

# **Self-Guided Digital Resources for Families**

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# **WPI**



# Digital resources: An opportunity for museums

- Disseminate information to many visitors with ease
- Encourage visitors to interact socially
- Allow for more dynamic learning experiences



# The Search for the Four Givens

## Pros:

- Families enjoyed using iPads
- Supported family learning

## Cons:

- Barrier to looking at objects
- Story was too complex
- Difficult for hosts to distribute



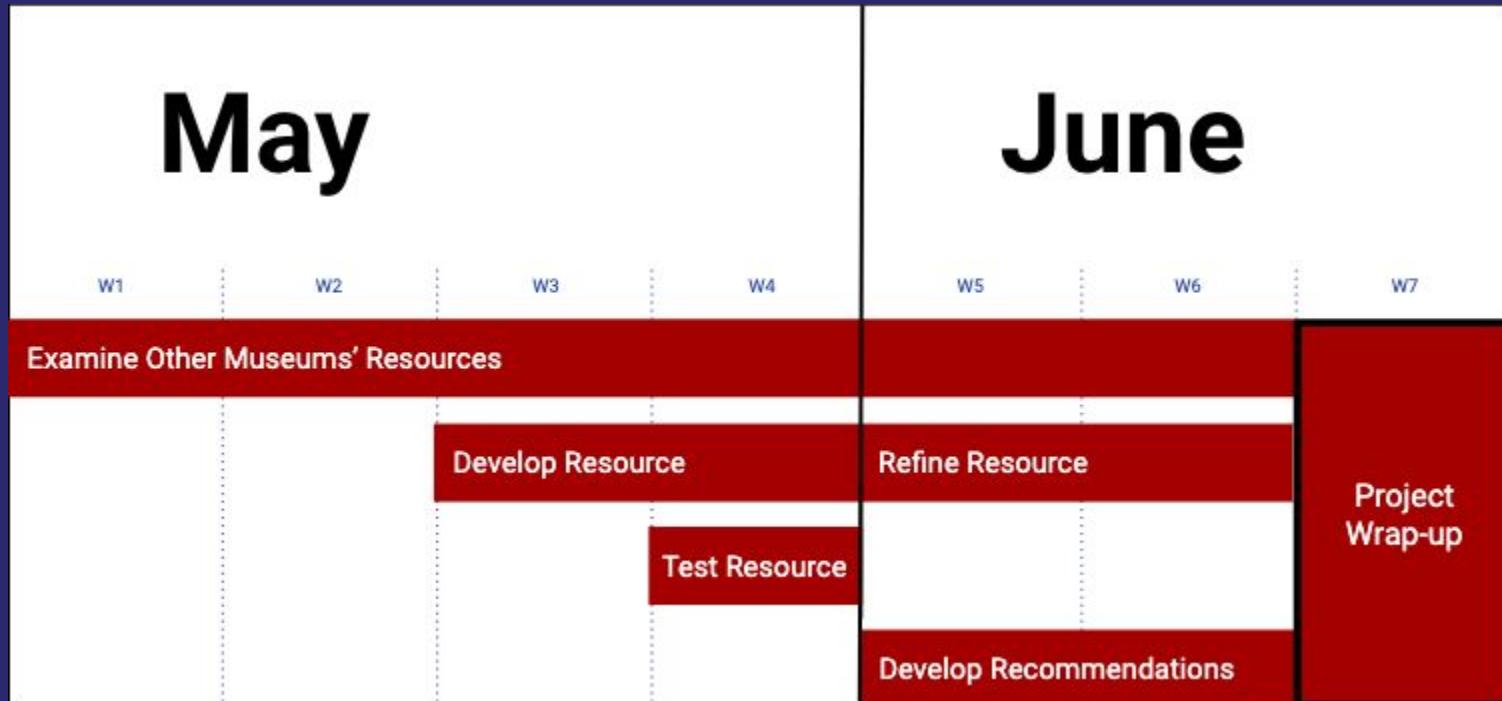
# Project Goal

Our goal was to assess whether self-guided digital resources for families are a practical and effective means to complement the experience at the Museum of London.

# Project Objectives

1. Examine self-guided digital resources in other museums across London
2. Develop a prototype of a self-guided digital resource for the Victorian Walk
3. Test the prototype in the Victorian Walk and assess its effectiveness and practicality
4. Develop recommendations on the use of self-guided digital resources for the Museum of London

# Project timeline





# Visiting museums and interviewing stakeholders

- Our resource should include
  - On-loading process
  - Help button
  - Choices for visitors
- Our resource should avoid
  - Handling personal information
  - Relying on a stable internet connection

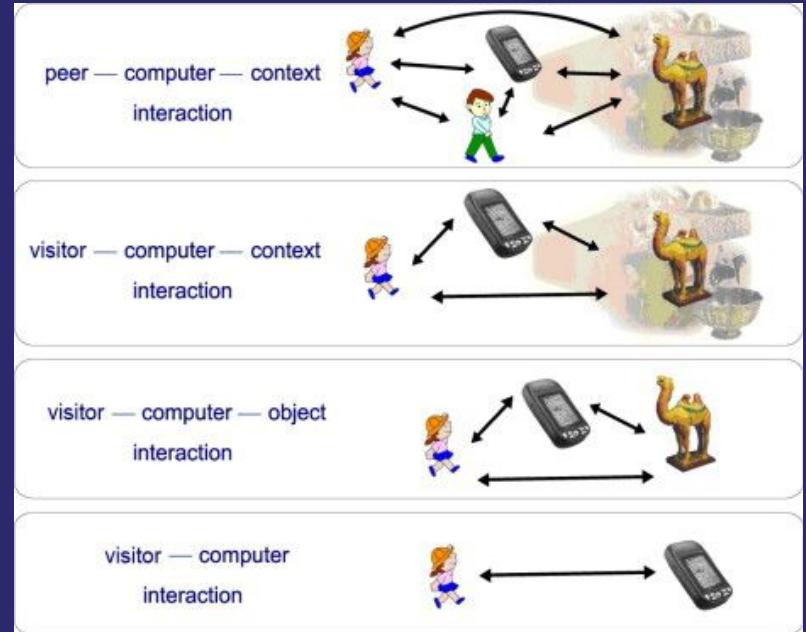
# Family learning

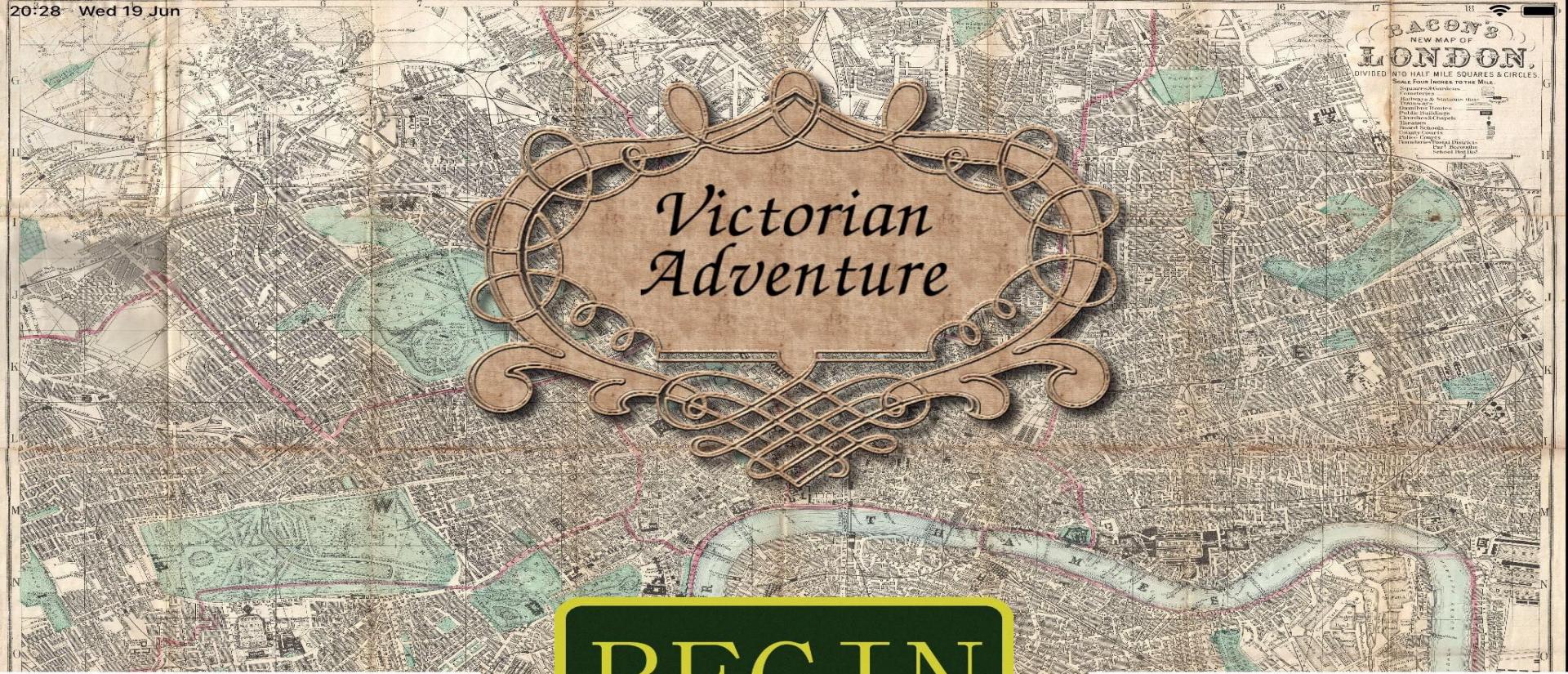
- Joint attention
- Recognising context and culture
- Collaboration through conversation



# Human Computer Context Interaction (HCCI) Framework

Outlines the interactions that an ideal resource should promote amongst visitors





BEGIN



WPI

# Welcome to London



You and your family have just moved to Victorian London!  
Take a walk through the streets and see what the city has to offer!

This is a self-guided experience. You do not have to follow the order of the numbers on the shops. Not every shop has an activity.

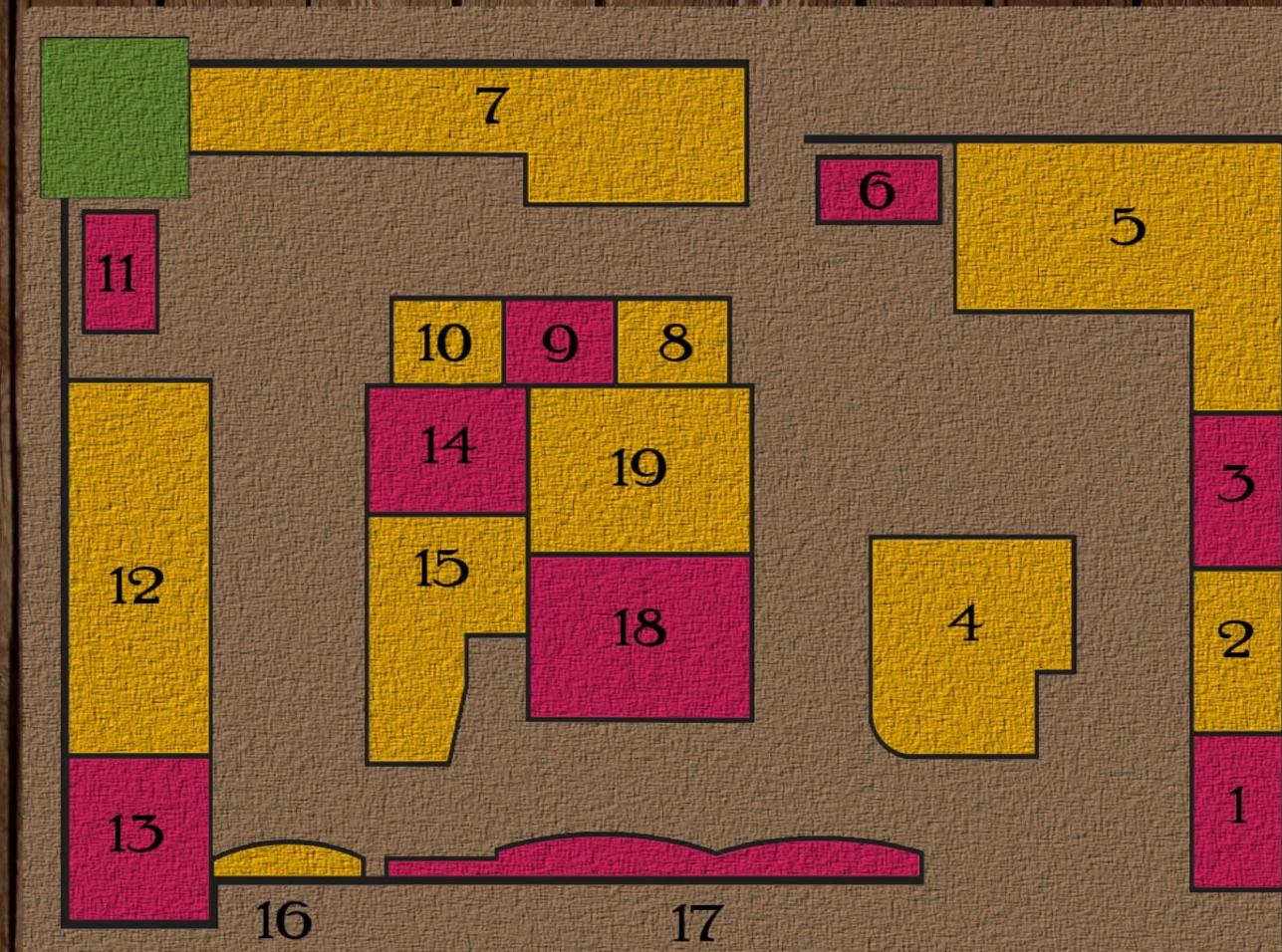


**EXPLORE**

# Welcome



Travel to a room and tap  
on the corresponding  
number!



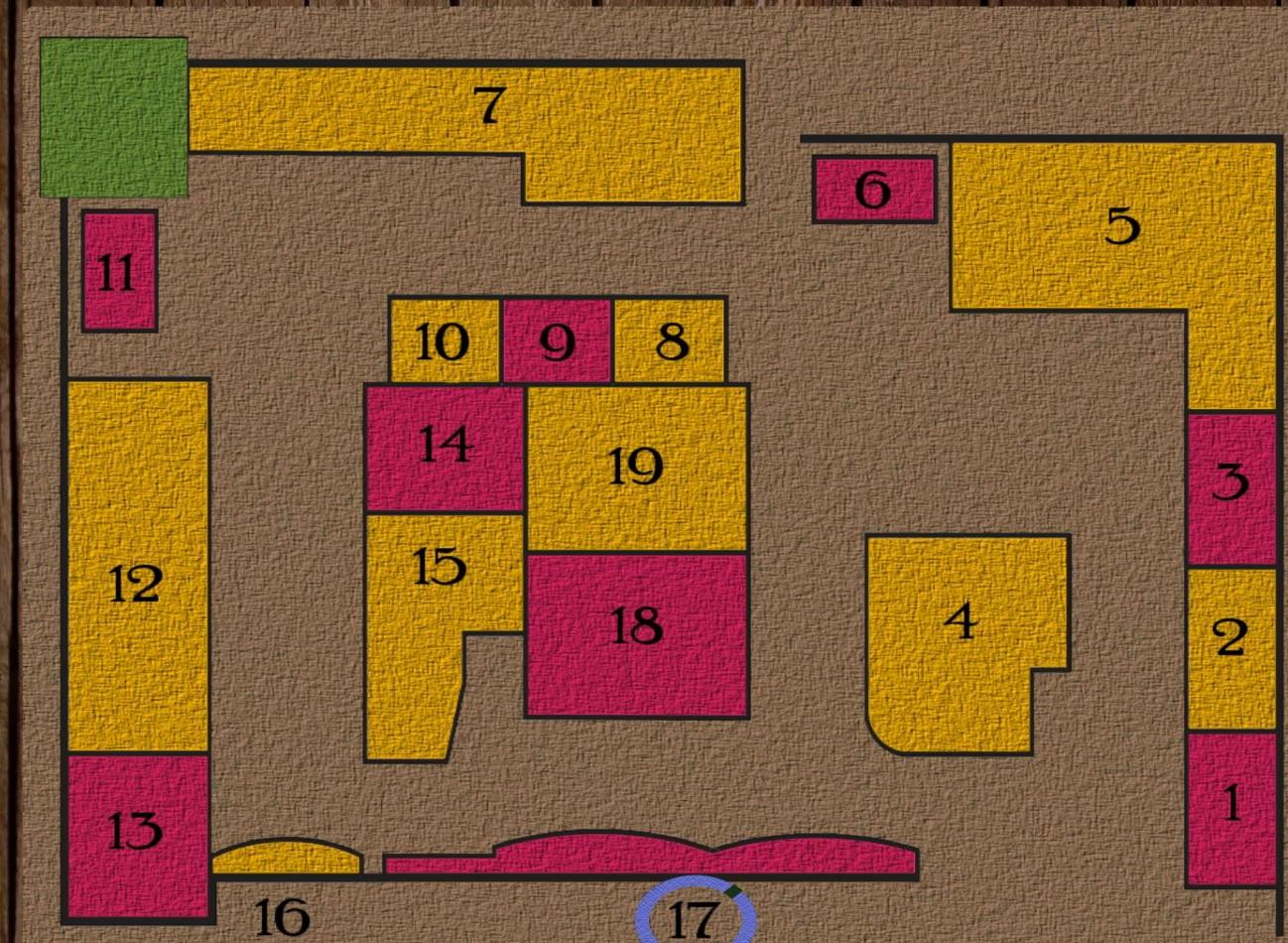
# Pawnbroker



Pawnbrokers, referred to as "uncle," were the poor person's bank. Clothing and jewellery were handed over in exchange for a loan.

If the loan was not repaid within a year, "uncle" could sell the goods. By 1900 there were 700 pawnbrokers in London.

GO





BACK

# Pawnbroker



HELP

Choose an Activity

Imagine

Search

Quiz

[BACK](#)

# Pawnbroker

[HELP](#)

Pick an object and make up a story  
about it. Who did it belong to? Why did  
they sell it?

[Imagine](#)[Search](#)[Quiz](#)



BACK

# Pawnbroker

HELP



Can you spot the following items?

Three pocket watches

Silver cutlery

Drinking glasses

Imagine

Search

Quiz



BACK

# Pawnbroker



HELP

How much money do you think the pawnbroking industry made annually?

£10 Thousand

£8 Million

£15 Trillion

BACK

# Pawnbroker

HELP

How much money do you think the pawnbroking industry made annually?

Try Again

£8 Million

£15 Trillion

BACK

# Pawnbroker

HELP

How much money do you think the  
pawnbroking industry made annually?

Try Again

£8 Million

Try Again

[BACK](#)

## Pawnbroker

[HELP](#)

8 million pounds; which today would be equivalent to well over 900 million pounds. With that much business, the pawnbrokers played an important role in the working class economy



BACK

# Pawnbroker



HELP

Choose an Activity

Imagine

Search

Quiz

**BACK**

# Pawnbroker

**HELP****Need help?**

Select an activity at the bottom of  
the screen!

Act: Live life as a Victorian through  
your actions!

Search: Find Victorian artefacts in  
the shops!

Imagine: Use your imagination to live  
back in Victorian London!

Quiz: Test your knowledge of the  
Victorian era!

Press back when you are finished

**Got it!****Search****Imagine****Quiz**

# Testing our application

Our methods of data collection

- Observations
- Survey responses



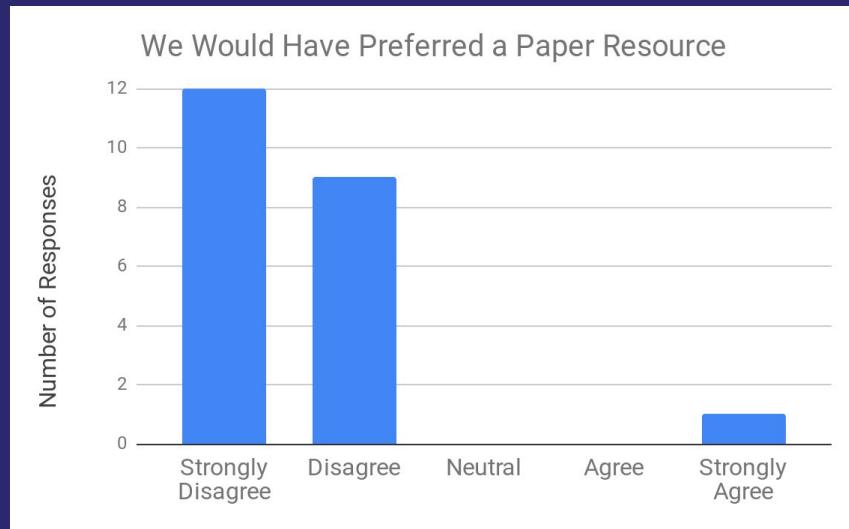
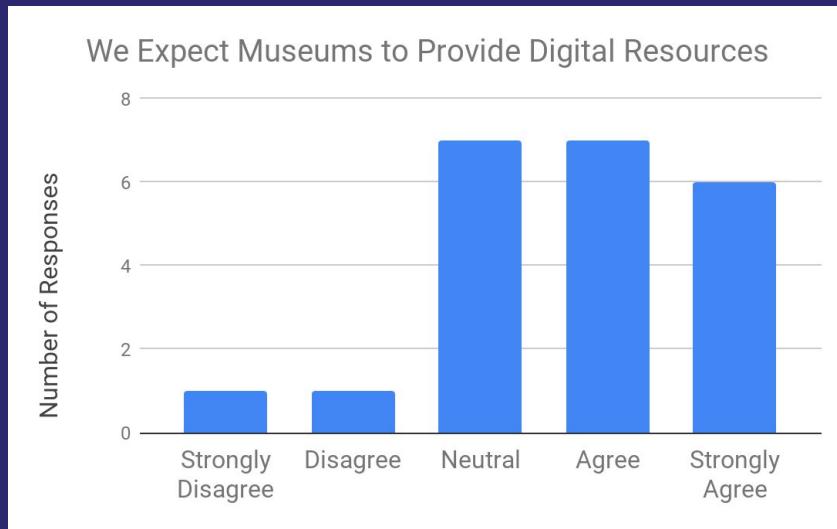
# Testing our application

## Limitations

- 63 families used our application
- Observed 20 families
- Surveyed 45 families
- Different version of the survey on different days



# Families prefer digital resources



"Times are moving on digitally and [the museum] should keep up with the market."

"Children are obsessed with technology and it might help them get more engaged."

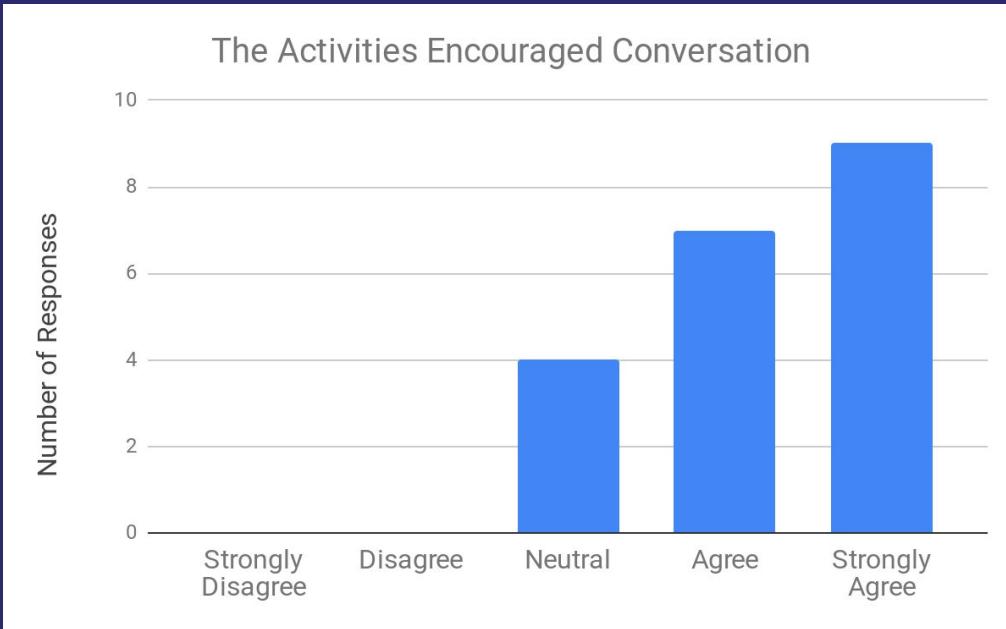
"[Digital resources] are fun, help you understand more, and encouraged our child to read."

# Joint attention

- Was the whole family engaged?
  - **Six out of seven** families said yes
- Were all family members included and invested?
  - **All ten families** agreed or strongly agreed

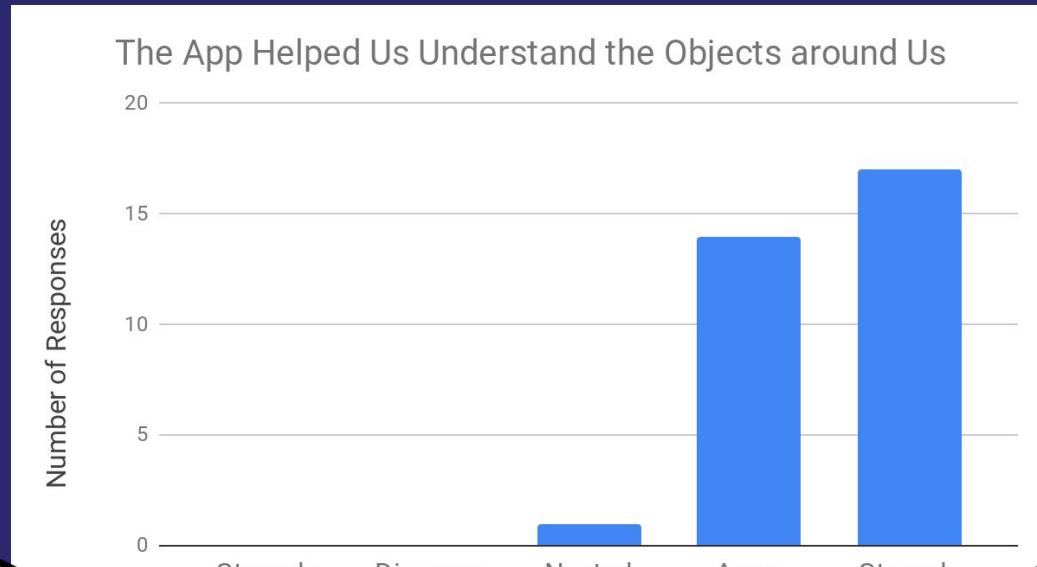
# Collaboration through conversation

“The imagine [activity] caused lots of interesting conversation.”



“Our favourite activity was discussing what went on in the shops.”

# Recognising context and culture



“We did not know [the pawnbrokers] existed.”

“We were excited to hear that the first public toilets were at the Great Exhibition in 1851.”

# Interviews with museum hosts

- Keeping £100 security deposits is unsafe and impractical
- **Five out of six** hosts would prefer an automated system for distribution
- Front desk is a preferred location of distribution for hosts but may be inconvenient for visitors

# Recommendations

**Implement more digital resources for families in its galleries**

**Further explore digital activities to promote family learning**

**Consider implementing resources for visitors' personal devices**

# Implement more digital resources for families in its galleries

- Families have positive attitudes towards digital resources
- The Four Givens report supports these positive attitudes

# Further explore digital activities to promote family learning

- Due to the small sample size, the museum should look into further testing our activities
- Other activities also promote family learning

# Consider implementing resources for visitors' personal devices

- The rent-out model is currently impractical for the museum
- The bring your own device (BYOD) model eliminates the need for a rent-out process
- Potential difficulty getting visitors to download the resource on mobile device

# Recommendations

**Implement more digital resources for families in its galleries**

**Further explore digital activities to promote family learning**

**Consider implementing resources for visitors' personal devices**

# Acknowledgements

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# Thank you!

# Why Victorian Walk?

- One entrance and exit
  - Easy to distribute and collect iPads for testing
- No existing exhibit descriptions
  - Visitor attention
  - Avoid information overload

Victorian  
Walk



VICTORIAN WALK  
Produced by  
Sue and Brightie Dendat



Please take a guide and return after use.