has fun doing it together" (Exhibits: Kid Power 2012). This exhibit's gallery guide encourages parents to be active with their children, saying that it will encourage their children to be active as well. The activities, such as dancing, using a stationary bike, and pulling oneself up a wall all have self assessment components marked by colored rings and targets. Both children and adults are encouraged to challenge themselves by getting to the next level. The emphasis on family activity and self-challenged movement in this exhibit really encourages younger visitors to participate, as well as their parents to be the encourager.

The Amon Carter Museum of American Art, in Fort Worth, Texas, touched upon the concept of using artifacts to inspire exercise nearly twenty years ago, beginning in 1991 with their 5k run, "Dash for the Timbers." Although community health may not have been the main motive, this program was close to realizing the potential exercise/artifact relationship. Staff at the Amon Carter started the "Dash" as a fun event for the community that would garner attention for the museum and what it had to offer.

They had also hoped it would indirectly affect membership (Muhlert 2011). According to the museum website, “the Dash race is named for one of the most popular paintings in the Carter’s collection, Frederic Remington’s “A Dash for the Timber,” painted in 1889. The event was inaugurated as a celebration of Remington’s birthday during the museum’s 30th anniversary in 1991” (DASH for the Timber 5K Road Race Set for September 28, 2002, at the Amon Carter Museum 2002). The museum used exercise to get the public interested in and to relate to their collections, particularly through Remington’s painting.

Another example that used exercise as an enticement to view objects is found at the Natural History Museum in Manhattan. Around 1994, *Walk on the Wild Side* was started. In this program, the focus is a speed walk through the museum during which small bits of education are given. This is much like a mall walk, but in a museum. It is an attempt at making visitors aware of an exercise program within the museum. The collections are not purposefully incorporated during this type of exercise, but they are viewed in the process of walking the route (Sontag 1997).

All of these programs either focus on interactive exhibits on exercise, or exercise activities that passively put visitors in proximity of the objects. These museums use exercise programs, but the collections are not fully integrated into the museum’s exercise program. Using the collections in conjunction with an exercise program serves to make more use of the artifacts and allows the focus to remain on the museum and what its strengths are rather than focusing only the types of exercise being performed.



### *Museums and Yoga Programs*

Art museums are leading the development of exercise programs in museums. The exercise program of choice is yoga. Practically, this does make sense, as some see yoga as a form of art. According to the Baltimore Contemporary Art Examiner,

Some might consider "museum yoga," also known as "artsy yoga" or simply "art yoga," as another strange yoga form to add to its never-ending list. However, I believe that this new setting to host a yoga class is not only a clever marketing tool, but also helps yogis reconnect to the roots of the practice. Spaces designed to honor "sacred," important works of art can draw one into a state of reflection and awaken the creative muse within. Yoga is not only a fantastic physical exercise, but also a blend of meditation, postures and conscious breathing which enables you to integrate and balance your body, mind and spirit. (Kuah 2009)

Some programs are doing exactly what is proposed, using artifacts as inspiration for a guided workout program. Museums such as The Munson Williams Proctor Arts Institute, The Ball State University Art Museum, The Tyler Museum of Art, and the Baltimore Museum of Art all are excellent examples of museums using their collections or exhibits in ways that work best for their particular organization and audience.

The Munson Williams Proctor Arts Institute offers, and has offered for the past five years, a series of yoga classes on Saturday mornings called "Art and Yoga for the Body, Mind and Spirit." The March-April 2011 classes were one-hour fifteen minute sessions that involved two instructors. The first instructor is the Curator of Modern and Contemporary Art. She introduces a specific piece of artwork as a tour guide would. Then, the certified yoga instructor starts the one hour long session in the gallery space (Art and Yoga For Mind, Body and Spirit 2012). The museum has a drop-in fee for those wishing to try the classes. Museum members are charged ten dollars, which is five dollars less than the general public fee of fifteen dollars. Participants may buy a six-pack

of sessions for which members pay discounted rate of forty-five dollars and the general public pays sixty-five dollars. Normally, ten to twenty people attend each class (Kane 2011). This program directly benefits the museum in terms of funds and may inspire more people to join as a museum member in order to gain the discounts. Learning more about the paintings at the beginning of the classes may also inspire more people to join, or at least to repeat visit. The Education and Public Programs Coordinator says, “With this program I think we have strengthened the connection between our patrons and the museum. I think they feel more confident about looking at art and interpreting it, and see the museum as a warm, friendly and accessible place that has positively affected their lives” (Kane 2011) The focus remains on the museum, even though the program is for exercise.

The Ball State University Art Museum conducted a ten-week program during the summer of 2009 called “Mirth in the Museum.” The program was reportedly well received by about five to fifteen people per week and brought many repeat participants. This program used laughing yoga, which is described as yoga that “combines unconditional laughter with yogic breathing (Pranayama)...the concept of Laughter Yoga is based on a scientific fact that the body cannot differentiate between fake and real laughter. One gets the same physiological and psychological benefits” (What is Laughter Yoga 2012). This type of yoga was used in conjunction with pieces of comedic or humorous artwork in the museum collection. The artwork was discussed in terms of what kind of comedy was represented and then a yoga pose was done next to the artwork. This is exemplary use of the collection and physical education combined.

The Tyler Museum of Art used one of their exhibits to inspire a family-friendly yoga workout program in 2010. One of the reasons for the creation of this program was physical fitness. The Mary Ryan Gallery in New York City organized the exhibit in order to show the artwork of the Babar books' author and illustrator, Laurent de Brunhoff. The Tyler Museum of Art created this exercise program to go along with the exhibit. The inspiration for the yoga classes came from one of the Babar series books entitled, "Babar's Yoga for Elephants" (Appendix C). The yoga program is highlighted here because although it was not part of the exhibits' intent, they found a way to use the exhibit in a different way. Seeing the opportunity to insert physical fitness into an exhibit, the museum was creative with what the exhibit collection encompassed and produced a workout program directly related to the artifacts. The classes were only conducted twice during the stay of the exhibit, but I believe this provides a great example to other museums looking to add something to the programming involved with acquiring an exhibit.

The Baltimore Museum of Art has a yoga program that has become a staple in their adult programming. Since its inception in 2007, the program has developed some deep roots at the museum. The classes are led by Brianna Bedigian, a past employee in the rights and reproductions area of the museum. Having come from an art museum background Bedigian understands the importance of keeping the artwork safe. This helped convince the museum's curators to allow test runs of the program. As safety of the artifacts is sure to be an issue at all museums, this may be the biggest hurdle to overcome when planning an exercise program in a museum. Someone whom the museum trusts to keep the artifacts unharmed, like the BMA does by using Bedigian, will

be critical in creating these programs. The curriculum was selected as a part of regular programming when everyone who attended the six week trial wrote a letter of praise about the classes.

The BMA uses their artifacts for inspiration when designing the yoga classes. Each class focuses on a specific artifact. Classes include Bedigian using the beaded curtains of Felix Gonzalez-Torres, who believes art should be viral and that we are all interconnected, to conduct partner yoga moves through the curtains. Another way all participants can become extremely involved with the artwork is when Bedigian takes them into the American Wing and has each person sit in front of their favorite piece of artwork throughout the yoga session. When the session is over, she has each participant talk about what he/she sees in the painting and what thoughts are provoked. Bedigian believes people will truly see the art, instead of glance at it for mere seconds like many visitors do after having meditated on the paintings throughout the entire yoga class (Bedigian 2011).

Visitor reaction to the classes at the BMA has been strong, with the program attracting participants ranging from ages 16 to 75. The instructor believes that most of the attendees were more interested in the yoga at first, but after the classes had a much better appreciation and interest in art. This can be seen on the testimonial page (Testimonials: Quiet Winds 2012). People attending the classes in the beginning were mainly people who attended the museum, because most of the advertising for the classes is at the museum and on their website. This program provides the perfect combination of careful presentation of the collection and a healthy workout.

These examples show how different types of museums have started to implement exercise into their programming, but making it work in conjunction with the collections is pivotal. It keeps the focus on both education and the museum. Art museums seem to be at the forefront of this movement, using yoga as the main exercise technique. However, most types of museums can look at what is in their collection and then get creative; there are many options for the implementation of different types of exercise programs in addition to yoga and meditation.

There is opportunity for more exercise programs that successfully combine a healthy workout inspired by, or created around, objects and exhibits in museums. Museums are held in a position of trust by the public; the accountability placed on museums requires them not only to take care of objects, but serve their public by means of effective, exciting, and educational programming. One way this can be done is by implementing exercise programs that benefit the health and overall well-being of the community. Not only would this aid in public vigor, but it would also challenge the museum to become more resourceful in its programming. Creative thinking and good collaboration can result in fun and safe workouts that garner inspiration from the artifacts and exhibits that exist within the museum. For more than one-hundred years, museum pioneers have been finding new ways to make use of the objects to serve a diverse public. The *Let's Move! Museums & Gardens* program has helped all types of museums think outside of the norm and start incorporating fitness programs in their exhibits and programming.

## CHAPTER FOUR

### *Let's Move! Programs and Other Examples*

#### *The Let's Move! Program*

The *Let's Move!* program is an initiative started by First Lady, Michelle Obama, to combat childhood obesity and to solve that problem in a generation. The initiative was launched in February 2010 after the First Lady had a discussion with a group of elementary students about healthy lifestyles (Let's Move Fact Sheet n.d.). Although the main goal of the program is combating childhood obesity, everyone can take heed in the message being delivered. That is, adults can learn from what is being taught to the children. This program encourages exercise and healthy eating, citing many examples of how to do so.

The initiative calls for everyone's help: communities and their organizations- government, schools, parents, children, companies, and more. There are five pillars of the *Let's Move!* program:

1. Creating a healthy start for children
2. Empowering parents and caregivers
3. Providing healthy food in schools
4. Improving access to healthy, affordable foods
5. Increasing physical activity

Each of these pillars is important but I will focus on the fifth pillar, increasing physical exercise, in this project.

The program encourages everyone to get active. Proponents of *Let's Move!* wants to increase opportunities for kids to be physically active and encourage families to do this together. The *Let's Move!* program shows that there is concern about the health of nation's citizens.

### *Let's Move: Museums & Gardens*

On May 23, 2011, Michelle Obama announced a partnership between the Institute of Museum and Library Services (IMLS) and the *Let's Move!* program to participants at the American Association of Museums (now the American Alliance of Museums) annual meeting. The *Let's Move! Museums & Gardens* branch of the program officially started on June 1, 2011. Obama told conference attendees:

Every day, in museums, public gardens, zoos, and so many other places, you expose our children to new ideas and inspire them to stretch their imaginations. You teach them new skills and new ways of thinking. And you instill a love of learning that will stay with them for the rest of their lives. Every day, you all make such a difference in the lives of our children. And that's why I'm so excited to work with you on an issue that is so critical to their health and well-being (Institute of Museum and Library Services 2011).

Museums are terrific places to implement this program, but, as discussed throughout this paper the museums need to make it relate to their missions by including teaching about the exhibits, collections, or themes represented in the particular museum. Obama's project also focuses on all types of people, not just children. But this is a big start to get people exercising in museums.

The *Let's Move! Museums & Gardens* program lists 581 museums throughout the states and the District of Columbia that have signed up to participate. According to the initiative's website, the program is a "national initiative to provide opportunities for millions of museum and garden visitors to learn about healthy food choices and physical activity through interactive exhibits, children's afterschool programs, and healthy food service" (Let's Move: America's Move to Create a Healthier Generation of Kids n.d.). It also encourages museums to host exhibits pertaining to eating healthy and being, to teach about nutritious foods and exercise through programming. This programming element is

the focus of my project. Participating institutions are required to commit to one of these two goals: interactive exhibits that teach healthy living or programs that include messages about healthy living. If the museum offers food, it must also commit to one of these two goals: serving healthy food options or have interpretation about healthy food choices and exercise where the food is served. These commitments must be made for at least one year:

The overall goals of the *Museums & Gardens* initiative are:

1. Each year, 200 million visits will be made to *Let's Move!* Museums and *Let's Move!* Gardens that have committed to offering interactive experiences that promote healthy eating and physical activity.
2. Each year, 20 million participants will engage in programming that includes healthy food choices and physical activity with emphasis on afterschool, summer and school-based programs.
3. Each year, 90% of *Let's Move!* Museums and *Let's Move!* Gardens that offer food service will already offer or will change their menu to offer food options that reflect healthy choices.
4. Each year 90% of *Let's Move!* Museums and *Let's Move!* Gardens that offer food service will incorporate interpretation about healthy food choices. (About Us: Let's Move Museums & Gardens n.d.)

The long term goal is to have over 2,000 participating institutions in one year. The Institute of Museum and Library Services website provides many activities adapted for the *Let's Move!* program goals and examples of programs that meet the goals.

The *Let's Move! Museums & Gardens* is a good starting point for a discussion about using museums as places of physical exercise. Creative thinking and planning is required to make exercise programs an option in museum programming. Numerous studies have made it clear that health is an issue. Although the focus of the First Lady's *Let's Move!* is on children and obesity, its goal relates to all: healthy living. Many museums could educate visitors of all ages on this issue if they adopt different outlooks



about how they can use their collections and exhibits to create exercise-specific programming.

### *Program Examples*

One can more easily find examples of health programs or exhibits in museums, which have been implemented since the inception of the *Let's Move! Museums & Gardens* program. What follows will look at a few of the exhibits or programs that are highlighted by the IMLS website and other post *Let's Move!* programs or exhibits. The *Let's Move!* program was created to combat childhood obesity, however, this is a problem for adults as well as children. I am particularly interested in programs that are inspired by museum collections or exhibits. Those programs remain faithful to museums' missions while teaching about physical wellness.

The Children's Museum of Manhattan in New York City has created the *Eat, Sleep, Play: Building Health Everyday* permanent exhibit. In this exhibit, children and their families are encouraged to learn how to make healthy choices, eat healthy foods, get good amounts of sleep, and to be physically active. The section where physical activity is exhibited is called the *Play Center*. Here, families are encouraged to be active by learning the "power of pedaling, dancing, running, bouncing and jumping together as a family" (EatSleepPlay: Building Health Everyday 2012). There are many programs and resources associated with this exhibit.

Parent and teacher resources associated with the *Eat, Sleep, Play* exhibit do not extend to physical activity ideas or give lessons on why it is important. However, a family health curriculum is provided. This curriculum was adopted from the National

Institute of Health's (NIH) *We Can!* curriculum and then adapted for younger audiences. One focus of this curriculum is increasing children's physical activity. The curriculum, once approved by the NIH and the USDA, will be the first federally approved childhood obesity prevention curriculum and will be made available for use in children's museums (Eat Sleep Play: Family Health Curriculum 2012). Occasionally, different types of exercise instructors are brought in on health festival days to instruct classes such as tai-chi, kung-fu, and different types of dance, to name a few. The museum wishes to show there are more ways to exercise than just aerobics (London 2012). All of these activities stay on track with the museum's mission which, in part, focuses on healthy lifestyle programs to provide a blueprint for a family's physical, emotional and environmental well-being.

The Sojourner Truth Multicultural Art Museum in Sacramento, California is also highlighted on the IMLS website. For a fee of \$7, those who want to participate in either Zumba or African Dance classes may do so at this museum. Although not using exhibits or collections to create this program, it is in line with their mission to create civic well being through performing arts (Museum: SojoArts 2012). The museum has also offered classes such as Salsa, Huki Lau, Hip Hop, and Modern Dance. All of these are fun ways to stay fit, but the individual museums are not using collections or exhibits to inspire their classes. It appears that the main purpose of these classes is to involve more visitors and thus generate more income for the museum.

The Port Discovery Children's Museum in Portland, Oregon has two permanent exhibits that focus on health and fitness. They both fall under the large umbrella of the museum's simple mission to "connect purposeful play and learning" (Mission 2012).

The goal of their *Kick It Up!* exhibit is to provide help and tips on nutrition and health while the child plays; this is done through signage throughout the exhibit. *Kick It Up!* provides hands on soccer programs designed to get children moving. When the “soccer stadium” is not in use, it is transformed into an “interactive games arena.” Kids can dance, ride bikes, test their balance skills and play games against an electronic wall. The museum’s other health related exhibit is *KidWorks*. This exhibit is more of a play place for children. In this exhibit, kids can climb, crawl, jump, and slide through the museum’s urban tree house. Both of these programs inspire movement, but only the *Kick It Up!* exhibit teaches children about the benefits of moving and exercise. Programs such as *Kick It Up!* and *KidWorks* are closely related to the ones I developed. Using these exhibits to create purposeful exercise programs would be closer to what is proposed.

The Mississippi Sports Hall of Fame and Museum in Jackson, Mississippi has a more sport-themed exhibit titled *Heroes for Health*. In this exhibit, museum visitors select from a variety of interactive games, which are designed to raise the heart rate. A light space floor is used to play a game of dodge ball without needing a ball. The ball is seen on the floor screen and player must run and jump to avoid the “ball” having contact with the squares their feet are on. Wall screens are used for sports such as football, soccer, and baseball. For each, the screen will show a scene corresponding with whichever sport being played. For example, a visitor may pitch a ball to a batter that appears on screen, trying to strike them out. These are fun games to play, however the museum’s mission is to preserve the state’s sporting legacy. This definitely touches on the theme, but I believe sport-specific exercise programs could be created to teach about the sport and the Mississippi residents who played them.

The Gulf Coast Exploreum Science Center boasts the “most advanced health exhibit in the nation” (Current Exhibits 2012). At this museum in Mobile, Alabama children can exercise, while at the exhibit *My BodyWorks*, in the “Be Healthy” section. Here, whole-body health is promoted through movement and fun. Participants are encouraged to test their high jump ability, upper muscle strength, and flexibility. Activity cards are given out so results can be recorded and turned in at the end of the exhibit for a personal health profile. Participants are then encouraged to compare their results on their next visit. This is an excellent way to try to get children to exercise outside of the museum as well. It makes a game out of beating your best scores, giving a health-related goal. The Exploreum’s mission is to promote science literacy and one of their goals is to provide quality family experiences. As the mission statement is quite broad, this program does fit within its’ range.

The Newark Museum in New Jersey advertises that its exhibit *Generation Fit: Steps to a Healthier Lifestyle* is a part of the *Let’s Move!* initiative. In this exhibit, guests can play with “Body Scan” to see what a difference exercise can make in one’s health. In “Exertainment”, video games are used to create exercise challenges for visitors and in “FIT Center” exercise equipment can be tested out and the components of good exercise are explained. This type of exhibit is in line with the museum’s mission, but again, no group exercise program exists to further the exhibit’s learning themes. However, a community fitness festival is being held at the museum, this is the perfect place for such classes.

The Bayou Country Children’s Museum in Thibodaux, Louisiana, scheduled to open in 2013, will include a permanent health and wellness gallery. In a personal

interview, the museum's executive director explained a few of the highlights this health gallery will have that will emphasize physical exercise. In "Pedal for Nutrition" children will be able to use an elliptical-like machine to see the results of prolonged exercise, fast versus slow aerobic exercise, and how calories are burned. The machine has been reconstructed so children with disabilities which restrict the use of their legs will be able to pedal with their arms. The museum is also partnering with New Orleans Saint, Pier Thomas' *I Can!* program. Pier Thomas will lead this special program which will provide obstacle courses with which the children can challenge themselves. The enrichment of the lives of children and adults is the overarching ideology of the museum's mission (Maquin 2012). I hope the health and wellness gallery will develop into an exhibit that can provide many ideas for regularly scheduled, exercise-related programs.

Many exercise exhibits are easily matched with children's museums' missions. It is a little more difficult to make them relative to other types of museums, requiring creative thinking for the inclusion of exercise programs that relate to exhibits and collections. The *Let's Move!* program is a brilliant initiative, but many museums do not incorporate physical exercise into their programming or exhibits. Nutrition seems to have been the topic most museums have used as their *Let's Move!* Program even though overall health involves more than just eating right.

In order to explore the possible pros and cons of establishing a workout program that is based upon a museum's artifact collection or exhibits, I ran pilot programs at two museums. I wanted to create these programs to demonstrate how easily museums could develop fitness programs to accompany and teach about exhibits or collections. I also wanted to explore the challenges that I believed other museums might encounter when

trying to create this manner of exercise programs. I worked with personal trainers, teachers, museum educators, and other professionals to develop two programs I believe demonstrated the kinds of programs to which I have been referring. The programs developed for this project were run in two Texas museums: the Mayborn Museum Complex on the Baylor University campus in Waco, Texas and the Log Cabin Village in Fort Worth, Texas.

## CHAPTER FIVE

### Pilot Programs in Two Museum Settings

#### *The Mayborn Museum Complex (MMC)*

The Sue and Frank Mayborn Natural Science and Cultural History Museum Complex (MMC), at Baylor University in Waco, Texas, opened in 2004. The MMC exhibits a wide variety of natural science and cultural history artifacts and receives between 100,000 and 120,000 visitors annually. Approximately 20% of the visitors are school children (Smith 2011). The primary demographic is local families. The MMC houses and displays the extensive collections from the Strecker Museum, forerunner of the MMC, on the Baylor campus.

The guiding principle of the MMC emphasizes enjoyment and learning through free-choice and directed experiences as well as fostering all types of learning, no matter how it is obtained. The museum principle is summarized in a shorter statement, *Engage.Enjoy.Explore*. This is exactly what visitors are encouraged to do as they explore the exhibits throughout the MMC. There is a 5,000 square foot traveling exhibit hall which hosts a wide variety of traveling exhibits from artwork to train shows and a stadium style theater that seats 178. The Waco at the Crossroads of Texas Natural History exhibits includes walk-in dioramas of a Texas limestone cave, a Texas forest, and the Waco Mammoth Site, an internationally recognized paleontological site. There are also four exploration stations in this area of the museum that educate visitors about geology, paleontology, natural history, and archaeology. Lastly in the Harry and Anna Jeanes Discovery Center, there are seventeen themed discovery rooms. These discovery rooms encourage touch and play and range from topics such as health, energy, optics and

communication. This section also houses a living collection of vertebrates and invertebrates. Several rooms encourage imagination and role playing. The Pioneer Room is located in this area of the museum. (Baylor University: Mayborn Museum Complex n.d.).

#### *Children's Pioneer Room Educational Program*

The discovery rooms serve both free-choice visitors and school children through directed programming. According to Denise Seaman, Education Coordinator for the MMC the purpose of the Pioneer Room, the common aim with many of the discovery rooms, is “to create a spark within the students. We want them to leave our museum excited to explore and learn more about the pioneers of central Texas” (Seaman 2011). In this room, designed as a pioneer’s log cabin, visitors are encouraged to explore what early pioneer life was like while engaging in various hands-on activities. Loading up a replica wagon with reproduced supplies needed for a trek West, completing chores pioneers performed in their daily lives using replica tools and objects, and dressing up as a pioneer, using clothes provided in a replica trunk a pioneer may have used to pack and store their own clothes, are just a few examples of the hands-on activities in this room. There are two enclosed cases with artifacts from the collection that display tools pioneers used to create and maintain life on the frontier.

Two directed programs make excellent use of the Pioneer Room: the *Junior Historian* program for children pre-kindergarten to second grade and the *Settling in Central Texas* program for children in third to eighth grade. Both of these programs educate about pioneers who settled in Texas, what they were like, how they got to Texas,



and how they survived and thrived on the frontier. The MMC also offers a pioneer *Discovery Box* as part of its outreach program. This box is filled with information such as handouts, videos, and replica artifacts related to the pioneers and serves as an aide to teachers in developing their lessons about early Texas history and the plight of its settlers. The box is available on loan to teachers and parents.

#### *Integrating an Exercise Program within the existing MMC Program*

The program I created had two parts. The first was an educational program for children that taught about movement by explaining the daily lives of pioneers. The second was an exercise class for adults that taught exercise movements through the same educational program about which the children were learning. An educator was needed for the children's program and an educator and trainer, or just a trainer for the adult exercise routine. In order to develop the program, I went to the Mayborn and took pictures of all of the objects in the Pioneer Room that could relate to movement. Objects the pioneers would use in their day-to-day life that would require repeated movement (exercise). I took the pictures home and then listed under each picture what muscle groups would be targeted by using the particular object (Appendix D). After making notes on the objects I created a list of each muscle group and matched each object in order to clearly write the education program script.

The goal of the children's program was to teach participants how pioneers got exercise in their daily lives without having to go to a gym. As stated earlier, the MMC already has directed programs used in school programming. I decided it was important to use this existing education program as the base script and adapt it for my particular

program to demonstrate that there were ways for museums to save time, money, and staff hours learning a new script simply by tweaking what already existed to fit the new, exercise focused program. The existing script was changed to highlight the pioneers' activities that were already discussed, but making the exercise that was required in these activities the main point of the lesson (Appendix E). I then read the script in order to make sure my adaptation would accurately track with what was already in place for this program. The revised scripts were intended to be an aid for educators and docents delivering the program (Appendix F). After completing this I met with Sonya Maness, the Assistant Education Coordinator at the MMC and the educator who would lead the pilot program, to go over the script. Following a brief meeting, we decided to leave my script as is, because it closely related to what was already implemented at the museum. I then made a sheet for Maness as a supplementary guide (Appendix G) just to be sure all questions were answered. The add-ins were made in red, so they could easily be seen. After Maness approved the children's script, I developed the adult workout program.

The goal of the adult exercise program was to create a group exercise program in which the exercise movements performed would relate to the movements pioneers would make to complete their daily chores and tasks moving westward and settling in Texas. This would allow for a good workout and the opportunity for the adults to learn about how the pioneers lived and were active in their day-to-day routines, as the trainer was instructed to tell the participants how the modern movements they were making related to equivalent pioneer activities. To keep program costs to a minimum, I chose to develop a workout program that did not require the purchase of specialized exercise equipment.

The workout, therefore, had to rely entirely on the participants' body weight rather than the use of hand weights, resistance bands, or other workout equipment.

Although I had the ability to design an adult program, I decided to get input from professionals working in the fitness field as this is what most museums would have to do, as it would be unlikely for them to have a personal trainer on staff. I consulted personal trainer, Leslie Bruce, a group exercise leader of seven years, at the Benbrook Community Center YMCA in Benbrook, Texas. After explaining the goals and specific parameters of the workout program to her, Bruce understood what was needed. We agreed to meet again when Bruce would bring her own workout program list to compare to what I had developed (Appendix H). At that second meeting, we compared notes and we were able to combine the best free-weight moves from both lists. We both wanted to make sure every main muscle group including chest, back, shoulders, biceps, triceps, quadriceps, hamstrings, calves, and abdominals was worked out during the exercise class.

Once I had a good list (Appendix I) of the specific modern movements that would be included in the program as well as its "pioneer" equivalent, I met with Van Davis, the Assistant Director for Fitness & Nutrition Education for Campus Recreation at the Baylor University Student Life Center. Since Davis had agreed to lead the adult workout program, I asked her for her feedback on the program. She was to keep in mind the "pioneer" equivalents in her decisions. Davis, like Bruce, had a clear understanding of the goal of the program and was enthusiastic in the planning process. Having conducted many group exercise programs, Davis ensured timing of the workout conformed to the forty-minute time limit we had for the adult program and revised the workout accordingly (Appendix J).

### *Correlation between the Child and Adult Program*

In designing both the children's and the adult's workout, I wanted to make sure that the two programs were linked. I thought it would encourage the adult and child to speak with one another after their programs about what they did and this would give them a common theme to discuss. I did this by implementing workout moves into the adult program that corresponded to the activities the pioneers performed that the children were learning about in their educational program. For example, the children learned that milking a cow was actually exercising arm muscles (triceps) and the adults were told, as they were doing tricep extensions, that pioneers worked out this muscle group by milking cows. As another example, children were shown how pioneers gathered chicken eggs. They then tried it themselves. The bending motion worked out their lower back muscles and the leg muscles on the back of the leg (hamstring). The adults performed Russian dead lifts, which involves the same type of movement. As they did this they were told how this activity worked the same muscle groups that pioneers used when they gathered chicken eggs. Making sure these two programs were linked was an important goal of the overall curriculum so what was learned while at the museum could be taken home. I hoped that curiosity on both the parent's and child's part would lead to questions about the other had done and they could talk about the similarities between their activities.

### *Recruiting Participants for the MMC Program*

Participants were recruited by word of mouth. There were four adult participants, all recruited to bring their children as well. Although the number of participants was small, I was satisfied with this participation, after hearing from the Munson-Williams

Proctor Arts Institute that in their fifth year of running this type of program, they sometimes only have ten people per class. Since this was the first run, the low numbers were not a discouragement.

The creation of a release form is very important for museums wishing to conduct exercise programs. If anyone is injured due to the physical nature of the program, the museums and those associated with the program can be held legally liable. Gyms and health clubs across the nation have their members, and those just visiting sign release forms before starting any kind of activity under their supervision; this is part of a normal process at these kinds of institutions. Museum staff should realize the seriousness of liability. The museum should have participants waive liability, previous to participation, should an accident occur. Of the museums contacted in my research, some do not have liability forms signed; this is something that needs to be looked into further by those institutions. However, some do have release forms signed before participation, which makes this kind of program much safer, legally, for the museum to host. Trainers may carry their own liability insurance as well, but this is completely at their own discretion. To limit liability to the MMC, Baylor University, Van Davis, and me, participants were required to sign a release form. Baylor Office of the General Counsel provided forms tailored for this specific program. (Appendix K). This liability release form states the participant is willingly participating in the program and assumes all risks. Initially, these forms had to be signed and returned to the Office of General Council. Museums might need to hire a lawyer to handle the legal aspects needed to waive their liability in the case of injury to a participant in a workout.

*The Log Cabin Village (LCV)*

The Log Cabin Village is a living history museum owned and operated by the City of Fort Worth. The LCV is devoted to the preservation of Texas heritage. The museum's website gives a brief overview of its history:

In the 1950s, the Village was a project of the Pioneer Texas Heritage Committee and members of the Tarrant County Historical Society. Members of these organizations realized that log structures, which were prevalent in the 1800s, were rapidly vanishing from the Texas landscape – and a portion of Texas history was vanishing with them. That is why they decided to create a Village dedicated to log cabin culture, history and preservation.

Six log houses, dating back to the mid 1800s, were selected from the North Texas region, moved to the present site, and restored in the 1950s to early 1960s. The Village was then donated to the City of Fort Worth, and it opened to the public in 1966. The Foster Cabin, an impressive 1850s plantation log house, was added in 1974 and the 1870s Marine School in 2003. The restoration of the Reynolds Smokehouse, relocated to the Village in 2004 from Azle, was completed in 2005.

Today, each of the historic structures, furnished with authentic artifacts, provides a vivid look at life in the nineteenth century North Texas frontier. Each log house displays different aspects of pioneer life. The exhibits include a water-powered gristmill, a one-room schoolhouse, a blacksmith shop, an herb garden, and several log home settings. Historical interpreters, who are City of Fort Worth staff and volunteers, depict the lifestyle of the people who lived and settled the area in the mid to late 1800s. (About Us: Log Cabin Village n.d.)

This is an open air museum and visitors must walk, outside, from structure to structure.

A series of trails connect the structures and educational signage appears outside and inside of the structures.

LCV hosts many school field trips and free choice visitors. I met with Rena Lawrence, Museum Educator and Collections Manager, and Kelli Pickard, Museum Director, at Log Cabin Village in Fort Worth, Texas to discuss running my program at the museum. After discussing the programs the museum offers, a decision was made to alter the existing *Wagon's West* program for the purposes of my project. Just as at the MMC, in Waco, the changes to the existing script would be minimal. This made staff

training for implementation of the test program a simple undertaking. However, before I altered the script, I went on the *Wagon's West* tour, so I could better understand how to merge this program with my ideas for child and adult programs similar to the one piloted at the MMC.

The *Wagons' West* program is a children's program best suited for ages 5- 12. The two-hour program allows hands-on activities for children that recreate aspects of life for a pioneer child. I followed a group of children on a fieldtrip through LCV, listening closely to what each interpreter spoke about at each structure, and paying attention to which objects in the collection they highlighted, and which ones they did not. I took pages of notes to use to develop my program on the basis of the *Wagons' West* program. Using what I had learned from implementing the program at the MMC made developing this program much simpler..

#### *Children's Log Cabin Village Educational Program*

In order to develop the program, I used the notes taken from my observations during the *Wagon's West* program to pick out which points made, at each structure, and which objects used, or not used, would best exemplify the exercise pioneer children got on a daily basis. The goal was the same as at the MMC: to teach how pioneers got exercise in their daily lives without having to go to a gym. The evidence of exercise the interpreters were already talking about was so overwhelming that I did not change their script. Instead, small note cards were made for each interpreter at each of the different structures that would be visited. These note cards simply had tips for what to add to what they were already saying (Appendix L). For example, if the interpreter was using a

spinning wheel, instead of just talking about how that machine was used, they would talk about how it provided a leg exercise for the pioneers. The children could then try this and feel the physical exhaustion resulting from using the object themselves.

The cards also listed everything in the room that would require movement, resulting in physical benefits for the body, thus mimicking a work out. This way, in each cabin, the children could point out what would have made pioneer work hard, and then guess what muscles or body parts the exercise would benefit, often times, getting to try the movement themselves. The interpreters were given the cards two weeks prior to the scheduled program run. This way, they had ample time to look over the small changes and be comfortable talking about pioneers in a slightly new way. Many of the interpreters said they never really even thought about talking about the objects this way, but stated how easy the transition was to make, because of the obviousness of the movements.

#### *Adult Exercise Program at Log Cabin Village*

The goal of the adult program at LCV was the same as the program at the MMC: to create a group exercise program wherein the exercise movement performed will correlate to the movements pioneers made in their daily chores and tasks. The adult program was to be a group exercise program, forty-five minutes long, which would run during the first forty-five minutes of the child's education program. Again, the trainer leading the workout was to instruct the class like normal, but to add how the movements being made related to pioneer activities in the past. Also, like the program at the MMC, I wanted to develop a program that did not require the purchase of specialized exercise



equipment. The main difference in this program is that it was to be hosted outside, weather permitting.

Having already worked with trainers for movement types, I did not need to interview any trainers. I used my knowledge as a personal trainer to change a few of the exercises that had been used at MMC because the LCV collection was larger, allowing for more speaking points and opportunity for different types of movements. .. Again, every main muscle group was to be used during the workout, including chest, back, shoulders, biceps, triceps, quadriceps, hamstrings, calves, and abdominals. As I had observed Van Davis lead the program at the MCC and I have experience doing this as a personal trainer, I was comfortable with running the exercise program myself. This was not ideal, as I would have liked to have been an observer, but as the program was run in the middle of the day at LCV, most trainers were busy with their own clientele.

#### *Correlation between the Child and Adult Program at LCV*

I wanted this program to have a link between the children's and adult's workout similar to the one at MMC. I did this because I wanted to show museums that it is possible to get creative with this type of program, creating a program that is more than just an exercise routine. I implemented workout moves into the adult program that corresponded to what the children were seeing, with how the objects were used, and hearing about how they affected one's body. However, with this program, I was able to see the adults talk about what they did, while the children were still in the educational program, touring from site to site, because the children's program ran nearly an hour and a half longer than the workout program. Adults were mimicking what they did to the

children, as they recognized objects that pioneers used which were talking about during their workout program.

### *Recruiting Participants for the LCV Program*

This time, to ensure I had a captive, or already-in-place, audience, and to speed along the recruiting process, I met with Dr. Thaddeus Bird, Headmaster at All Saints' Episcopal School (ASES) in Fort Worth, Texas. This made things easy for the Log Cabin Village staff, as well, as ASES takes their third grade classes to the museum for the *Wagon's West* program each year. Nearly sixty ASES third graders, their teachers, six chaperones, and five parent workout participants came to the program. As the children's program hardly differed from LCV's normal *Wagon's West* program, the additions from my program did not take away from LCV's intended lessons for their audience.

Deborah Koppleberger, the Dean of Lower School, at ASES arranged it so I would work with Cherie Diogaurdi, the head third grade teacher. I created a package, to be sent home to the parents (Appendix M). In this package, I sent a letter of introduction that described the aim of this project and asked for volunteers to participate in the workout program and a certification of informed consent form to be signed by every parent whose child was participating in the program. The staff at LCV determined that a release form was not required.

Overall, the programs at both institutions were well received by the parents and the children. Staffing was needed by the museums, but it was minimal and there was not an entirely new script to learn. There was no equipment needed for the exercise program. These considerations kept cost and staff time at a minimum. Museums wishing to

implement a larger, more equipment heavy or new program need to take staff time into account. I believe one of the most difficult things for museums wishing to create these kinds of programs will be finding a trainer, or staff member with the knowledge to connect objects, exhibits, or themes with relevant exercise movements. Having the exercise program led by a certified trainer is important and decreases the liability of the museum. Another even larger task for museums creating these programs will encounter is visitor numbers. For a program to be worthwhile and to justify its continuation in the future it would be necessary to advertise through the correct marketing channels and recruit a stable number of participants.

## CHAPTER SIX

### Conclusions and Recommendations

In creating my two separate workout pilot programs, I saw what challenges museums may face when developing long-term programs for group workouts based on collections, exhibits, or themes within the museum. For example, matching specific exercise movements with particular collections objects, or identifying the best types of workouts for certain themes takes careful thought. This is why I recommend consulting people with a background in training, athletics, and specific types of workouts such as aerobics, weight lifting, yoga, zumba, etc. Furthermore, it can be difficult to find ways to encourage people to start working out at a museum, to move away from a gym and come to a museum to do their daily workout. These programs will need time to develop and for word of mouth from satisfied participants to spread. My recommendations come from research done on other programs, interviews with museum professionals engaging in like programs, and lessons learned during the implementation of my programs.

#### *Preliminary Considerations*

When considering an exercise program at your museum, research should first be done to determine if this will be a successful, reoccurring program. First, take into consideration the space that will be used.

*Will the objects be safe here with people performing physical tasks?*

The artifacts and exhibits must be considered only after the safety of the participants has been determined. If there is an insufficient amount of space and if the objects will be compromised with people working out, another room needs to be

considered. Working out outside of the museum may also be an option, as long as objects or exhibits are still the key focus of the routine. Also keep in mind, some workout routines may be safe around artifacts in a certain area and others may not. For example, a kick-boxing class may not be safe in a smaller room where fragile objects or artwork is displayed, but certain types of yoga may be performed in this kind of room. Moreover, the programs do not need to be run in the same room as the objects; one could tour the museum and then work out in a non-gallery room afterwards.

*How many people can your space safely accommodate?*

This is an important question to ask for three reasons. First, this will help to ensure the safety of your visitors. Secondly, you do not want to try to fit as many people into a gallery as possible, thus endangering the artifacts as well as degrading the participants' experience. And, last, the number of people needs to be one that the trainer is comfortable with instructing at one time. Keep in mind, some trainers will not be as comfortable working with extremely large groups (20-25+) of participants as they are unable to keep careful watch over all of them, which is when accidents could occur.

*What kind of equipment can be used in here?*

Careful thought must accompany decisions to use various types of equipment for a workout program, be it resistance bands, balance balls, weights, steps, stretch bands, or yoga equipment. Equipment can be dropped, bands can snap, people can lose their balance using workout aids. All of this and more needs to be taken into account. Asking

the trainer what risks are associated with each exercise apparatus, while letting them know your concerns for the objects could prove helpful.

*How does the museum research fitness programs?*

The museum staff should also research the different types of exercise programs available and find one that can be related to their artifacts, exhibits, or themes/concepts. This may prove difficult if no one on staff is familiar with current trends in fitness or how each individual program (step, Tai-Chi, aerobic, etc.) is conducted and what kind of movement, space, or equipment it involves. Consulting a personal trainer, group exercise leader, yogi, or someone involved in doing, teaching, or instructing some type of physical fitness routine may be necessary.

The Internet can prove helpful in researching the types of programs available, however, consulting a trainer, group instructor, or fitness specialist would be most beneficial. If the community has local gyms or fitness groups, staff can attend classes to see what may work best in their organization and to make contact with fitness specialists who may be questioned for their expertise in the area.

*What is the best way to recruit an instructor for the program?*

Asking select trainers to conduct a trial series of the program, maybe two classes, can save the museum money in the testing phases of the program. Partnerships with local gyms or fitness groups could prove a valid and beneficial resource if the museum needs to recruit instructors. Developing a partnership with a gym could benefit both the museum and the gym; the museum could gain a trainer free of charge and the gym may

be able to recruit more members as a result of the museums advertising specials for the gym.

Another option is paying the group leader an hourly fee. Averages can be found by asking local gyms what their trainers earn conducting this sort of program. The price of the classes needs to cover the fee of the trainer for the trial sessions. The museum can then decide if they will raise the cost of attending the program if the classes become a part of normal programming at the museum.

#### *What should the trainer know about the program?*

In picking a trainer that will work best with your museum, one should be sure the trainer comprehends the goal of the exercise program in the museum. The first trainer I went to was unable to see the end goal of the program, to teach about the artifacts in the museum. This trainer wanted to make it only about the workout. There are many different options in choice of who conducts the program. But they need to understand they, or a museum staff member, will be adding in museum knowledge with the exercise program; it is not simply a workout class. It is also of upmost importance that the class conductor knows how important the safety of the objects is.

#### *How does my museum recruit participants for this type of program?*

It is also important to research who you are targeting as participants and how to get them into the museum. There is already base audience from which to recruit, people who already go to the gym and those who frequent the museum. Starting off with this small base and then expanding is one of the easiest of ways to start.

I recommend to starting first with your base of museum visitors. Word of mouth, e-mail alerts, and maybe even phone calls to those members you think may be interested in participating. If needed, expand your search to local gyms. These are people who already work out on their own; this may even include some of the museum members. This again, creates an opportunity for partnerships with gyms and fitness clubs. Recruiting may be as easy as getting permission to post signs around the gym or you may be able to get gym staff to make announcements to groups of people about the program pre-workout classes.

*What is the best way to advertise or get the word out to potential participants?*

Advertisements posted at the museum, on its website, and maybe in a monthly newsletter are easy ways to get a base of participants. This can also be done with a gym if collaboration has been set up, or if permission is granted, as stated above. But, the one thing that will help recruit the most is word of mouth from those who have participated in the trial runs. Once the word spreads, as was the case at the Baltimore Museum of Art, numbers will hopefully rise if a good program has been executed.

#### Implementation

There are only a few recommendations for finally implementing the program but they are of major importance. The trainer or instructor needs to have certifications pertaining to their expertise, in order to give the program reliability and to keep the museum safe from legal issues. The trainer, or someone on staff that is present, should be CPR and First Aid Certified. This helps the museum to make sure all safeguards are implemented and the safety of the visitors is maintained. The museums' legal department



or a legal entity should draw up a legal document releasing the museum of all liability if injury occurs which should be signed by the participant before taking part in the program. It should be museum policy this signed release is required for participation; that if it is not signed, that visitor cannot participate and his/her money will be refunded.

If at any time museum staff feels that the objects are at risk, the program should be discontinued. One thing that may become an issue is the bringing of water into the galleries. Although this is necessary for the health of the active participant, it could threaten the artifacts. There should be a place where participants can access water without being a hazard to the artifacts, perhaps be down the hall or keeping water right outside the room.

Although not located at the museum, the program can still relate to its collections and exhibits. If there is no safe place in the museum to conduct an exercise program, outside could be an option, or, again, collaboration with gyms. Maybe the program could be run at a local gym in exchange for something on the museums' part. However, it is important to remember you do not want to steal the gym's members, or be perceived by gym owners as trying to "steal" members. Try to hold the program at a time that will not interfere with the collaborating gym or fitness club.

With so many different types of museums, the needs for each and capabilities of each are surely different. The AAM lists these as all of the different types of represented museums: Arboretum/Botanic Gardens, Art Museum, Children's/Youth Museum, General Museum, Historic House/Site, History Museum, Natural History/Anthropology, Nature Center, Science/Technology Museum, Specialized Museum and Zoo. Commonalities in how programs could be run exist between a few of these types. For

example, arboretums, historic houses or sites, nature centers, and zoos may all benefit more from outdoor programs. Art, history, natural history and some science museums may need to pay more attention to the particular needs of their collection before deciding on whether an indoor or outdoor session would be best. Creative thinking can be used to find ways to implement an exercise program at your particular institution. Each particular institution should research what would best work for its particular site.

### *Cost to Museums*

The cost of an exercise program to a museum can vary from expensive to relatively inexpensive. The cost to the museum will depend on collaboration, volunteers, what type of exercise program the institution wants to develop and the cost of participation.

Collaboration with local health clubs and gyms could significantly reduce or increase the cost of an exercise program. If the museum must rent out a room weekly, cost will be increased. If the museum and gym collaborate thus benefiting each organization, the cost could be reduced. Incentive programs could be set up for both organizations. For example, a gym could start a punch-card system, whereby the gym user who participates in a given number of museum classes at the gym, is then given a discounted membership at the gym. This is good for the gym because the museum program brings in people that would not have previously bought a membership. Or a museum could offer discounted memberships for participating in workout sessions at the gym. Both organizations could also advertise for one another at their institutions and on

their websites. These are just a few examples. Many different types of collaborations could be developed.

There could even be incentives for trainers. The museum could offer a free membership to those who are conducting the classes, or discounted store items, etc. This would cost the museum less than paying the instructor per session. If the museum opts to pay an instructor to lead the classes, this could increase the budget for the exercise program. There is also the option to use volunteer trainers, who could be recruited from local gyms or studios, and possibly from the museum staff.

### *The Let's Move Museums & Gardens Program*

The *Let's Move! Museums & Gardens* program has helped museums to produce some refreshingly new exhibits and programs that focus on health and fitness. In April 2012, the Institute of Museum and Library Services (IMLS) released a newsletter stating that there was a total of 536 participating institutions, with twenty one different types of museums, categorized by the IMLS, listed (Let's Move! Museums & Gardens Monthly Report April 2012 2012). Of the 536 total, 132 were children's museums, almost one quarter of the participants. As the *Let's Move* program was created to combat childhood obesity, it makes sense that many of the participating institutions are children's museums. However, this means nearly three quarters of the museums participating are not child focused. That the *Let's Move!* program has extended itself past being just for children indicates an interest in this type of programming. There are a few programs, seen in the monthly newsletter highlights, that involve exercise and do include parents, or are exhibits for all, but there still do not seem to be any long term programs or classes. Most

are for the run of an exhibit, or are a onetime event like a festival or family day.

However, the *Let's Move!* program has started something new in museums that can be expanded and continued within and outside of its parameters.

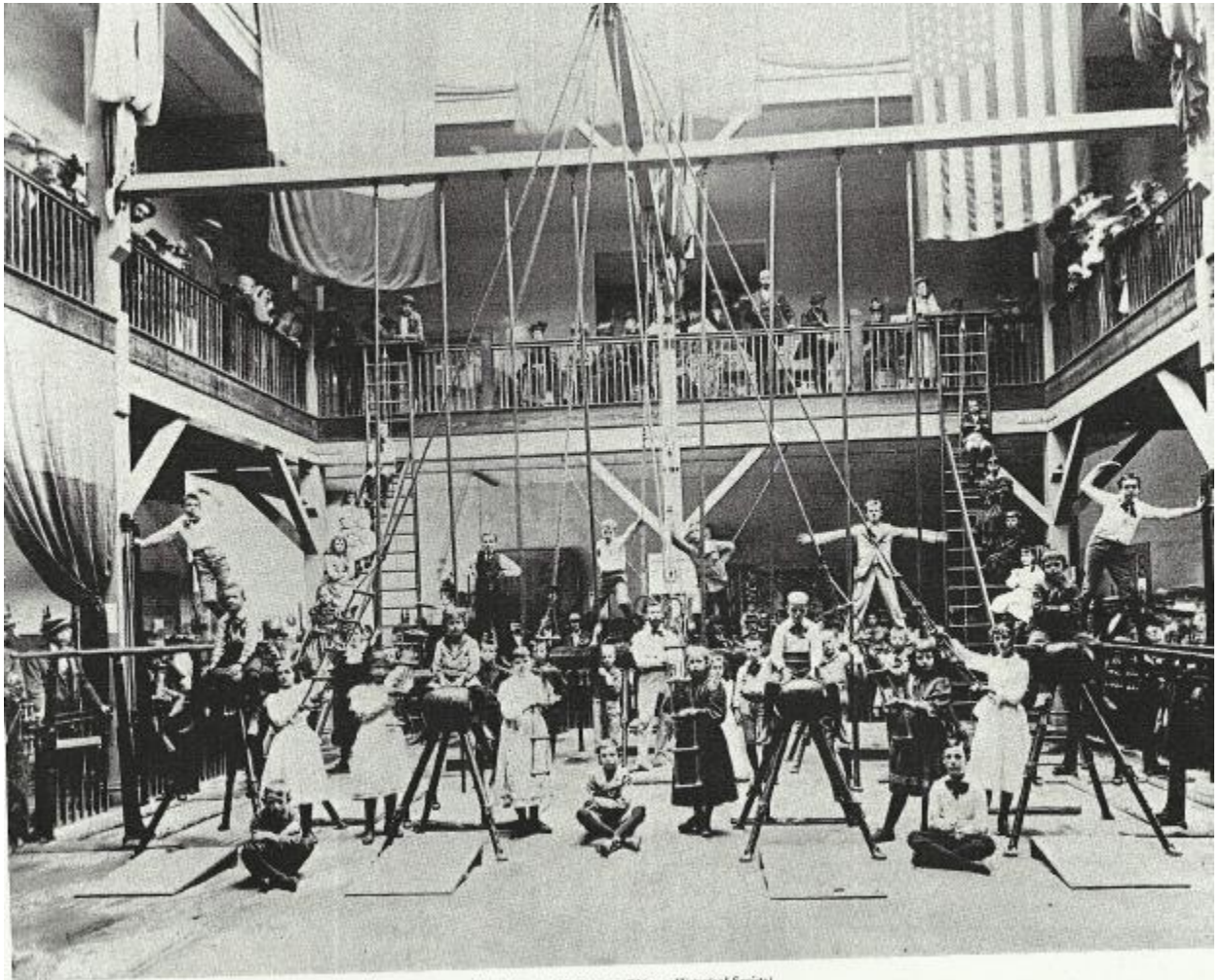
*Let's Move! Museums and Gardens* does have certain requirements that need to be met in order to be a partner. Many of the programs have chosen to focus on healthy eating or exhibits that explain healthy eating or exercise. The *Let's Move!* program merging with the IMLS definitely made museum administrators think differently. However, without assistance from the athletic world, I believe it will be difficult for museum staff to develop exercise programming related to exhibits or collections that encourage people to routinely come to the museum to both learn and exercise. A strong idea and framework has been laid out by the *Let's Move!* program, but, in order for museums of all types to create a more adult specific exercise program, careful instruction, imagination, and partnerships with more sports or movement related fields are necessary.

Children's museums, when combined with Arboretums, Botanic Gardens, or Public Gardens, make nearly 43% of all participating institutions. Art and history museums also make up a large percentage, at 21%. This means that 64% of participation is coming from only four of the twenty one different types of IMLS categorized institutions. Although the *Let's Move!* program has garnered much support from museums all over the United States, this leaves a lot of room for growth and even more new programs creating out of this initiative. Taking this program beyond children's museums and healthy eating via gardens, is how I hope museums will eventually choose to expand their participation in the *Let's Move!* program.

Implementing such programs in museums could bring in new revenues and visitors the museum may not normally receive. The organizations already beginning to implement programs similar like, or close to the kind recommended in this paper are the start of something new in the museum world. It is my hope that this will spread to hundreds of museums throughout the nation as a way of responding to a societal need and to expand the scope of what the museums have to offer.

*Let's Move!* has encouraged museums to examine a new direction for programming ideas. The alarming rates of unhealthy Americans could be enough to motivate any museum to look for ways to support the betterment of public health. Now is the time that museum administrators may want to think about opening their galleries, exhibits, meeting spaces, etc. to exercise, while using exhibits or collections to inspire the physical activity.

## APPENDIX A



Interior of the Childrens' Building Gymnasium. (Photograph by C. D. Arnold; Courtesy Chicago Historical Society)


Badger, Reid. *The Great American Fair*. Chicago: Nelson Hall, Inc, 1979.

## APPENDIX B



*PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston. 2012.*  
<http://exhibits.cmhouston.org/powerplay/> (accessed August 16, 2010).





### Upper Body Strength

Learn more about how different challenges in PowerPlay affect your cardio, lower body strength, flexibility, upper body strength and balance.


#### Upper Body Strength

- **Grip It:** Measure your grip strength and record this measurement using their Kid Card.
- **Blast Off:** Crank hand pedals as fast as you can to race flying superheroes across the exhibit.
- **Adventure Course:** Run through a course of climbing and crawling activities along padded, sloping surfaces! Slap each hand whacker along the way and record the level you achieve.
- **Mt. Boulder:** A climbing wall with three challenge levels measures how far you've climbed and tests your grip strength, reach, flexibility and coordination.
- **Power Course:** Grab a scooter and use your upper body strength to push or pull yourself along this wheelchair accessible course.
- **Power Tower:** Climb, jump and leap your way through the Power Tower, a three-story climbing structure in the middle of Power Play.

Look for these symbols to see how the challenges benefit your body:

Click the icons to learn more:

- < Cardiovascular
- Lower Body Strength >
- < Flexibility
- Upper Body Strength >
- < Balance



*PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston. 2012.*  
<http://exhibits.cmhouston.org/powerplay/> (accessed August 16, 2010).



**Cardiovascular**

Learn more about how different challenges in PowerPlay affect your cardio, lower body strength, flexibility, upper body strength and balance.

**Cardiovascular**

- **Dance Mania:** Listen to music and follow along with different dance moves. Record your heart rate after you play.
- **Match My Moves:** Players capture images of their own bodies in action and follow the poses they've set through a sequence of quick movements, testing their endurance and raising their heart rate.
- **Light Chase:** Race around an interactive game board, while increasing your speed and raising your heart rate.
- **Jump It Up:** Get your heart pumping as you jump over a glowing, virtual rope, which gets faster and faster the more you jump!
- **Blast Off:** Crank hand pedals as fast as you can to race flying superheroes across the exhibit.
- **Adventure Course:** Run through a course of climbing and crawling activities along padded, sloping surfaces! Slap each hand whacker along the way and record the level you achieve.
- **Power Tower:** Climb, jump and leap your way through the Power Tower, a three-story climbing structure in the middle of Power

Look for these symbols to see how the challenges benefit your body:

Click the icons to learn more.

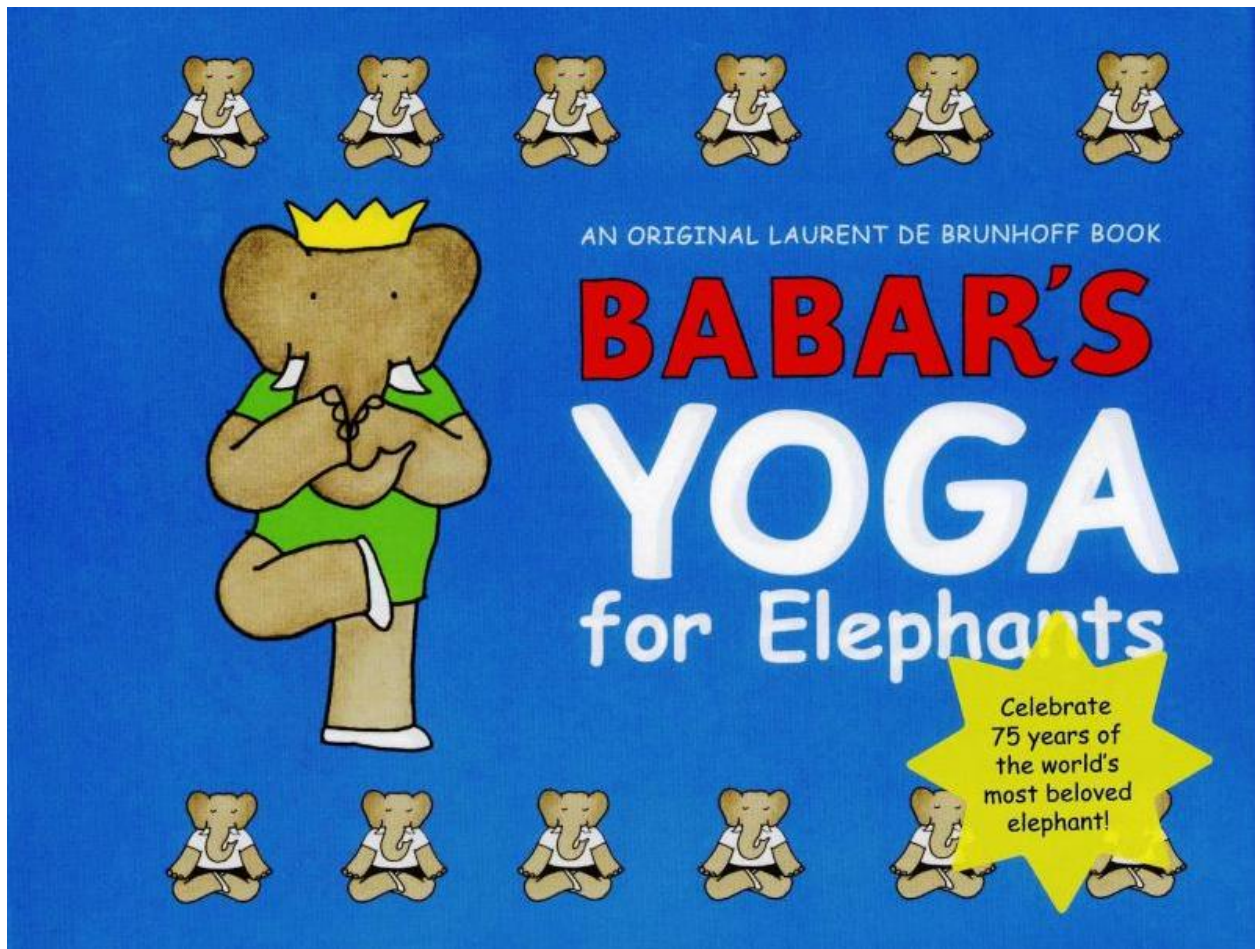
- < Cardiovascular
- Lower Body Strength >
- < Flexibility
- Upper Body Strength >
- < Balance

*PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston.* 2012.  
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*PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston.* 2012.  
<http://exhibits.cmhouston.org/powerplay/> (accessed August 16, 2010).

APENDIX C



*Norton Simon Museum.* 2011. <http://store.nortonsimon.org/children/books/babar-s-yoga-for-elephants.html>. (May 5, 2013).



## APPENDIX D



Inner out thighs, squats, triceps  
Shoulders-grooming



Biceps, squats-kneeling down, upright row  
-carrying and moving carton (back, biceps, shoulders)



biceps-holding bedwarmers and heavy cookware



forearms, biceps, triceps



squats, biceps



biceps and triceps



biceps, triceps  
forearms-drying out  
military press (upper back, biceps changing up to dry)



laterals-swinging axe  
lunges (legs)- holding steady ground to saw  
abs- sawing while standing



abdominals and obliques



pectorals- squeezing





biceps, triceps-red. back, hamstrings-green



back and hamstrings-picking up eggs  
cardio-chasing chickens  
chest, shoulders-roller



biceps-carrying  
laterals-cutting down  
back, shoulders-cutting wood



laterals-chopping wood



biceps, triceps, shoulders

Author's personal photos

## APPENDIX E

### PIONEER PROGRAM - TEXAS HISTORY (to be used with the information in the docent manual)

Mayb.

As the student enter the room, have them sit on the carpet facing the fireplace. The last students that come in can sit (2 or 3 of them) on the wagon seat, one on the saddle and one on the school desk.

#### MOVING TO TEXAS

Begin by asking who has ever moved from town to another - or from one state to another - or from one country to another. Was it scary to move? Were you sad to be leaving friends behind? Did you know anyone here before you moved? Did you leave grandparents behind? How did you move? Did you have a moving van? a pickup? several car loads of stuff?

When the first settlers moved to Texas, they were leaving behind family (grandparents) and friends and going to a place that they had never been before. They did not know anyone where they were going. They weren't even going to have neighbors close by when they got to Texas. They did not have moving vans and they did not have a pick-up truck. How did they move their belongings to Texas? What did they move in? What did they travel in?

They Walked!  
Hunt for  
food. Take  
care of  
animals.

Fix  
wagon  
wheels!

How big was the wagon? What would you bring in the wagon with you? What things were necessities and what things could you leave behind? Things to bring: clothes (packed in a trunk - the entire family's clothes in A trunk), gun, tools, water, chickens, cow, cooking utensils, butter churn, food, seeds to plant, knife, bedding, etc. Remember the size of the wagon when you are loading it - what would you not bring? furniture, wood, etc.

What did you do for food along the way? Did you stop for lunch at the Mac Donald's or at the Jack-in-the-Box? Did you spend the night at the Holiday Inn? What did you do? Setting up camp, firewood carrying

Was it comfortable riding on the wagon the entire way? Have the children sitting on the wagon seat bounce up and down. It was a rough ride. Many people probably walked much of the way.

What did you do if you had to cross a river? Could you travel on a boat down river if the river would take you where you wanted to go? What did you do with your wagon and your livestock? Forging Rivers!

Have to  
dev. 2 programs

## HOMES

When you get to Texas and find the perfect spot for your new home, what was the very first thing that you did? What sort of house did you build? Show the log cabin and talk about it. How big was it? How was it made? What if you were in an area where trees were scarce - what sort of home did you build then? How were the soddies built?

Cut logs,  
build home  
hammer +  
nail squat  
to ground

What was the most important part of the log cabin? The fireplace - because it provided heat, light, a place to cook, a place to heat the water for baths. Was the fire ever allowed to go out?

What did you do for windows?

heavy utensils  
carried water buckets  
keep fire going

## FOOD

What did the pioneers eat? Did they have stores where they could buy food? How many different ways could they fix corn?

Let's make a cake. What will we mix it up in? Where did we get our bowls? Where did we get our utensils to mix it with? What will we put in it?

Food preparation,  
may be all day back  
& forth  
moving

Flour - where do we get the flour? Wheat that we grow and then have to grind it - let a child grind the wheat in the grinder.

lend the  
crops

Eggs - where do we get the eggs? Send someone to the barn to get the eggs from the chickens. bending and reaching for eggs

Milk - Where do we get the milk? What else can we do with the milk from the cow? Has anyone ever made butter? Demonstrate making butter in the butter churn. Pretend that you are making butter and then put the butter in the cake.

milk cow  
& churn  
the butter

Sugar - We have a problem because sugar (if we could buy it) would be very expensive. There was a free way to get something just as sweet as sugar. Honey - how do we get the honey - talk about the bee smoker.

How are we going to bake our cake? Talk about the Dutch oven and how it was the oven and how it cooks just like a real oven with heat on top and heat below.

Heavy

Talk about the other cooking utensils.

## CHORES AND EVERYDAY LIFE

Do you have specific days that you do certain chores on? The pioneers did. There were everyday chores like tending the animals, gathering eggs, milking the cow, working in the fields, etc. but the women had a regular schedule of what they did when;

Monday - wash day - talk about the wash pot and how to make homemade lye soap.

Tuesday - ironing day - show the irons and talk about what a hard day of work this would be and why.

Wednesday - sewing and mending day. Talk about how you would make clothes. This is when I show the cotton and then TRY to spin it into a thread. There is lots of information in the docent manual that can be used here to talk about clothing. *calves + quacks*

Thursday - odd job day - usually a very busy day, tending the garden and doing all the chores that don't fall into a specific category

Friday - cleaning - how did you do this without electricity? without vacuum cleaners, without Pledge, etc.

Saturday - baking and bath day. What did they use for a bath tub? Where did they get their water? Why didn't they take a bath every day?

Sunday - well earned day of rest and church day.

Schools - what were they like? Did they children when they first moved to Texas have schools or were they taught at home until villages were established? Did they use paper? There are slates in the back of the room. *walk to school or ride*

#### ENTERTAINMENT

What do you do for fun? What are your favorite toys? Did the pioneers have as much free time as you do?

In the back of the room are the tops and hoops and dolls that the children love to see and try to work. You demonstrate them first and then let them do them if they can.

If you have time to turn the children loose in the class to card the cotton, spin the cotton, play with the tops and hoops and look around set some guidelines first. They may touch things, but they may **not touch the doctor's kit and the medicines around it. They may not touch the razors near the leather strap.** Everything else they may touch and pick up if they are careful.

This is a room that it is very easy to spend a least an hour in - especially if you have the children participate and talk and answer questions. There is information in the docent manual that can supplement this information. Use what you are comfortable with - this is not the only way to be this program.



## APPENDIX F

### CHILDREN'S PIONEER EXERCISE PROGRAM

As the student enters the room, have them sit on the carpet facing the fireplace.

Begin by asking who has ever worked out before. Ask why, where and how they did it. Explain why working out is a healthy thing to do. It makes your heart strong, makes your muscles stronger, and helps you to live a happier life, because working out can make people happier, it's true!

Then ask them what gym they think the pioneers workout out in. They did not have a gym to go to, so what did they do to stay healthy?

### JOURNEY WEST

Well let's talk about their move to Texas. Begin by asking who has ever moved from one town/state to another. Was it scary? Did you have to leave friends? Pioneers had to move to, but did they use a moving truck? No, they walked! Walking is really good exercise. It can help you to gain muscles, keep your heart healthy and to burn calories. What are calories? You get them from food. It is the energy that you burn off from the food that you eat.

Were they always walking? What did they move in? What did they travel in? The wagon got pretty bumpy at times (which is why people walked) and was stuffed full of things like, what? What would you take? They would bring: clothes (packed in a trunk, the entire family's), guns, tools, water, chickens, cow, cooking utensils, butter churn, food, seeds to plant, knife, bedding, etc. Sometimes you would even get a workout riding in the wagon, steering the horses.

What kind of food do you think they had? Sometimes they would have to hunt, more walking! Did you spend the night at a hotel when you moved or traveled somewhere new? Pioneers had to set up camp. This took a lot of exercise (unloading/re-loading). Can you imagine finding all the firewood and carrying it back to start dinner? Holding all of the heavy pots and pans? Changing wagon wheels, rounding up the animals (chickens, cows. Etc.) took a lot of energy and worked on a lot of different muscles. What muscles do you think these things worked on? Arms? Legs? Back? Let the kids hold some of the pots and pans and carry the yokes with the water buckets.

Sometimes they had to cross rivers...with all that stuff! So what did they do? Do you think this made them exercise? What muscles?

## **HOME**

When the pioneers finally got to Texas, they would find the perfect spot for their new home. What do you think was the first thing they did? Build! Show the log cabin briefly, but talk more about how cutting logs, moving heavy boards, climbing up and down house, hammering nails, squatting to the ground to work on things, etc. really made the pioneers get exercise when they did these things.

What was the most important part of a log cabin? The fireplace- because it provided heat, light, a place to cook (heavy utensils, walking back and forth all day to cook), a place to heat the water for baths (maybe use yokes here). Was the fire ever allowed to go out? Always having to keep it lit you used heavy tools to poke and prod the fire throughout the day. Working out those arm muscles!

## **FOOD**

What did the pioneers eat? Were there stores to buy food from? It took a lot out of a pioneer's day to make the food and again, they actively have to walk and move, mix and stir, hunt and lift all of the objects involved in cooking. And when they weren't cooking, they were making or growing the things to cook.

Let's make a cake. What will we mix it in? Where did we get our bowls? How does mixing a cake make you exercise? What muscles? What will we put in the cake and did it take exercise to get these things?

Flour: where do we get it? We have to grow it and grind it. Tending the wheat crops was no easy task. You had to plow with the horse and with big heavy tools, like that one? Point to all of the tools in cabinet you would use for tending crops. How do you think these made your muscles work? Grinding the flour work a lot like stirring the cake. What muscle was that, again?

Eggs: where do you get them? Send someone to barn to get eggs from chickens. Sometimes you would have to bend down to get them, sometimes reach for them and put them in your basket. What muscles would this work?

Milk: Where do we get it? Them? Someone go milk that cow. What muscles do you think this works? Can you imagine doing this for long? What else would they make from milk? Butter. Man does making butter make you workout! Someone go churn us some butter. How is this exercise?

Sugar: Sugar was expensive. So most of the time they used something else. Honey. Show them the bee smoker. What muscles would this workout?

Talk about cooking the cake in the Dutch oven. Let someone hold it and move it back and forth. What muscles does this workout?

## **Chores and Everyday Life**

Do you have specific chores you had to do on certain day? The pioneers did. They did have jobs they had to do every day, like : tending the animals, gathering eggs, milking the cow, working in the fields, etc. (so all those things we just talked about, they were doing everyday) This made them stronger and more in shape, but the women had a regular schedules of what they did on certain special days of the week:

Monday- wash day. Show them the wash pot and washboard. What kind of muscles would this get. Hanging up the clothes even was exercise.

Tuesday- ironing day. Explain about what a hard day of work this would be and why. What muscles?

Wednesday- sewing and mending day. They would try to spin cotton into a thread. They used sewing machines you had to step on to make go. What muscles do you think this worked out?

Thursday- odd jobs like tending the garden. What muscles do you think you would use here and how? Doing all of the other chores

Friday- cleaning- how would you do this without electricity? Without vacuums and Pledge?

Saturday- baking and bath day. We already talked about how it was a lot of work to bake a cake. But they didn't take baths everyday. Why? After you exercise or play, you stink sometimes, right? Can you imagine how bad they smelled? They worked out all week and only took one shower!

Sunday- rest, well deserved

So what are some things that they did back then that we can still do for exercise? Walk, laundry, making healthy dinners, cleaning, gardening, running, certain chores around house.

What are some things we have that they didn't to make it easier to work out? Trainers, coaches, weights, p.e. classes, treadmills, more sports, exercise classes (like at your YMCA)

## APPENDIX G

### CHILDREN'S PIONEER EXERCISE PROGRAM: Answer/tip sheet

As the student enters the room, have them sit on the carpet facing the fireplace.

Begin by asking who has ever worked out before. Ask why, where and how they did it.

Explain why working out is a healthy thing to do. It makes your heart strong, makes your muscles stronger, and helps you to live a happier life, because working out can make people happier, it's true!

Then ask them what gym they think the pioneers workout out in. They did not have a gym to go to, so what did they do to stay healthy? Let them give a few answers

### JOURNEY WEST

Well let's talk about their move to Texas, do you think they got exercise while they moved to a new home? Begin by asking who has ever moved from one town/state to another. Was it scary? Did you have to leave friends? Pioneers had to move to, but did they use a moving truck? No, they walked! Walking is really good exercise. It can help you to gain muscles, keep your heart healthy and to burn calories. What are calories? You get them from food. It is the energy that you burn off from the food that you eat.

Were they always walking? (Sometimes they rode in the wagon, but not often-bumpy and not much room) What did they move in? What did they travel in? (rode horses, this can work out these muscles- inner/outer thigh, b/c squeezing to stay on horse) The wagon got pretty bumpy at times (which is why people walked)and was stuffed full of things like, what? What would you take? They would bring: clothes (packed in a trunk, the entire family's), guns, tools, water, chickens, cow, cooking utensils, butter churn, food, seeds to plant, knife, bedding, etc. Sometimes you would even get a workout riding in the wagon, steering the horses (steering the horses you almost semi-squat, and must hold arms outward –shoulders).

What kind of food do you think they had? Sometimes they would have to hunt, more walking! Did you spend the night at a hotel when you moved or traveled somewhere new? Pioneers had to set up camp. This took a lot of exercise (unloading/re-loading)(this shoulders, back and legs- squatting and lifting things in and out of wagon), . Can you imagine finding all the firewood and carrying it back to start dinner? (hamstring and back, bending to pick up wood and carrying wood) Holding all of the heavy pots and pans? (shoulders and biceps) Changing wagon wheels, rounding up the animals (chickens, cows. Etc.) took a lot of energy and worked on a lot of different muscles. What muscles do you think these things worked on? Arms? Legs? Back? Let the kids hold some of the pots and pans and carry the yokes with the water buckets.

Sometimes they had to cross rivers...with all that stuff! So what did they do? Do you think this made them exercise? What muscles? (have kids imagine they are swimming and ask which muscles? All of them! Especially is having to carry items or guide animals...this is why swimming is a good and un way to work out)

## HOME

When the pioneers finally got to Texas, they would find the perfect spot for their new home. What do you think was the first thing they did? Build! Show the log cabin briefly, but talk more about how cutting logs (back, biceps, triceps, abdominals, have them go through the motion), moving heavy boards (imagine they are moving them, this hits legs, arms and abdominals), climbing up and down house, hammering nails (biceps), squatting to the ground to work on things, etc. really made the pioneers get exercise when they did these things.

What was the most important part of a log cabin? The fireplace- because it provided heat, light, a place to cook (heavy utensils, walking back and forth all day to cook), a place to heat the water for baths (maybe use yokes here). Was the fire ever allowed to go out? Always having to keep it lit you used heavy tools to poke and prod the fire throughout the day (biceps, shoulders, triceps). Working out those arm muscles!

## FOOD

What did the pioneers eat? Were there stores to buy food from? It took a lot out of a pioneer's day to make the food and again, they actively have to walk and move, mix and stir, hunt and lift all of the objects involved in cooking. And when they weren't cooking, they were making or growing the things to cook.

Let's make a cake. What will we mix it in? Where did we get our bowls? How does mixing a cake make you exercise? What muscles? What will we put in the cake and did it take exercise to get these things?

Flour: where do we get it? We have to grow it and grind it (upper body, some forearm). Tending the wheat crops was no easy task. You had to plow with the horse and with big heavy tools, like that one? Point to all of the tools in cabinet you would use for tending crops. How do you think these made your muscles work? Grinding the flour work a lot like stirring the cake. What muscle was that, again?

Eggs: where do you get them? Send someone to barn to get eggs from chickens. Sometimes you would have to bend down to get them, sometimes reach for them and put them in your basket. What muscles would this work? (bending down- hamstrings, glutes/ reach to basket- biceps)

Milk: Where do we get it? Them? Someone go milk that cow. What muscles do you think this works? (biceps and triceps- legs if squatting and not sitting to do it) Can you imagine doing this for long? What else would they make from milk? Butter. Man does making butter make you workout! Someone go churn us some butter. How is this exercise? (biceps and triceps, some abdominal)

Sugar: Sugar was expensive. So most of the time they used something else. Honey. Show them the bee smoker. What muscles would this workout? (Some arms, but mostly chest)

Talk about cooking the cake in the Dutch oven. Let someone hold it and move it back and forth. What muscles does this workout? (some arms and some abdominals)

## **Chores and Everyday Life**

Do you have specific chores you had to do on certain day? The pioneers did. They did have jobs they had to do every day, like : tending the animals, gathering eggs, milking the

cow, working in the fields, etc. (so all those things we just talked about, they were doing everyday) This made them stronger and more in shape, but the women had a regular schedules of what they did on certain special days of the week:

Monday- wash day. Show them the wash pot and washboard. What kind of muscles would this get? (shoulders and trapezoids-upper back). Hanging up the clothes even was exercise. (Squatting to get the close, turning –abs-to hang, and shoulder {deltoids} up and down to hang, this also gets upper back)

Tuesday- ironing day. Explain about what a hard day of work this would be and why. What muscles?

Wednesday- sewing and mending day. They would try to spin cotton into a thread. They used sewing machines you had to step on to make go (mainly calves, but some quadriceps and hamstring). What muscles do you think this worked out?

Thursday- odd jobs like tending the garden. What muscles do you think you would use here and how? (let's go with lower back being the main one) Doing all of the other chores

Friday- cleaning- how would you do this without electricity? Without vacuums and Pledge?

Saturday- baking and bath day. We already talked about how it was a lot of work to bake a cake. But they didn't take baths everyday. Why? After you exercise or play, you stink sometimes, right? Can you imagine how bad they smelled? They worked out all week and only took one shower! (maybe bring the yokes into play here, talk about carrying pots of water)

Sunday- rest, well deserved

So what are some things that they did back then that we can still do for exercise? Walk, laundry, making healthy dinners, cleaning, gardening, running, swimming, running (hunting) certain chores around house.

What are some things we have that they didn't to make it easier to work out? Trainers, coaches, weights, p.e. classes- who has a p.e. class at their school, recess, treadmills, more organized sports-what are these and what muscles do you use?, exercise classes (like at your YMCA)



## Appendix H

### Tentative Workout Program Ideas

TITLE?!

- ① <sup>MOVE?</sup> walking → step warm up
- ② sitting in wagon → squats
- ③ lifting pales, wheels etc to pack + unpack → RDL (hammys)  
 ↓ go into side squats (set the pale here, or here?)
- ④ big hills — lunges (holding + ups)
- ⑤ fjord rivers/creeks — over head press with knee raises  
 ↳ like kicking in water and carrying objects
- ⑥ clothes are dirty/wet — lateral raises  
 use washboard  
 ↳ maybe add more squats <sup>w/ lat raise</sup> (bending over to wash)

YOU GOT THERE!  
BUILD!

- ⑦ cut the wood → show how you would then go into clunches (have axe)
- ⑧ hammer + nail together → up/down single side planks — biceps/obliques  
 show how move like hammer

BUILT!  
TAKE CARE!

- ⑨ Milk the cow → triceps — tricep pushups → downy kick
- ⑩ Pick up eggs → single leg balance
- ⑪

more tri's, bi's, back

Combine mvmts for times sake      2 reps + an iso.

## Leslie Bruce's Tentative Workout

Forearms - fingertip raises on wall or floor  
Biceps - pushups / ~~partner~~ exercises / palm push / towel / tug  
Triceps - dips / diamond pushups / tricep pushups  
Shoulders ← diamond pushups / dim bombers / wheel  
Chest ← army crawl / barrel  
Abdominals - Core / Plank / rotations / army crawl / wheel barrel / side crunches / elbow planks w/ rotation  
Upper Back - Planks  
Mid Back - Starfish  
Lower back - Swim  
Quadriceps - lunges / one leg balance in runners lunge / wall sets  
Hamstrings - vertical leg lifts  
Hamstrings - reverse plank, lunges  
Glutes - donkey kicks, glute raises  
Calves - calf raises (3 ways) / calf raise in squat position

## APPENDIX I

### THE WALK TO TEXAS

1. Walking- step warm up- just like walking next to the wagon the trek West
2. Squats with arms at side and then forward, representative of steering the horse
3. overhead press with knee raises, representative of fording the river with objects at hand
4. inner/outer thigh glutes, representative of riding a horse

### YOU FOUND YOUR LAND, BUILD!

5. lunge and twist, representative of walking out to find and cut wood for your home
6. diamond pushups, representative of hammering and nailing things for your home
7. mountain climbers, representative of climbing up and down ladders to work on house and roof

### NOW YOUR'RE SETTLED, THE WORK REALLY BEGINS!

8. tricep pushups, representative of milking a cow
9. single leg Russian dead lifts with placed touch, representative of picking up eggs

10. supermans, representative of gardening-bending up and down to plant and weed
11. calve raises, representative of using sewing machine
12. Pushups, representative of using a bee smoker

## **JOURNEY WEST TO TEXAS WORKOUT**

### **WALK TO TEXAS**

<b>WALK TO TEXAS -</b>	<b>WALK STEP</b>
<b>STEER THE HORSE -</b>	<b>SQUATS (ARMS UP &amp; DOWN)</b>
<b>RIVER WALK -</b>	<b>KNEES UP (ADD ARMS)</b>
<b>HORSE RIDING-</b>	<b>GLUTES/ABDUCTOR/ADDUCT</b>

### **FOUND YOUR LAND, BUILD YOUR HOME**

<b>LOOK FOR &amp; CHOP WOOD-</b>	<b>LUNGE &amp; TWIST</b>
<b>HAMMER &amp; NAIL -</b>	<b>DIAMOND PUSH UPS</b>
<b>CLIMB TO BUILD -</b>	<b>MOUNTAIN CLIMBER</b>

### **YOUR HOME IS BUILT, NOW THE WORK BEGINS**

<b>MILK THE COWS -</b>	<b>TRI EXTENTION</b>
<b>PICK UP THE EGGS-</b>	<b>ONE LEG RDL</b>
<b>PLANT &amp; WEED -</b>	<b>SUPERMAN (STRENGTHEN BACK)</b>
<b>SPINDLE (WEEVE)-</b>	<b>SQUATS W/ HEEL RAISES</b>
<b>LOG &amp; LAUNDRY CARRY-</b>	<b>CHEST PRESSES</b>

### **DAY OF REST**

### **COOL DOWN**

## APPENDIX K

### FORM D: PARENT/LEGAL GUARDIAN RELEASE

**BY SIGNING THIS DOCUMENT, YOU ARE WAIVING CERTAIN LEGAL RIGHTS.  
READ CAREFULLY BEFORE SIGNING.\***

#### GENERAL RELEASE AND INDEMNITY AGREEMENT

I hereby represent that I am the parent or legal guardian of \_\_\_\_\_, "PARTICIPANT", who is under the age of 18. For and in consideration of Baylor University permitting PARTICIPANT to participate voluntarily in the **Workout/Exercise Program at Mayborn Museum**, hereinafter referred to as "EVENT," sponsored by Baylor University, I hereby expressly assume all the risks associated with the **EVENT**, and I release Whitney Moore, Baylor University, its regents, officers, employees, students, and agents from all claims, demands, suits, causes of action, or judgments which PARTICIPANT or I ever had, now have, or may have in the future or which our heirs, executors, administrators, or assigns may have, or claim to have against Whitney Moore, Baylor University, its regents, officers, employees, students, or agents, arising out of or in any way connected with the **EVENT**, for all personal injuries, known or unknown, property damages, or claims for wrongful death, caused by the

#### ACTS, OMISSIONS OR NEGLIGENCE

of Whitney Moore, Baylor University, its regents, officers, employees, students, or agents. I understand this waiver does not apply to injuries caused by Whitney Moore or Baylor University's intentional or grossly negligent conduct.

**I FURTHER AGREE TO INDEMNIFY AND HOLD HARMLESS WHITNEY MOORE, BAYLOR UNIVERSITY, ITS REGENTS, OFFICERS, EMPLOYEES, STUDENTS, AND AGENTS FROM ALL CLAIMS, DEMANDS, SUITS, CAUSES OF ACTION, OR JUDGMENTS WHICH PARTICIPANT OR I EVER HAD, NOW HAVE, OR MAY HAVE IN THE FUTURE OR WHICH OUR HEIRS, EXECUTORS, ADMINISTRATORS, OR ASSIGNS MAY HAVE, OR CLAIM TO HAVE AGAINST WHITNEY MOORE, BAYLOR UNIVERSITY, ITS REGENTS, OFFICERS, EMPLOYEES, STUDENTS, OR AGENTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE EVENT, FOR ALL PERSONAL INJURIES, KNOWN OR UNKNOWN, PROPERTY DAMAGES, OR CLAIMS FOR WRONGFUL DEATH, CAUSED BY THE**

#### ACTS, OMISSIONS OR NEGLIGENCE

**OF WHITNEY MOORE, BAYLOR UNIVERSITY, ITS REGENTS, OFFICERS, EMPLOYEES, STUDENTS, OR AGENTS, AND ON BAYLOR'S BEHALF AND IN BAYLOR'S NAME DEFEND AT MY OWN EXPENSE ANY SUCH CLAIMS, DEMANDS, SUITS, CAUSES OF ACTION OR JUDGMENTS DESCRIBED ABOVE.**

I have read and executed this document with full knowledge of its legal significance.

BY:

\_\_\_\_\_  
PARENT/LEGAL GUARDIAN SIGNATURE (in INK)

\_\_\_\_\_  
DATE

Parent/Legal Guardian Name Printed: \_\_\_\_\_

\*If you are a Baylor employee or a dependent of a Baylor employee, this release shall not be construed to deny any valid direct or first party insurance claims which you or PARTICIPANT may have relating to possible death or to any injuries you or PARTICIPANT may sustain while participating in the **EVENT**.

(FORM D) REVISED 09.22.10

{00034719.1}

**FORM E: PARTICIPANT RELEASE**

**BY SIGNING THIS DOCUMENT, YOU ARE WAIVING CERTAIN  
LEGAL RIGHTS. READ CAREFULLY BEFORE SIGNING.\***

**GENERAL RELEASE AND INDEMNIFICATION AGREEMENT**

For and in consideration of Baylor University permitting me, "PARTICIPANT", to participate voluntarily in **Workout/Exercise Program at Mayborn Museum**, sponsored by Baylor University, I hereby expressly assume all the risks associated with the **EVENT**, and I release Whitney Moore, Baylor University, its regents, officers, employees, students, and agents from all claims, demands, suits, causes of action, or judgments which I ever had, now have, or may have in the future or which my heirs, executors, administrators, or assigns may have, or claim to have against Whitney Moore, Baylor University, its regents, officers, employees, students, or agents, arising out of or in any way connected with the **EVENT**, for all personal injuries, known or unknown, property damages, or claims for wrongful death, caused by the

**ACTS, OMISSIONS, OR NEGLIGENCE**

of Whitney Moore, Baylor University, its regents, officers, employees, students, or agents. I understand this waiver does not apply to injuries caused by Whitney Moore or Baylor University's intentional or grossly negligent conduct.

**I FURTHER AGREE TO INDEMNIFY AND HOLD HARMLESS WHITNEY MOORE, BAYLOR UNIVERSITY, ITS REGENTS, OFFICERS, EMPLOYEES, STUDENTS, AND AGENTS FROM ALL CLAIMS, DEMANDS, SUITS, CAUSES OF ACTION, OR JUDGMENTS WHICH I EVER HAD, NOW HAVE, OR MAY HAVE IN THE FUTURE OR WHICH MY HEIRS, EXECUTORS, ADMINISTRATORS, OR ASSIGNS MAY HAVE, OR CLAIM TO HAVE AGAINST WHITNEY MOORE, BAYLOR UNIVERSITY, ITS REGENTS, OFFICERS, EMPLOYEES, STUDENTS, OR AGENTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE EVENT, FOR ALL PERSONAL INJURIES, KNOWN OR UNKNOWN, PROPERTY DAMAGES, OR CLAIMS FOR WRONGFUL DEATH, CAUSED BY THE**

**ACTS, OMISSIONS, OR NEGLIGENCE**

**OF WHITNEY MOORE, BAYLOR UNIVERSITY, ITS REGENTS, OFFICERS, EMPLOYEES, STUDENTS, OR AGENTS, AND ON BAYLOR'S BEHALF AND IN BAYLOR'S NAME, DEFEND AT MY OWN EXPENSE ANY SUCH CLAIMS, DEMANDS, SUITS, CAUSES OF ACTION, OR JUDGMENTS DESCRIBED ABOVE.**

I have read and executed this document with full knowledge of its legal significance.

By:

PARTICIPANT SIGNATURE (in INK)

DATE

Name Printed: \_\_\_\_\_

\*If you are a Baylor employee or a dependent of a Baylor employee, this release shall not be construed to deny any valid direct or first party insurance claims which you may have relating to possible death or to any injuries you may sustain while participating in the **EVENT**.

(FORM E) REVISED 02.01.10

## APPENDIX L

### **Tompkins** (front of card)

- a. Pots and pans
  - i. These are very heavy, when you get to the hands-on cabin, you should try holding these over the fire
    - 1. holding an object like this will make your biceps work hard...who knows where your biceps are? Front of arm
- b. mortar and pestle on the mantle
  - i. See how my arms are moving? (stand further away from the machine, so as to exaggerate). What part of my body do you think this is exercising? Shoulders! These are called your deltoids. Having healthy shoulders makes it easier to move you arms up and down

### **Tompkins** (back of card)

- a. Rug beating
  - ii. What part of the body/muscle do you think this uses the most?
    - 1. Stomach muscles, what are these? Abdominals (abs), your stomach muscles. This uses the stomach muscles on the side of your body (point down your side) these are called obliques
      - a. When you twist like this (demonstrate) your obliques are exercised. This is important because it will help to protect your spine (where is this? back). Your back is a bad bone to break, so the stronger your stomach muscles are, the more you can protect it
- b. candle making
  - iii. What muscle does this work? Move your body like this?
    - 1. this works your triceps...where do you think this muscle is? Back of your arm it doesn't hurt now, but after 50 dips (just one candle) it sure will



### **Parker**

- A. Washing clothes...it's fun right now, but families were large, there was a lot to do.
  - a. this works what part? Your arms. This works your bicep muscle again. Now if you sit behind the board to do this it will work the top of you back (your trapezoids), can you feel those muscle working?
- B. Retrieving water with the yoke
  - a. what part of your body do you think this exercises? your legs! You need strong legs for all of the walking you would have to do...no cars, sometimes rode horse/wagon
  - b. how many buckets? how many trips? That's a lot of leg exercise!
  - c. if you just carry the bucket it does make your legs work...but it also makes the top part of you shoulder near your neck work hard...these are a different part of your trapezoid muscle
- C. butter churner
  - a. this works your arms on the front and back...after doing this for a long time, they'd be pretty sore (can you feel those working?)biceps and tricepS

### **Howard**

#### Shave horse

- A. where do you think this exercises? It the bottom part of your back, it also exercise the back of your legs a little bit (those muscles are called your hamstrings) can you feel these muscles working when it's your turn?
- B. how do you think all of this wood got here? had to be cut down with an axe or saw...this is a lot of hard exercise for lots of different muscles...pretend you're using one of these? what parts of the body do you think that is exercising?

### **Gristmill**

What items in here do you think make you exercise?

- A. Sickle
  - a. explain what its for and show how move to use it
- B. Corn sheller, mano y metate (mortar and pestle), and cradle scythe
- C. Picking corn even exercises you muscles
  - a. the skinny part of your arm...these are your forearms

### **School House**

You get a little bit of a break from exercise in here

- A. when you make yourself sit up straight, where do you feel that? kind of your stomach, sides and back, right?
  - a. sitting up straight is an exercise, even though you're not moving (this is called a static exercise, it means you're staying still) you are making your muscles stay in a certain place they normally do not stay in (they are not relaxed)
    - i. sitting up straight is healthy for your back, sides, and stomach muscles...this protects your spine and makes it easier for our to exercise all of your muscles

**Pickard**

- A. In the cabin, some items to point out alongside typical program
  - a. Cotton cards/carding paddles
    - a. I noted that they were chest/upper back...see how you have to move??
  - b. Spinning wheel and drop spindle
    - a. What part of the body are you using? Where do you feel this? You move your foot up and down, but you feel it on the back of your leg...this is called your calf muscle
      - 1. it doesn't hurt much now, but imaging doing this for hours...your legs would get pretty sore
  - c. What else in this room do you think could exercise your muscles?
- B. Weaving...won't talk about here, but if they ask, it is your upper back

## APPENDIX M

Dear All Saints' third grade parents,

Your child will be participating in a field trip to the Log Cabin Village on April 13, 2012. This is no ordinary field trip, and I ask for your participation.

I am a Museum Studies Master's Candidate at Baylor University, the Development Officer at the Fort Worth Museum of Science and History, and an All Saints' Alumna ('04). All Saints' and the Log Cabin Village (LCV) have both agreed to support me in my graduate thesis research which encourages museums, like LCV and the FWMSH, to promote physical exercise in their programming.

Along with my research, I am running sample programs to better show how museums can incorporate physical activity into their weekly schedules. This field trip is one of those programs. It was met with great success at the Mayborn Museum in Waco, Texas. This is where YOU come into the picture. The program consists of a physical education program based on the lives of pioneers for your children, and a group exercise program for you, the parent/chaperon. This exercise class will be taught at the beginner level by a certified personal trainer and will explore how early Texas pioneers "worked out". It is a *fun* and *light* workout you will not want to miss.

So what I need from you is participation! I would like to have at the very least 10 parents to take part in the workout program. It will be very close to a group exercise class you see at a gym, but with a pioneer twist; plus, you could learn something new!

Signing up to chaperon, you will rotate with the kids. You must sign up separately to participate in the workout program. In other words, you either sign up to chaperon, or you sign up for the workout.

The workout will be outside, amongst all the historic cabins at the Village, so please dress accordingly. To RSVP for the workout program, or if you have any questions, comments or concerns, please contact me at [wbrown@fwmsch.org](mailto:wbrown@fwmsch.org) or 817.255.9367. I will forward all RSVP's to your students teacher.

Thank you and I look forward to meeting you there.

Go Saints!

Whitney Brown

Class of '04

### **Certification of Informed Consent**

This form asks for your consent to participate in research for a potential new museum program. For this research, you will be asked to fill out a brief survey after you participate in a forty-five minute exercise program and your child participates in a forty-five minute educational program; both at the same time at the Log Cabin Village.

There will be no physical risks to your child at any time. There will be the normal risks associated with an exercise program or workout routine. You may elect, at any time during the program, to withdraw your own or your child's participation with no penalty or loss. Participation is completely voluntary.

We have no interest in knowing how a specific individual performs in the workout routine it is at your own decided pace. There will be no way to identify your answers to the anonymous survey and the telephone survey is completely confidential. You are guaranteed anonymity and privacy throughout the entire process.

The results of the museum program success will be figured over the next few months; if you would like, they will be available for your interest. There will be no identifying information kept, so none of the survey answers will be directed back at any of the individual participants. This data will allow us to understand if a program like this could be successful in museums and if parental participation in a program similar to their child's will have a lasting effect.

Please direct all inquiries to Whitney Brown, Department of Museum Studies, Baylor University, One Bear Place, #97154, Waco, Texas, 76798. Mrs. Brown can also be reached at (817) 308-3228 or Whitney\_Moore@baylor.edu. Or you may contact my faculty advisor, Dr. Julie Holcomb, Museum Studies Department, Baylor University, P.O. Box 97154, Waco, TX 76798; phone (254)710-6614; e-mail Julie\_Holcomb@baylor.edu

If you have any questions regarding your participation or any part of the research as it pertains to you, please contact the Baylor University Committee for Protection of Human Subjects in Research, Dr. Michael E. Sherr, PhD., Chair Baylor IRB School of Social Work, Baylor University, One Bear Place # 97320 Waco, TX 76798-7320; phone (254)-710-4483.

I have read and understand this form, I am aware of my and my child's rights as a participant, and have agreed to participate in this research on my own accord.

---

NAME (signature)

---

Date

## BIBLIOGRAPHY

- About Us: Let's Move Museums & Gardens*. <http://www.imls.gov/about/letsmove.aspx> (accessed July 20, 2012).
- About Us: Log Cabin Village*. City of Fort Worth. <http://www.logcabinvillage.org/visit-about-us.html> (accessed August 2, 2012).
- Agarwal, Shashi K. "Cardiovascular Benefits of Exercise." *International Journal of General Medicine* (Dove Medical Press Ltd.) 5 (2012): 541-545.
- Art and Yoga For Mind, Body and Spirit*. 2012. <http://www.mwpai.org/museum-of-art/museum-of-art-calendar/art-and-yoga-for-mind-body-and-spirit/> (accessed April 6, 2011).
- Badger, Reid. *The Great American Fair*. Chicago: Nelson Hall, Inc, 1979.
- Barrett, Deirdre. *Waistland: The (R)evolutionary Science Behind Our Weight and Fitness Crisis*. New York: W.W. Norton & Company, 2007.
- Baylor University: Mayborn Museum Complex*. <http://www.baylor.edu/mayborn/> (accessed April 4, 2011).
- Bedigian, Brianna, interview by Whitney Brown. *BMA Yoga* (March 3, 2011).
- Current Exhibits*. Dogwood Productions. 2012. <http://www.exploreum.com/exhibits.html> (accessed September 20, 2012).
- Christenson, Joel. "Capture Your Entire Audience." *Legacy* (Falcon Press Publishing Co.) 5 (1994): 17-19.
- "DASH for the Timber 5K Road Race Set for September 28, 2002, at the Amon Carter Museum." *Amon Carter Museum of American Art*. August 2002. <http://www.cartermuseum.org/press/releases/dash-for-the-timber-5k-road-race-set-for-september-28-2002-at-the-amon-carter-museum> (accessed April 06, 2011).
- Eat Sleep Play: Family Health Curriculum*. 2012. [http://www.cmom.org/about\\_cmom/eat\\_sleep\\_play\\_cmom\\_health\\_initiative/family\\_health\\_curriculum](http://www.cmom.org/about_cmom/eat_sleep_play_cmom_health_initiative/family_health_curriculum) (accessed July 20, 2012).
- EatSleepPlay: Building Health Everyday*. 2012. [http://www.cmom.org/explore/exhibits/eat\\_sleep\\_play\\_building\\_health\\_every\\_day](http://www.cmom.org/explore/exhibits/eat_sleep_play_building_health_every_day) (accessed July 20, 2012).
- Exhibits: Kid Power*. 2012. [http://www.bostonkids.org/exhibits/kid\\_power.html](http://www.bostonkids.org/exhibits/kid_power.html) (accessed August 16, 2010).

- Falk, John H., and Lynn D. Dierking. *The Museum Experience*. Washington D.C.: Walesback Books, 1992.
- Genoways, Hugh H., and Mary Anne Andrei. *Museum Origins: Readings in Early Museum History and Philosophy*. Walnut Creek, CA: Left Coast Press, Inc., 2008.
- Harvard Health Publications*. September 2008.  
[http://www.health.harvard.edu/newsletters/Harvard\\_Health\\_Letter/2008/September/Glossary-of-exercise-terms](http://www.health.harvard.edu/newsletters/Harvard_Health_Letter/2008/September/Glossary-of-exercise-terms) (accessed April 16, 2013).
- Institute of Museum and Library Services. "Let's Move Museum and Gardens Press Release." *Institute of Museum and Library Services*. May 23, 2011.  
<http://www.imls.gov/news/2011/052311.shtm> (accessed January 2, 2012).
- Jenson, Eric. *Teaching with the Brain in Mind*. Alexandria, VA: Association for Supervision and Curriculum Development, 1998.
- Kane, Barb, interview by Whitney Brown. *Yoga at the MWPAI* (March 8, 2011).
- Kuah, Laura. *Yoga + Art winter series at BMA*. January 7, 2009.  
<http://www.examiner.com/article/yoga-art-winter-series-at-bma> (accessed April 06, 2011).
- Landro, Laura. "The Hidden Benefits of Exercise: Even Moderate Physical Activity Can Boost the Immune System and Protect Against Chronic Diseases." *The Wall Street Journal*. January 5, 2010.  
<http://online.wsj.com/article/SB10001424052748704350304574638331243027174.html> (accessed August 28, 2012).
- Let's Move Fact Sheet*.  
[http://www.letsmove.gov/sites/letsmove.gov/files/Let%27s\\_Move\\_Fact\\_Sheet.pdf](http://www.letsmove.gov/sites/letsmove.gov/files/Let%27s_Move_Fact_Sheet.pdf) (accessed February 27, 2011).
- Let's Move: America's Move to Create a Healthier Generation of Kids*.  
<http://www.letsmove.gov> (accessed January 30, 2013).
- London, Rita, interview by Whitney Brown. *Interview with the Director of Public Programs* (August 5, 2012).
- Maquin, Christy, interview by Whitney Brown. *Exhibit Interview* (October 29, 2012).
- Mission*. Mission Media. 2012. <http://www.portdiscovery.org/about/mission> (accessed September 13, 2012).

- Muhlert, Jan, interview by Whitney Brown. *The Dash for the Timbers Race* (April 5, 2011).
- Museum: SojoArts*. 2012. [http://www.sojoarts.net/museum/#.UKg\\_Y1F41Bl](http://www.sojoarts.net/museum/#.UKg_Y1F41Bl) (accessed September 12, 2012).
- Norton Simon Museum*. 2011. <http://store.nortonsimon.org/children/books/babar-s-yoga-for-elephants.html>. (May 5, 2013).
- PowerPlay Fitness Activities for Kids Health at the Children's Museum of Houston*. 2012. <http://exhibits.cmhouston.org/powerplay/> (accessed August 16, 2010).
- Roland, David H. "Creating a Wellness Culture: Reflections on Health, Science and the Role of Museums." *Museums & Social Issues* (Left Coast Press, Inc.) 5, no. 2 (Fall 2010): 166-174.
- Seaman, Karen D., interview by Whitney Brown. *Coordinator of Education* (April 5, 2011).
- Smith, Mark, interview by Whitney Brown. *Assistant Director, Promotions and Events* (April 6, 2011).
- Testimonials: Quiet Winds*. 2012. [http://www.quietwindsofchange.com/?page\\_id=100](http://www.quietwindsofchange.com/?page_id=100) (accessed March 6, 2011).
- U.S. Department of Health and Human Services. *Physical Activity Guidelines for Americans*. 2008. <http://health.gov/paguidelines/guidelines/summary.aspx> (accessed November 1, 2011).
- Weisberg, Shelley K. *Museum Movement Techniques*. 2006. <http://www.museummovementtechniques.com/> (accessed December 3, 2010).
- Weisberg, Shelley K., interview by Whitney Brown. *Museum Movement Techniques* (March 7, 2011).
- Wexler, Barbara. *Weight in America: Obesity, Eating Disorders, and Other Health Risks*. Farmington Hills, MI: Thomson Gale, 2006.
- What is Laughter Yoga?* 2012. [http://laughteryoga.org/index.php?option=com\\_content&view=article&id=180:what-is-laughter-yoga&catid=85:about-laughter-yoga&Itemid=265](http://laughteryoga.org/index.php?option=com_content&view=article&id=180:what-is-laughter-yoga&catid=85:about-laughter-yoga&Itemid=265) (accessed April 5, 2011).