wobble world

fun with balance!
see!
do!
explore!
goal

see + do + explore
balancing!
strategy

familiar activities
strategy

familiar activities + simple tools
strategy

familiar activities + simple tools + flexibility
design principles

- instinct
- interaction
- possibility
- risk
- age
- ability
design principles

fun!

- instinct
- interaction
- possibility
- risk
- ability
- age

Wobble World  Huang Su  Taggart Ye
the exhibit
exhibit elements
wobble world

a giant moving board game that lets kids play by using their own balance
### wobble world

prototyping and testing

<table>
<thead>
<tr>
<th>insights</th>
<th>ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>• kids liked to jump on it</td>
<td>• place other elements nearby so kids can jump from object to wobble</td>
</tr>
<tr>
<td>• kids liked it at first, but lost interest quickly</td>
<td>• make a game out of it!</td>
</tr>
<tr>
<td>• multiple kids wanted to be on at the same time</td>
<td>• make a larger surface to allow many kids to interact</td>
</tr>
</tbody>
</table>
wobble world

- kids use balance to move the ball through the maze
- game is enclosed under plexiglass
- one player or many at the same time

transparent plexiglass
wobble world

- kids use balance to move the ball through the maze
- game is enclosed under plexiglass
- one player or many at the same time
wobble world

- kids use balance to move the ball through the maze
- one player or many at the same time
teeters

a new experience with a familiar playground game using balance in creative ways
## teeters

<table>
<thead>
<tr>
<th>Insights</th>
<th>Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Kids liked the higher teeters with the bigger lifts and drops</td>
<td>• Make teeter's heights more dramatic</td>
</tr>
<tr>
<td>• Kids liked to stack things on one end of the teeter and step on the</td>
<td>• Give kids a variety of options to weight down one side of the teeter</td>
</tr>
<tr>
<td>other side to launch it</td>
<td></td>
</tr>
<tr>
<td>• Kids liked the teeters but found it too simple</td>
<td>• Add a variety of elements to make the activity more interesting</td>
</tr>
<tr>
<td>• Adults liked to participate</td>
<td>• Make teeters large enough to let adults participate and kids to play together</td>
</tr>
<tr>
<td>• Kids liked to play with their friends on the teeters</td>
<td></td>
</tr>
<tr>
<td>• Kids liked to move the teeters around</td>
<td>• Make some teeters moveable</td>
</tr>
</tbody>
</table>

Wobble World  Huang Su  Taggart Ye
launching teeter

teeter with platform on each end to encourage kids to place blocks and shapes there
tippy tot teeter

a 60 lb tippy tot on one end that encourages multiple kids to climb on and balance
sliding teeter

teeter with an attached weight that slides back and forth on the board
tunnel teeter

teeer with foam tube tunnel that encourages kids to use the board in a different way
for example, kids can crawl under the tubes or use them to move the teeter
surfing teeter

shaped like a surf board to encourage both kids and adults to try and balance
tippy tots

a lighter version of tippy tot from teeter that kids can push, but it'll bounce back

Tippy tots are spread all over the exhibit
stacking up

a natural activity kids play everyday to explore balancing
stacking up

<table>
<thead>
<tr>
<th>insights</th>
<th>ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>• kids liked moving and stacking smaller elements on top of each other and on the larger elements</td>
<td>• allow for elements to be used with other parts of the exhibit</td>
</tr>
<tr>
<td>• kids liked to stack things on one end of the teeter and step on the other side to launch it</td>
<td></td>
</tr>
</tbody>
</table>
stacking up

Kids get a sense of balance through stacking up moveable blocks and shapes. Shapes can be used in other elements like teeters and wobble world.
curb

kids learn to keep balance while walking along the curving curb
curb

spans across the entire room pulling people through the exhibit helps to connect other elements and separate activity areas
experience, look, and budget
experience flow

path

lower part of curb for stroller and handicap access
activity levels
age levels

- ages 0-8
- ages 2-8
- ages 5-8
colors and walls

bright, cheerful complimentary colors
wall art features basic shapes found in the exhibit
soft flooring supplied by museum

C94 M52 Y3 K1
C35 M0 Y100 K0
C0 M0 Y40 K0
C0 M0 Y100 K0
C35 M85 Y0 K0
## materials

<table>
<thead>
<tr>
<th>Wobble World</th>
<th>Teeters</th>
<th>Stacking Up</th>
<th>Curb</th>
<th>Tippy Tots</th>
<th>Seat</th>
<th>Floor</th>
<th>Walls</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Medex wood with paint finish</td>
<td>• Medex wood with paint finish</td>
<td>• wood shapes wrapped in foam and fabric</td>
<td>• pre-made curved plastic blocks</td>
<td>• plastic (PETG)</td>
<td>• pre-made curved benches</td>
<td>• soft, safety flooring</td>
<td>• paint</td>
</tr>
<tr>
<td>• plexiglass</td>
<td>• wood beams</td>
<td></td>
<td>• cement</td>
<td>• cement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• rubber ball</td>
<td>• plastic (PETG)</td>
<td></td>
<td>• custom-made curved ramp at the end</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• fabric curtain (skirt)</td>
<td>• cement (inside ball)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• pvc piping</td>
<td>• steel (for weight)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• soft, foam covering</td>
<td>• soft, foam covering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• sturdy foam tubing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Wobble World
- Medex wood with paint finish
- plexiglass
- rubber ball
- fabric curtain (skirt)
- pvc piping

### Teeters
- Medex wood with paint finish
- wood beams
- plastic (PETG)
- cement (inside ball)
- steel (for weight)
- soft, foam covering
- sturdy foam tubing

### Stacking Up
- wood shapes wrapped in foam and fabric

### Curb
- pre-made curved plastic blocks
- custom-made curved ramp at the end
- cement

### Tippy Tots
- plastic (PETG)

### Seat
- pre-made curved benches

### Floor
- soft, safety flooring

### Walls
- paint
<table>
<thead>
<tr>
<th>item</th>
<th>#</th>
<th>approximate cost</th>
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</thead>
<tbody>
<tr>
<td>wobble world</td>
<td>3</td>
<td>$9,000 x 3 = $27,000</td>
</tr>
<tr>
<td>teeters</td>
<td>7</td>
<td>$257 x 7 = $1,800</td>
</tr>
<tr>
<td>tippy tots</td>
<td>8</td>
<td>$625 x 8 = $5,000</td>
</tr>
<tr>
<td>stacking up</td>
<td>60 (20 of each shape)</td>
<td>$12.50 x 60 = $750</td>
</tr>
<tr>
<td>curb</td>
<td>1</td>
<td>$2500</td>
</tr>
<tr>
<td>wall art</td>
<td>1</td>
<td>$4,500 ($6/sq.ft)</td>
</tr>
<tr>
<td>seating</td>
<td>2</td>
<td>$100 x 2 = $200</td>
</tr>
<tr>
<td>soft flooring</td>
<td>n/a</td>
<td>supplied by museum</td>
</tr>
</tbody>
</table>

**total cost** | **$41,750**
thanks!
appendix
schematics
scale model
scale model
wobble world

Top

Front

Perspective

A-A
teeters: launching
teeters: sliding
teeters: tippy tot
teeter: surfing
teeter: tunneling

Top

Front

Perspective

Right

R=6"
stacking up
cost references

**Tippy Tot cost**
https://barnardltd.com/product.jsp?prodId=8127&catid=129

**Wall Art cost**
http://www.googleplexmurals.com/mural_painter_mural_artist_pricing.htm

**Seating cost**

**Wobble cost** (per RedBox)

**Teeter cost**
Home Depot
http://www.homedepot.com/h_d1/N-5yc1vZ1xou/R-100569382/h_d2/ProductDisplay?langid=-1&storeId=10051&catalogId=10053