2023 Interpretive Plan for the Bryan J. Barber II Children's Stage

Rachel Landes's Honors Thesis

Big Idea

The Bryan J. Barber II Children's Stage is a dynamic environment for kids to explore the world of theatre and take the spotlight for creative performances enhanced by techniques and items employed by theatre professionals. This exhibit fosters pretend play and child-caretaker discussions about theatre, theatre technology, and the entertainment industry. Play experiences lead to the discovery and practice of storytelling strategies. Kids walk away aware that there is more to theatre than just acting on a stage. Because pretend play is frequently also social play, the exhibit is designed to encourage cooperative and multigenerational play. The key developmental/educational skills this exhibit fosters are language development, social skills, and creative expression.

To achieve these goals, the exhibit includes/will include interactives that expose users to the technology, personnel, and techniques that make theatre successful. Additionally, the stage, costumes, and backdrops inspire creative acting performances in this space, and immersive environment decorations encourage active prolonged engagement in both adults and children. The cohesive design concept is that The Bryan J. Barber II Children's Stage is putting on a fairytale based production, drawing background, characters, and props from famous tales as Into the Woods does. Visitors are drawn to this exhibit by the obvious medium for dress-up and make-believe play, the visible costumes, and the theatre's two-story nature (what artists call "scale"). The childhood educational goals are met through a variety of interactive components and the nature of the theatre: role-play (and water play) facilitating

equipment has been shown to be a nexus for cooperative play and friendly behaviors between children (Fernelius 28).

Audience

The primary audience for this exhibit is children, primarily thoses ages 5-8 year old. The exhibit is not designed to target any gender above others. Additionally, all children who visit KNS should be considered possible audience members for this exhibit. KNS's child visitors range from 3-10 years old. Children are wiggly, curious about the world around them because they have not experienced very much of it, and enjoy using their hands/bodies to explore new things. They are likely to have seen a stage before and be able to recognize costumes and their affordance, but will not be familiar with the particulars of how theatres work (including theatre nomenclature, technology, and careers beyond acting). Children 5-8 years old, the primary audience, especially enjoy pretend play, though the sorts of scenarios they come up with aren't always complex or logical. Their motor skills are good on flat ground, but occasionally blunder at stairs or if anything encumbers their feet. Older/more mobile members of this group will look to engage in motor play beyond stairs because "risky" play, play that challenges children's dexterity/strength and that leads to the most growth, is specific to the child's abilities (Little 501). Game play and creative play (drawing or storytelling) are in the wheelhouse of these kids (Trawick-Smith 24). Cooperative play skills begin around ages 4-6 (Trawick 64), so the intended audience for this exhibit should be able to play socially. To accommodate motor play, there should be draws for play on the main level and upper floor. A prompt for plot creation would be encourage creativity and forethought in pretend play. An opportunity to (safely) test their physical limits would be a medium for risky play. To foster pretend play, costumes and a playmate (adult or other child) are useful. Interactives

that encourage cooperative play, like perspective or location dependent interactives would enhance this exhibit's social and language development goals.

The secondary audience is children's caregivers (including nannies, siblings, parents, and grandparents). Because studies have shown that adult scaffolding in play increases learning, especially language development (Weisberg), adult-child cooperative play is one of the goals of the exhibit. Caregivers come to KNS as facilitators – socially motivated visitors whose priority is enabling their group's enjoyment according to Falk and Dierking (Summers 17) – and are certain to have less energy than their young companions. Adults have been noted as having a "universal need" to "take a break from the hard work of taking care of children" (Nguyen 27). They are responsible for the safety and comfort of their party and act as both a source of information and general aid for the child they are minding, and need to be able to see their charge even when resting. They may or may not have experience with theatre outside of the exhibit. Therefore, caregivers are accommodated with signage explaining interactive intent/background information which they can relay to children as appropriate, easy sightlines to all accessible parts of the exhibit, and seating options near the play area. Costumes that could fit adults and the apparent opportunity for play adults wouldn't find demeaning, like structured storytelling or participating in sports, will also encourage caregivers to play cooperatively with their children which leads to a better play experience than if a child must play alone.

Exhibit Components:

Spotlight – Future Addition

A large pseudo-spotlight, with maybe 12" diameter "light" adhered to a pivot-afforded pedestal like a viewfinder on a beach. It is not electrical in nature, a fresnel lens like lighthouses used to amplify lantern light is used to refract the ambient light of the room, creating a mild spotlight effect. The fresnel lens would be encased in a cylinder made to resemble a theatre light. That case would be attached to a podium with thick pins and a frame. This idea behind this interactive is pictured in Figure 1 below.

This spotlight would foster explorative/problem solving play and motor play. It would be a draw to the second story (increasing kinetic play and exploration), and it would expose visitors to the lighting element of stagecraft. In this plan the spotlight is included as a future addition due to time constraints. The fresnel lens and ambient light idea would need testing and its construction is beyond the scope of this project, and so might be considered for future updates. Below is a drawing of the interactive component (Figure 1.1), a 3D model of what a fabrication might look like (Figure 1.2), and an stl file of the CAD model is here.

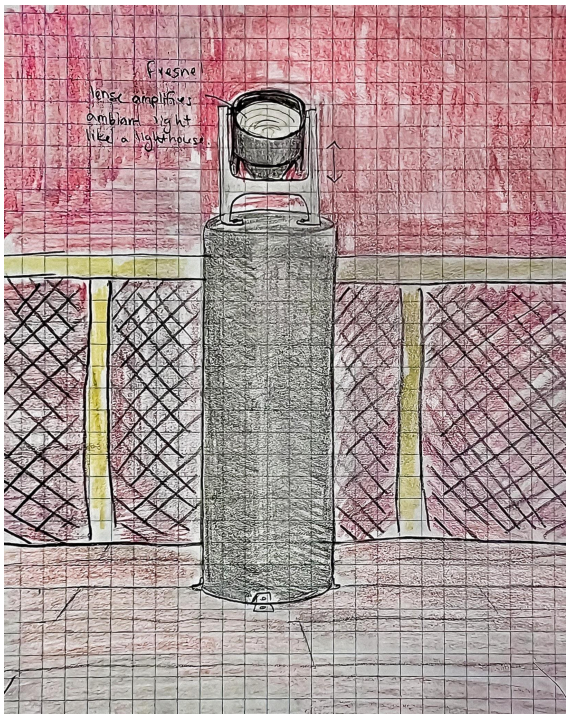


Figure 1.1. Spotlight Interactive Drawing. Rachel Landes, 2023.

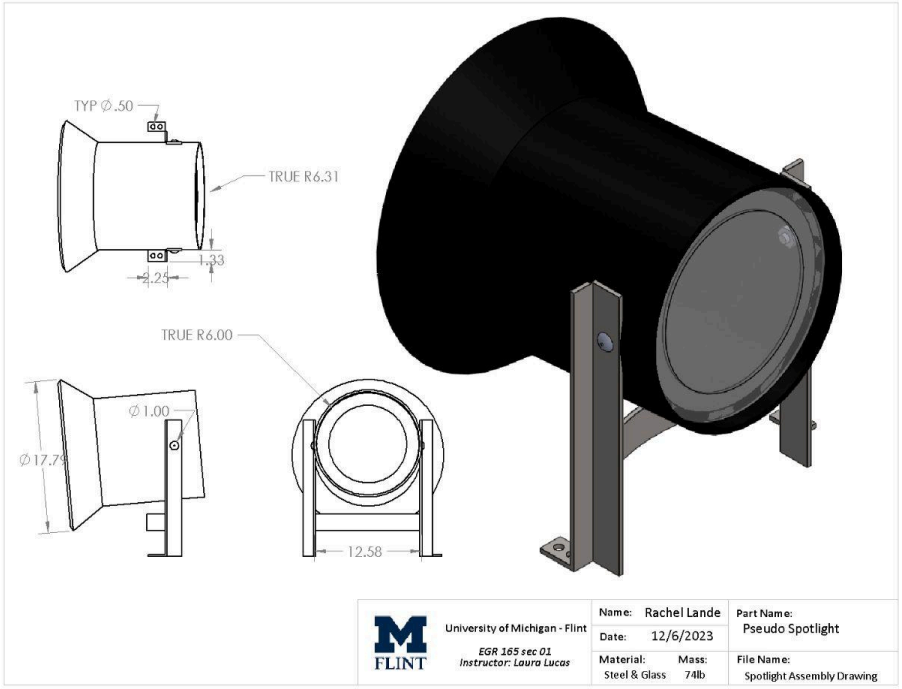


Figure 1.2. Spotlight Interactive 3D Model Drawing. Rachel Landes, 2023.

Pulley – Fabricated 2nd

This would be an interactive exhibit component built in an approximately 36"x24" box mostly blocked off by plexiglass that prevents unsafe interactions. A curtain with weighted ends would either be scrunched up or allowed to fall taught based on the y-axis location of a "sandbag" (filled with beanbags). The "sandbag" is also attached to a rope which is threaded through a pulley and that a gap in the plexiglass allows kids to pull down. Pulling the rope down raises the sandbag and allows the curtain to fall (see Figure 2.1-2.3 for details).

This would be a medium for motor and "risky" play – letting kids exercise their arm muscles and test their limits. It's also a chance for problem solving/explorative play, letting kids see what happens when the pulley raises the sandbag and use logic and observational skills to puzzle out its consequences. Possibly, this would prompt a child/caregiver discussion about physics. It's also exposure to a key technology of theatre which also happens to be historically important – the pulley system!

Constructing this interactive involved marrying many fabrication techniques and an understanding of physics. I prototyped the pulley layout with a linen test curtain bracketing anchor points and pulleys on a freestanding structure to determine the necessary hardware and it placement as well as the best way to weight the rising curtain. Sewing the curtain out of velvet called for pattern making and finishing techniques, as well as fabric, webbing, and two medal rods. The sand bag is made of canvas fabric with a plastic lining and webbing for long lasting use, and weighted with beanbags for easy cleanup in case of accidents or damage. D-rings connect it to the ropes. The box was made of wood cut with a chop and table saw, and the plexiglass was cut with a table saw. Assemblage, a lot of sanding, and painting were the final steps. Though the box was designed to be hung from the back, no

mechanism was initially installed due to uncertainty as to its long-term home in the exhibit space (see Figure 2.3). Later, bolts were added to attach it to an aluminum support structure (see Figure 2.4). After being play-tested by daily use by kids, we discovered that the metal rod I'd used used to hold up the curtain has a tendency to fall out of the eyehooks. This is illustrated in Figure 2.5. The rod will be replaced with another with threaded ends and bolts to keep it in its bounds to solve this issue.

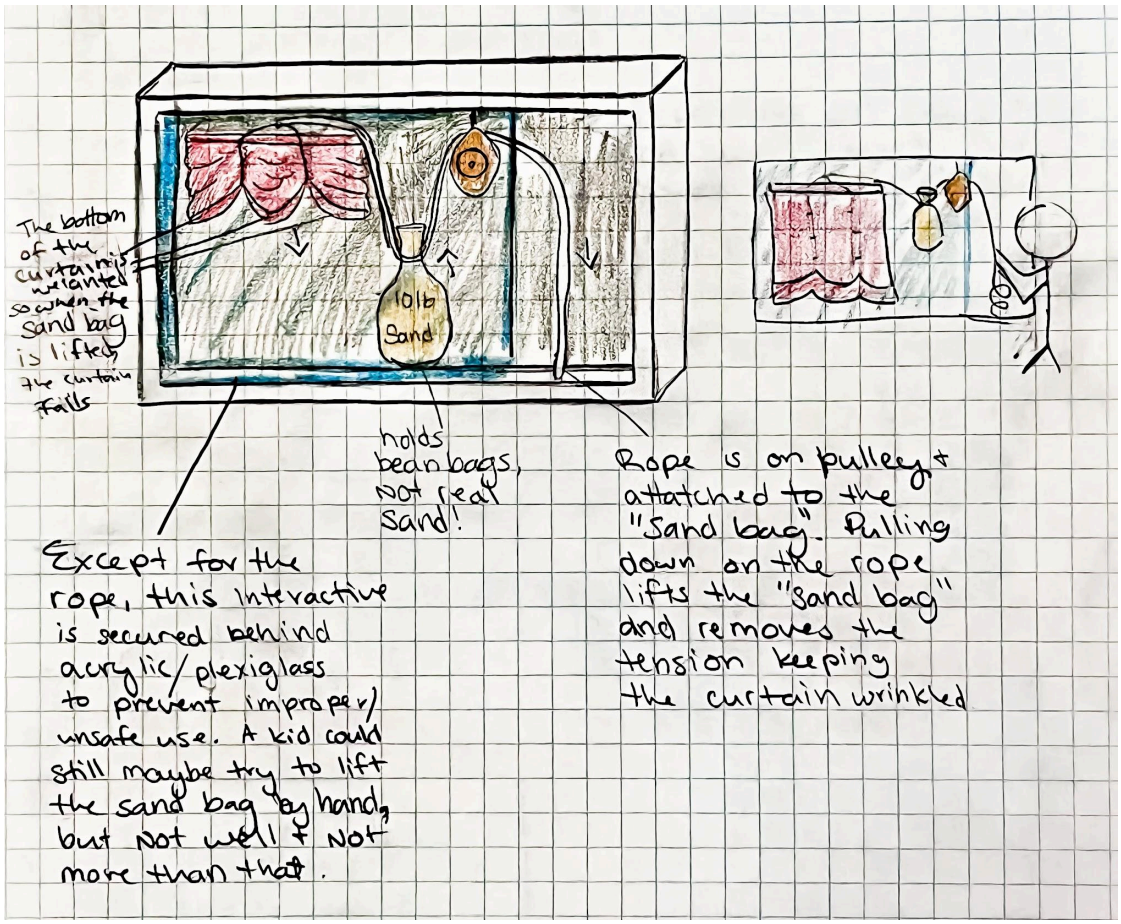


Figure 2.1. Pulley Interactive Drawing. Rachel Landes, 2023.

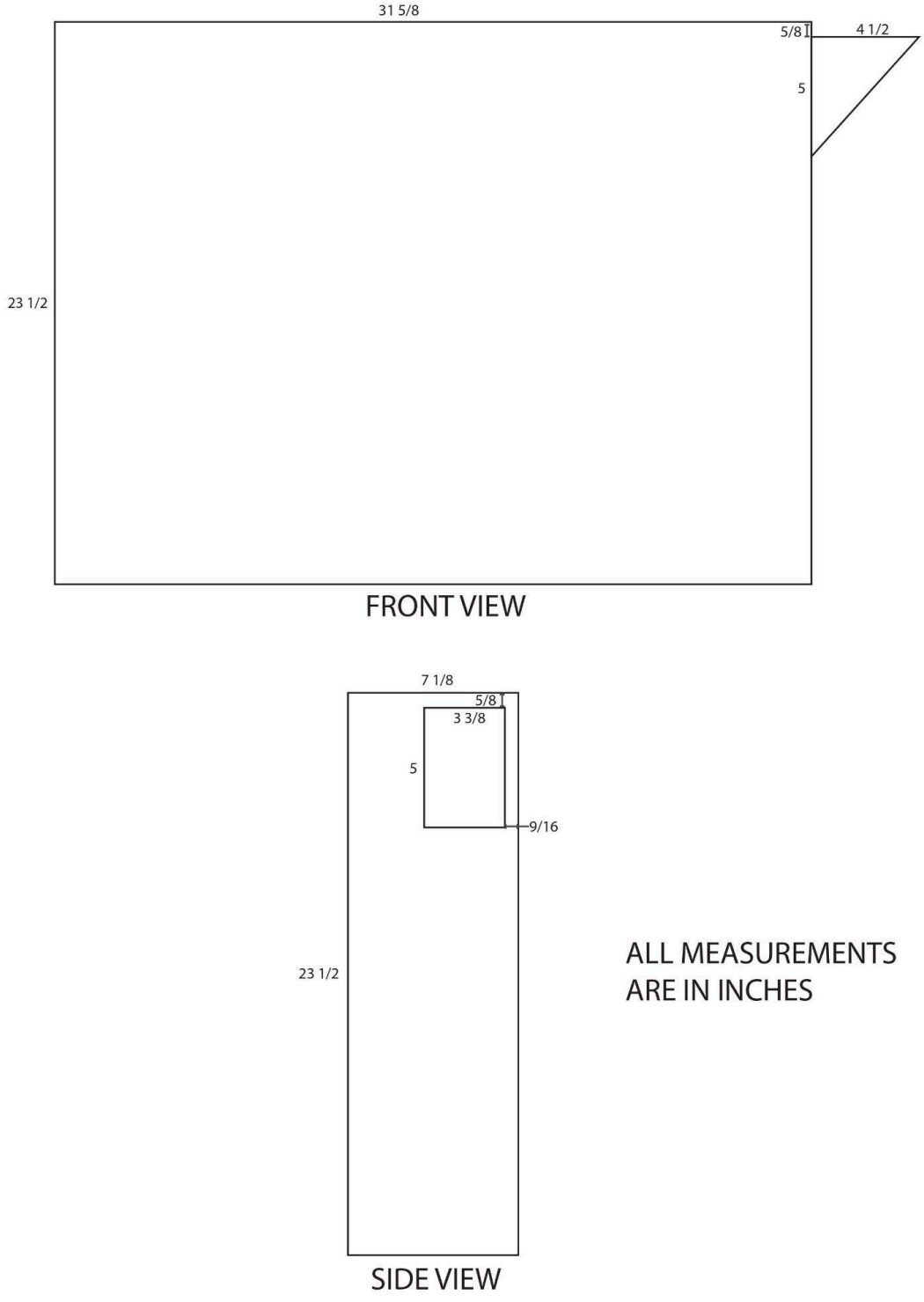


Figure 2.2. Pulley Interactive Diagram. Rachel Landes, 2024.



Figure 2.3. Pulley Interactive Photo on Installation Day. Rachel Landes, 2024.



Figure 2.4. Pulley Interactive Photo Permanently Installed. Rachel Landes, 2024.



Figure 2.5. Pulley Interactive Inoperable Photo. Rachel Landes, 2024.

Backdrop Mechanism – Future Addition

The existing backdrop mechanism's functionality is non-optimal. Though replacing it with a conventional curtain rod is unnecessarily difficult due to the composition of revenant walls, an alternative has been discovered. Two aluminum crossbars designed to connect to the pre-existing rigging will be purchased and staggered to allow for backdrop variety. Four backdrops will be selected that correspond to the settings available in the Plot Guidance interactive, two of each being strung onto each aluminum crossbar in the manner currently used by the red curtain. Some minor sewing may be

required to fit the curtain's sleeve over the crossbar so that kids can easily pull them to one side or the other when choosing their backdrop.

Plot Guidance – Fabricated 1st, visualized with a mock up for draft

This would be storytelling/creative play with an educational bonus of reading/writing. It would consist of sheet metal covered in photo text/vinyl designed to look like a script, and custom magnets used to write a fill in the blanks story. Possibly this could look like "Today's Show" as the title and have an open ended "Once upon a time…" to propt story telling in a theatre context. This would be great for more literate kids and multigenerational play, but would be pretty advanced for some members of the target audience. As this is partially intended for a younger audience something more scripted and containing visual clues to words is ideal. This would foster creative play and encourage children to experiment with storytelling techniques. As this is a less "silly" for of play, there is also a hope that caregivers might engage with this interactive alongside their charges in multigenerational play, creating powerful memories and learning moments in the process. The look of this interactive is shown in Figure 3.1, 3.3 and 3.4. Designed magnets for story writing are in Figure 3.2

Fabrication of this interactive mostly involved design work on a computer. The characters that were included were chosen in concert with the established "classic fairytale" theme of the theater and those similarly selected in other interactives. To accommodate limited reading ability of some children, icons are present next to the nouns, adjective meanings are hinted at through typeface selection, word types are grouped by color, and a tight hold on English grammar was relaxed regarding verb tenses, capitalization, and prepositions. The hope is not that child will write a complex story, but that they will create a bare bones script that informs their make-believe shows on the stage. Connecting acting to

scripts in the minds of playing children is one of the goals with this interactive. After the designs were finalized, the graphic was printed at 24”x36” scale on vinyl and stuck to a sheet of steel. The word magnets were printed as one large custom car magnet and then cut into individual words for cost effective printing. See Figure 3.5 for a photo of how it turned out. An Early Education class at Albion College is studying how theater elements help kids explore arts-integrated learning at the Children's Stage exhibit at Kids N Stuff. One of their activities is using my Script Writing interactive as a literacy basis to write, dissect, and create a short play with the kids and teach the parts of speech. In hindsight, a protective coating or a more durable kind of vinyl should have been used as it is already starting to show signs of wear.



Figure 3.1. Plot Guidance Interactive Concept Sketch. Rachel Landes, 2023.

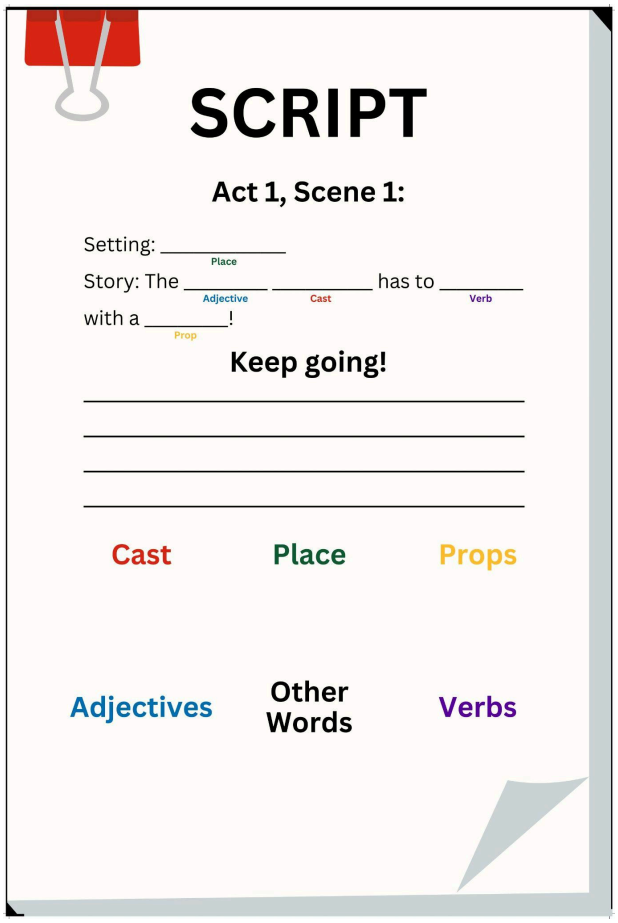


Figure 3.2. Plot Guidance Interactive Graphic. Rachel Landes, 2023.

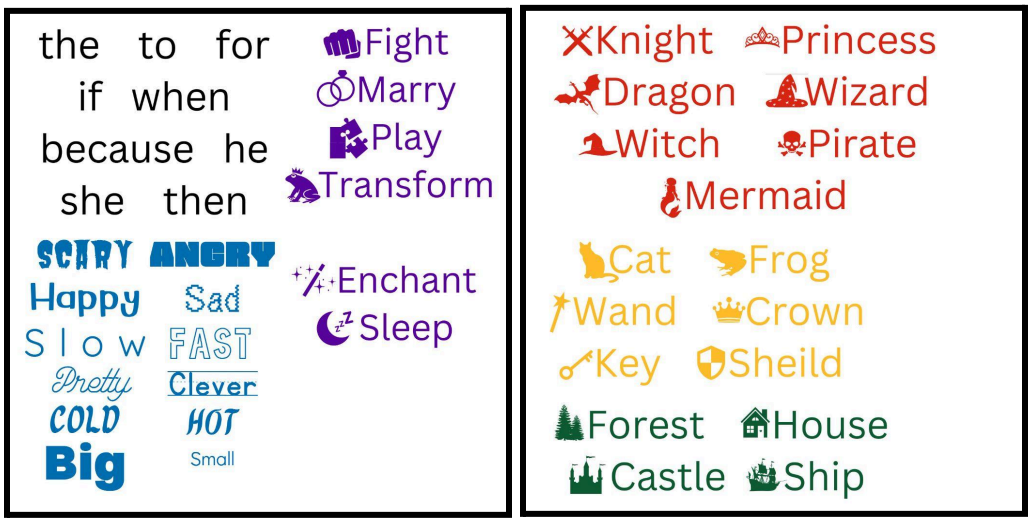


Figure 3.3. Plot Guidance Interactive Magnets Graphic. Rachel Landes, 2023.



Figure 3.4. Plot Guidance Interactive Digital Mock Up. Rachel Landes, 2024.


SCRIPT
to
Act 1:
because
Clever
Crown
Castle
Setting:
House
he
Story: The
Happy
Adjective
Frog
Cast
ha
Sleep
Verb
with a
Prop
Sheild
Transform
Keep going!
she
Marry
Big
HOT
SCARY
Knight
when
Dragon
Fight
for
FAST
Pretty
Princess
Witch
Cast
Place
Ship
Props
Wand
Key
Enchant
Other Words
Adjectives
Small
S l o w
Sad
ANGRY
COLD
Mermaid
Play

Figure 3.5. Plot Guidance Interactive Photo. Rachel Landes, 2024.

Makeup Station – Fabricated 3rd

This is an acrylic/plexiglass vertical easel designed to look like a vanity. Placed next to and perpendicular to the mirror, it can be played with independently by children but encourages cooperative play. Custom static window clings can adhere to the glass/mirror, allowing children to choose the look they want to see on their play partner/reflection and place it at the appropriate height. This would be a way for kids, caregivers, and playmates to look at each other with different color/length hair and/or makeup. It would add another layer of creativity to dress up (pretend play). Cooperative play, defined here as play that is dramatically enhanced or made possible only when 2 or more persons play together, may enhance social skills and lead to better play experiences during pretend play (Trawick-Smith 17-18, 32). If no other children are available to play with, this interactive encourages caregivers to play with their children. Though the exhibit is scaled for children – the plexiglass does not extend to the height of an adult due to efforts to simplify the exhibit construction process – adding stools on either side of the glass would accommodate adult players. Stools are also a common part of the makeup artists practice, so it would enhance immersivity while inviting adults to be part of the experience (Nguyen 27). Additionally, an accommodation like having seating at this interactive could also help combat the tendency for adults to sit on the audience's bench away from the play occurring in the costume shop.

Window clings would be stored in a basket/slot beneath the plexiglass. The easel itself is bookended by a cut of wood painted to resemble a vanity and its work surface which may contain explanatory signage. An early version of this interactive is shown in Figure 4.1. Figure 4.2 shows fully fleshed out designs for the window clings, chosen based on the fairy-tale theme of the exhibit's "ongoing show" and in concert with those of the Script Writing/Plot Guidance Interactive. To fabricate this interactive, an easel was bought off amazon and decorated with a custom cut and painted endpiece to establish it as a make up table/station. Costumes as well as stagemakeup were designed so it would fit well in the space under the costume shop sign, and then printed by YouSticker as large rectangluar clings and then hand cut into individual pieces. Sizing of the clings was approximated with paper prototypes and children's face measurements found online intended to inform the design of air masks for emergency situations.

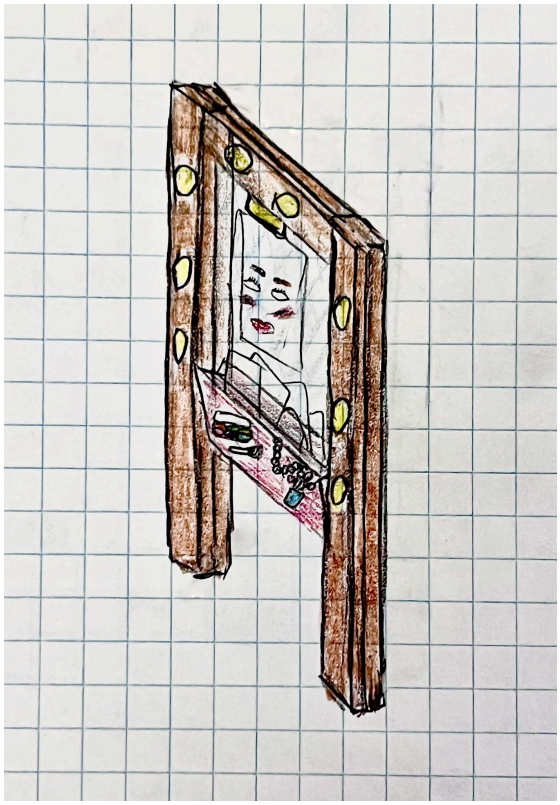


Figure 4.1. Makeup Station Interactive Concept Drawing. Rachel Landes, 2023.



Figure 4.2. Makeup Station Clings. Rachel Landes, 2024.



Figure 4.3. Makeup Station Photo. Rachel Landes, 2024.



Figure 4.4. Makeup Station Photo Close Up. Rachel Landes, 2024.

Rigging – Pre-Existing With A Suggestion for A Future Addition

The bulk of the exhibit is made up of this rigging and the stage. The rigging is the 2-story play structure that allows visitors to get above the stage and see what stage hands might see during a production. The rigging consists of a staircase (10 ½ft long, 7ft tall) leading to the second story with a "U" shaped path encompassed by 3 ½ ft tall railings. There should be a "Theatre Personnel This Way →" sign pointing up to the deck near the stairs to aid in wayfinding for kids embarking on a Spinner Career journey. The second story ideally contains spotlight and pulley interactives. If preexisting building

materials or other limitation make that impossible, some sort of stagecraft related sensory board or signage (see Figure 5) will make it an immersive part of kids' play/learning experience. This part of the exhibit involves kinetic/motor play, as climbing stairs is a physical task, and heights which can be characterized as vestibular stimulation – the swooping feeling in one's stomach. Vestibular stimulation is a component of "risky" play and has been shown to be popular with all ages and genders, with one study suggesting it's a favored play component of school-aged girls (Refshauge 241). It also is explorative play and education in this context as it provides an opportunity for learning about theatre technology and personnel and involves seeing the stage from a new perspective.

The busyboard components included in the suggested interactive (Figure 5) are all theater related based on my experience as a theater shop assistant. Buckles, buttons, zippers, and lacing are all part of costume choices; curtains and pulleys open and close every scene in every play; and switches, ropes, wheels, and hinges are all part of setting up the stage and running shows. They are all also things most children would be happy to fiddle with as a minor expression of motor, exploratory, or sensory play. Such a busy board could be included up in the rigging for stagecraft vircemilitude, and/or on the ground floor for accessibility, especially as busy boards are popular with toddlers.

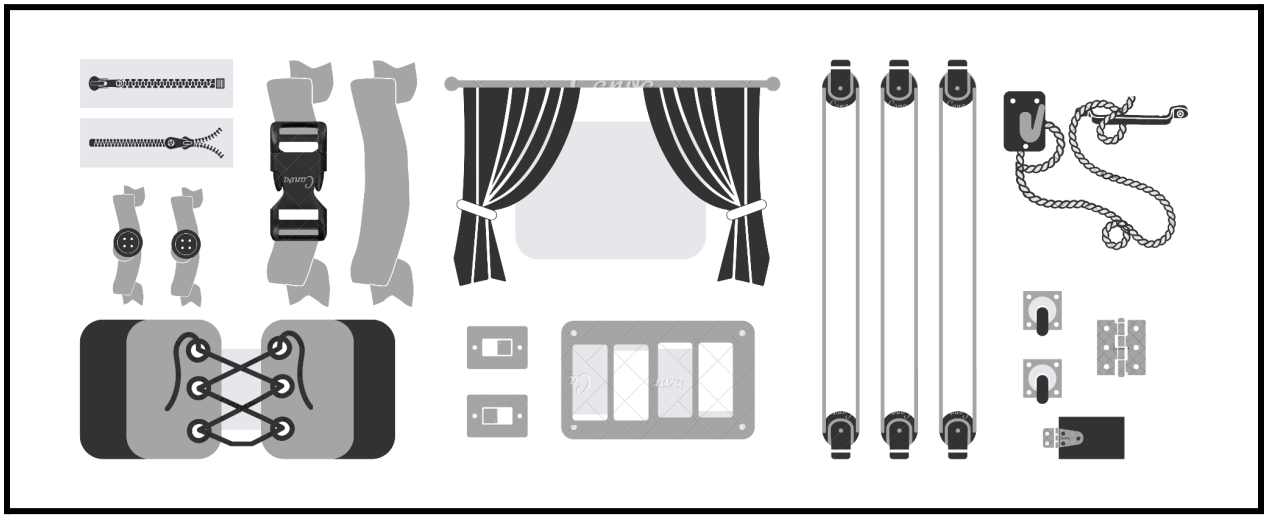


Figure 5. Stagecraft Busyboard Digital Drawing. Rachel Landes, 2023.

Stage – Pre-Existing

The stage is the main component of this exhibit. Located beneath the rigging, the stage is about 7x6 1⁄2 ft with an apron providing about 2 more feet of space and is raised about the main floor by 4 inches. The ramp attached to the apron (downstage) makes it wheelchair accessible, and the seating in front of the stage provides an affordance for an audience. Kids may have seen siblings on stages during concerts/performances and will have seen stages through books or media previously. They will understand that stages are for special or important events and afford the people on stage an amount of importance and attention. Kids love to feel important and get attention, so this will be a natural draw. Though the nearby plot guidance and costume exhibit components lead to a signified interaction, the stage can also be used for non-theatre pretend, musical, or motor play like make-believe, dancing, or singing.

Costumes – Pre-Existing With A Suggestion For Future Changes

Costumes are located near the stage and stored in a 6Lx1Dx4H ft wooden cubby on hooks. Signage nearby explains the purpose of costumes in theatre and some design considerations, like color and fabric and cut. Costumes should primarily be fairytale related and where possible match the characters listed in the Plot Guidance interact. While most costumes are sized for children, some should be available sized for adults to encourage multigenerational play, though specific costume selection should be made with an adult's "too cool for this" sensibility in mind. Children's costumes should be chosen with the public nature of the Children's Stage and children's staggered development in mind – they should be visibly outerwear so children do not attempt to disrobe to put on a costume, and they should not encumber the diaper area especially if the costume is for a younger child. Costumes are the biggest difference between everyday pretend play and both pretend play in a kids museum and theatre. They elevate the experience of putting on a story by providing a sense of professionalism.

Prop Bins – Modification of Existing Interactive

In the existing Children's Stage, there is an preexisting interactive in which children can use velcro dots and laminated cutouts of clothing to dress up the KNS characters/mascots in different outfits/costumes. This is being removed in the update, but the bins used currently to store the clothing cutouts will be repurposed to hold props children can use in their pretend play. Props will be chosen to complement the concept of the fairytale play being "put on" in the Children's Stage, and match the costumes and Plot Guidance interactive.The storage container currently has explanatory signage related to costumes, it will be replaced with signage explaining the various kinds of props in theatre and how they are used in storytelling.

This change is intended to mitigate the observed tendency for toys from other exhibits to migrate to the stage to be used as props as well as increase the immersiveness of the theatre setting. It also furthers the educational goals of this exhibit by facilitating symbolic play for children, as understanding object-substitution pretense (having one thing stand in for another) is a component of developing language skills. This makes the prop component of this exhibit an ideal play site for kids younger than the identified 5-8yo target audience who come in anyway. Studies have shown that frequent symbolic play in infants and toddlers correlated to language skills months later (Weisenberg 42). Additionally, "loose parts" (tool-like toys consistently available in a play space, like shovels in a sand pit) have been shown to "[create] more opportunities for cooperative and complex play." A 1999 study found that in playgrounds with loose parts it was more common for children to play together than play alone. The observed duration of play on a playground element also increased with the inclusion of loose parts (Fernelius 27), which in this exhibit could contribute to the stated goal of increasing the mean play length of children in this exhibit.

Ticket Booth – Fabricated by Flutter & Wow With Some Suggestions

The ticket booth, built by Flutter and Wow by modifying the blue Rally's booth, will be the intended entrance to the Children's Stage. Shorter than its previous incarnation and painted white, it is an enterable "building" that prepares children and caregivers to best use the rest of the exhibit. It will host the Job Spinner and have both immersive and explanatory signage which contains a brief preface of stagecraft/theatre and instructions to play cooperatively (improv) with caregivers and other children. This will encourage caregivers to engage in serve and return behavior which, similar to cooperative play and guided play, is good for neural development related to language skills (Nguyen 22). Possibly, the sign

could welcome kids to "improve practice," where it explains audience members are invite to call out changes to the show. Graphic design specifics of the sign will be determined at a later date, when fabrication is completed and the "building" is installed.

Job Spinners are going to be a cohesive element used throughout the museum to expose kids to jobs in the community, but at the Children's Stage specifically it will encourage exploration of theatre careers beyond acting. Though not all kids will want to interact with it, the jobs and their matching graphic marks will expose all kids playing in this exhibit to the idea of non-acting theatre careers to varying degrees. Additionally, research shows that direction-prescribing play elements like the Job Spinner have been supportive of play in kids with ASD, so it will also make the exhibit more accessible (Fernelius 25-26).

Visitor Experience

Kids N Stuff's exhibit concept on the main floor that the kids are exploring a miniature town, refelcting Albion township through an exhibit based playground and exposing children to the world they live in on a more macro-scale. Visitors step from out in the "town" and into a building that encompasses a world of storytelling and make believe: the theatre. They are drawn in by the lure of the stage and wonder at the "movie magic" they discover as they move through the exhibit. Children and their minders traverse the stage and world of theatre it encompasses, noticing and discussing theatre specific details, and engaging with the interactives built into the exhibit.

Currently, engaged children stay in the exhibit between 10 and 15 minutes usually. The goal of this update is to increase the quantity of children who meet this criteria, instead of ducking their head in and choosing a different place to play, not the length of time spent by an engaged child. Also a goal of this update, parents and caregivers previously spent time sitting on the bench but aren't always engaged

with the exhibit. This behavior is to be decreased through environmental design. While this exhibit does not currently have dedicated programming, future programs are likely to be developed for this space. A school trip option is prop making which could be referenced if props become more central to the exhibit itself, and performing arts partners are likely to have events soon which would most likely be based in this space.

Interaction Outcomes

There are distinct behaviors that this exhibit update intends to elicit and discourage in its visitors. For example, children concoct creative stories and act them out on stage using the costumes, (possibly props,) and changeable backdrops are encouraged. Through the interactives, they grow curious about theatre techniques/technology/professions and ask their caregivers questions. They check out the rigging of the theatre if mobility allows. Caregivers point out theatre details to their charges, staying engaged with their child(ren) at all times. Children hurting themselves or others with the costumes, props, or interactives is discouraged. This is prevented by making the costumes, props soft and light, and interactives thoroughly kid-safe. Children disrobing or dirtying the costumes during dress up is prevented by choosing costumes that obviously go over clothes and ideally don't cover the diaper area. Parents letting their children play unsupervised, sitting on the nearby bench and checking out on their phones is prevented by putting up a sign asking to silence phones and possibly by arranging the area to be less enclosed. Using this space in a way other than intended – bringing other exhibits toys up the rigging – is discouraged. Having other interacting options should help with this, but signage about animals in theatre and leaving the props where they are will also be implemented.

Children should walk away having had an enjoyable fantasy play experience, and aware that there is more to theatre than the stage. Caregivers will walk away having witnessed or participated in pretend play and were satisfied with the quality of play afforded by the exhibit as well as the exhibit's safety and aesthetic.

Layout and Graphic Design

The exhibit space has been 3D modeled using SketchUp. The SKP file can be downloaded here, but for convenience still are shown in Figures 6.1-6.3. Graphic design elements like interpretive signage are necessary to transform the children's stage from a play space into an environment for place based learning. The signage provides very basic background information or instructions for using an interactive that can prompt a child's reading about elements of theatre or prompt child-caregiver interactions when their information is relayed. Such signage is required for the Makeup Station, the Prop Bins, the Ticket Booth, and the Busyboard. Additionally, wayfinding signage like a "Theatre Personnel This Way →" and Stickers that match the Job Spinner jobs help expose theatre jobs and encourage specific visitor paths. A sign reading "Please Stay Off Cell Phones'' will also be included to discourage unwanted caregiver behavior. Lastly, posters about the fairytale-based play or famous plays placed throughout the exhibit help create a cohesive aesthetic and a more immersive play experience.

To maintain a cohesive aesthetic throughout the exhibit, Flutter & Wow created an identity system that should be used as a guide when creating graphic design elements and should be kept in mind in other visual decisions. The exhibit colors are Cinema Red (#ED2024), Spotlight Gold (#DDA256), and White (#FFFFFF). Komet is the typeface for this exhibit. Additionally, an exhibit logo was created. These guidelines are visualized in Figures 7.1-7.3.



Figure 6.1. Top Down View of Exhibit 3D Model. Rachel Landes, 2023.

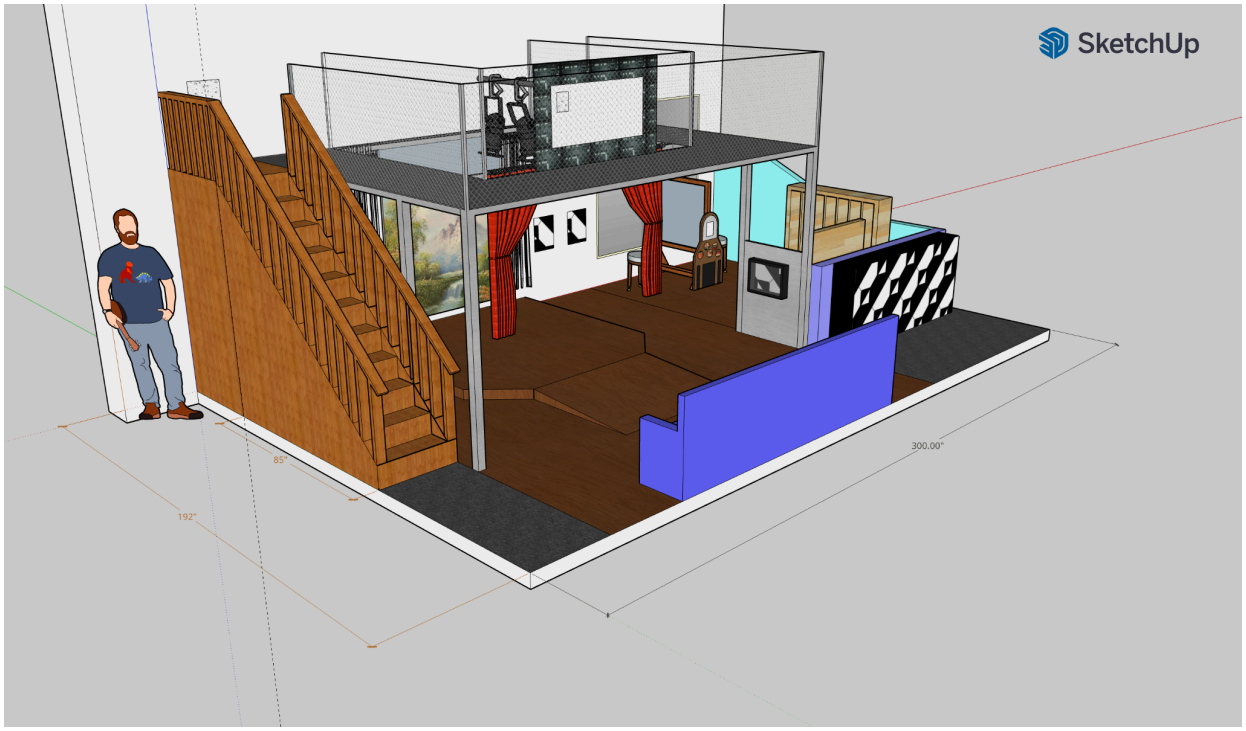


Figure 6.2. Front Isometric View of Exhibit 3D Model. Rachel Landes, 2023.



Figure 6.3. Back Isometric View of Exhibit 3D Model. Rachel Landes, 2023.



Figure 7.1. Children's Stage Style Guide: Logo. Flutter & Wow, 2023.



Figure 7.2. Children's Stage Style Guide: Typography. Flutter & Wow, 2023.

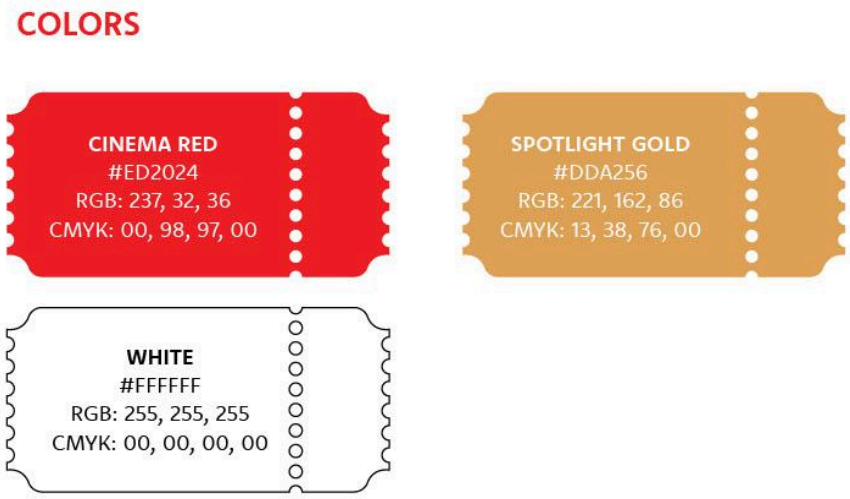


Figure 7.3. Children's Stage Style Guide: Color Pallet. Flutter & Wow, 2023.

Other Suggested Changes

As this plan has developed, there have been non-interactive updates considered that are beyond the scope this project. This section includes suggestions for these smaller updates. 1.) There are some spots on the stairs that have visible deterioration of the stain caused by wear and tear. A wood grain crayon can be used to fix this discrepancy in a low budget and with a low time-commitment necceesary. 2.) If possible, there should be an increase in seating available for caregivers in nearby exhibits. The noted tendency for adults to disengage with their children at this exhibit might be caused by the understandable need of caregivers to take occasional breaks from strictly attending to their charge(s) and accommodating it is an important part of designing for adults in a children's space (Nguyen 28). If the audience seating is the only play for caregivers to recharge in the nearby area, it might be that caregivers are worn out by the time they follow their child to the theatre. More seating nearby other than the audience's bench could combat this.

Budget

EXHIBIT COMPONENT	MATERIAL	ESTIMATED COST
Pulley	Wood	$20
	Rope	$14
	Bean Bags	$23

	Fabric for curtain	$15
	pulley	$13
	canvas/linen fabric and f pain	
	Acrylic/Plexiglass	$11
	misc/hanging method	$25
Pulley: SUM=		$121
Plot Guidance	¼" Sheet Metal	$45
	Phototex/Vinyl Print	$50
	large custom magnet (to be cut smaller)	$70
	Hanging Mechanism	$10
	Misc.	$25
Plot: SUM=		$200
Makeup Station	Plexiglass Frame	$35
	Custom window cling stickers	$60
	Vanity base wood	$0
	2 stools	$50
	Paint	$15
	Misc.	$25
Makeup Station: SUM=		$185
NON-URGENT ADDITIONAL PURCHASES LIKELY TO BE NECESSARY FOR A FULL EXHIBIT UPDATE		
Signage	Signage printed and hung up throughout the exhibit. Estimated price is not based on calculations due	$300

	to insufficient data. Sticker.com is a suggested venue.	
Costumes	Costumes added to replace existing ones and bring the exhibit into a more cohesive concept.	$75
Props	Some props will certainly be possible to pull straight from storage, but others may need to be purchased for the Prop Bins interactive.	$50
Extruded Aluminium "Curtain Rod"	The current idea to replace the wacky backdrop system is these extruded Aluminum beams that attach easily to the rigging.	$100
Backdrops	Backdrops added to replace existing ones and bring the exhibit into a more cohesive concept.	$100
Wood Crayon Crayon	To erase visible wear and tear on the staircase.	$10

References

Fernelius, Courtney L. 2017. "Evidence-Based Practices for the Design of Inclusive Playgrounds that Support Peer Interactions Among Children with All Abilities." M.A. Thesis, Utah State University. https://doi.org/10.26076/625c-82c9.

Little, Helen and David Eager. 2010. "Risk, Challenge and Safety: Implications for Play Quality and Playground Design." *European Early Childhood Education Research Journal*, 18:4, 497-513, DOI: 10.1080/1350293X.2010.525949.

Nguyen, Cecilia and Victoria Coats. 2022. "Focusing On Adult Learners to Put The Youngest Learners First." *Exhibition: Journal Exhibition of Theory and Practice For Museum Professionals* 2023, no. 1 (Spring): 1–12. Arlington: National Association for Museum Exhibition.

https://static1.squarespace.com/static/58fa260a725e25c4f30020f3/t/62605d52866aab1f5a5ef508/1650482518916/08_Exhibition_22SP_FocusingOnAdultLearners.pdf

Summers, John. 2018. "Creating Exhibits That Engage: A Manual For Museums and Historical Organizations." London: Rowman and Littlefield.

Travis-Smith, Jeffery. 2018. "Young Children's Play: Development, Disabilities, and Diversity." New York: Routledge.

Weisberg, Deena Skolnick, Jennifer M Zosh, Kathy Hirsh-Pasek, and Roberta Michnick Golinkoff. 2013. "Talking It Up: Play, Language Development, and the Role of Adult Support." *American journal of play* 6, no. 1: 39-69. https://eric.ed.gov/?id=EJ1016058.