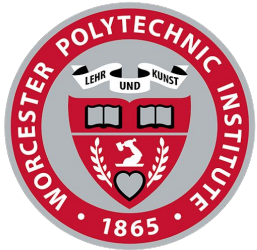


# LearnPad Content Development at The Postal Museum

By Griffin Cecil, Matthew Fortmeyer, Emily Morra, and Jack Palmstrom



**WPI**



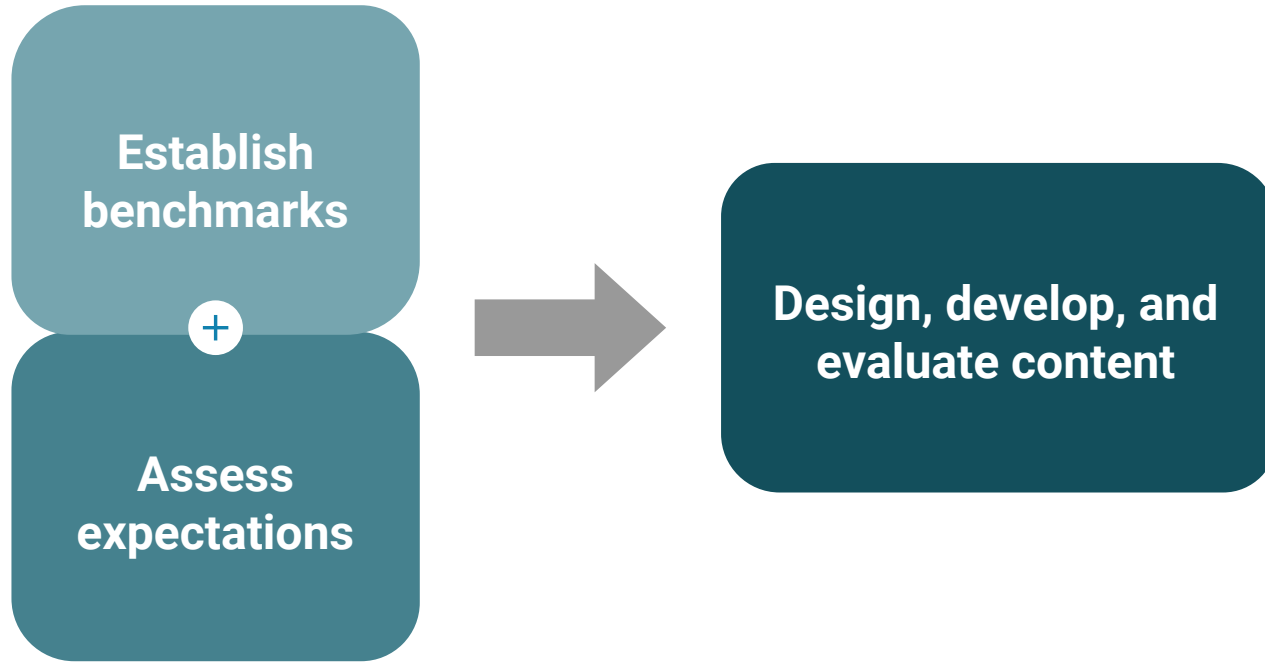
The  
Postal  
Museum

# Project Goal

The goal of this project is to identify how The Postal Museum might deploy LearnPads to improve the effectiveness and consistency of the in-gallery experience of school groups visiting the museum.



# Project Objectives



# Establish current practices in the use of digital technologies



Museum of London interview



Museum of London program observation



British Museum interview



British Museum program observation



British Museum self-led activity



Victoria and Albert Museum interview

# Museum of London Interview

## Findings

- Devices work well when promoting creativity
- Programs include take-home material
- Concerns with sensitive information
- Tablets have a “wow” factor
- Museums can use pre-existing apps

# Museum of London Program Observation

## Findings

- Distributed iPads to groups of three students
- Walked through how to use the application
- Reminded students regularly to share the tablet
- Pre-loaded all photos
- Used cloud sharing site for post-visit material

# British Museum Interview

## Findings

- They utilize a combination of third-party and in-house development
- They train staff to maintain and troubleshoot devices
- They use cloud sharing site for post-visit material

# British Museum Program Observation

## Findings

- Instructor reinforced behavioral expectations
- Students worked in groups of three
- Students showed excitement when they received technology
- Students had no trouble using apps



# British Museum Self-led Activity

## Findings

- Designed for groups of two students
- Rewarded players consistently
- Implemented multiple versions to help traffic flow
- Catered to various learning styles

# Victoria & Albert Museum Interview

## Findings

- Use tablet for creative purposes
- Offer different activities in application
- Avoid making application too immersive

# Assess the needs and expectations of The Postal Museum and its target audience



Observational study at TPM



Head of School phone interview



Student focus group (activity evaluation)



Teacher focus group

# Observational Study at TPM

## Findings

- Students preferred interactive elements
- Students explored in small groups
- Students had variable attention spans



# Head of School Phone Interview

## Findings

- Instant gratification improves engagement
- Teachers are interested in post-visit material
- Students are familiar with digital technologies

# Student Focus Group (Activity Evaluation)

## Findings

- Concepts students liked:
  - Finding an object and taking a picture
  - Making collages with pictures they take
- Students want to be challenged
- Students want to work in groups



# Teacher Focus Group

## Findings

- Resource collection provides a sense of accomplishment
- Application should not be too immersive
- Preservation of unique experience
- Post-visit material
  - Email
  - Cloud sharing
- Privacy concerns

# Design, develop, and evaluate appropriate content and activities for LearnPads



Brainstorm



Storyboard



Prototype



Student focus group (field test)



# Brainstorm

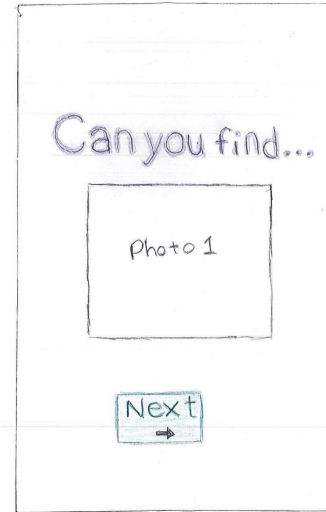
## Purpose

- Generated many potential options
- Allowed ideas to expand upon each other
- Promoted lateral thinking

# Storyboard

## Purpose

- Represented brainstorming ideas visually
- Added concrete details to abstract ideas
- Presented recommended features



Screen 2  
In zone 3, possibly picture of motorcycle, relates to activity in screen 5



Screen 3  
Error message appears when wrong answer is selected, Stamp count incremented with correct response

# Prototype

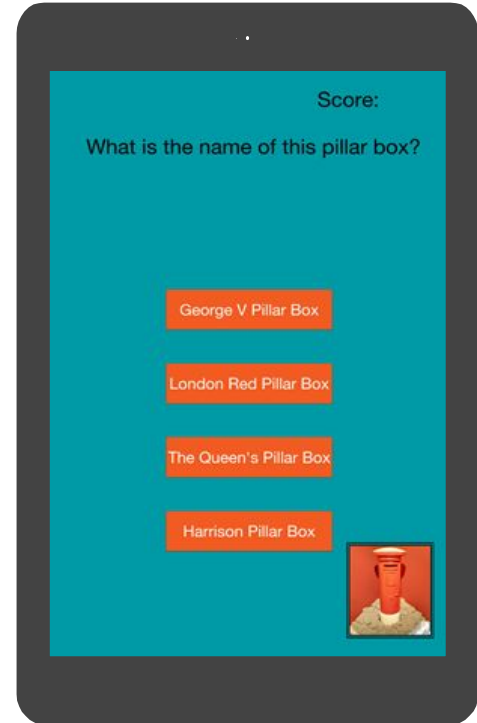
## Purpose

- Provided proof of concept
- Allowed for user testing
- Enabled us to refine ideas

# Prototype

## Design

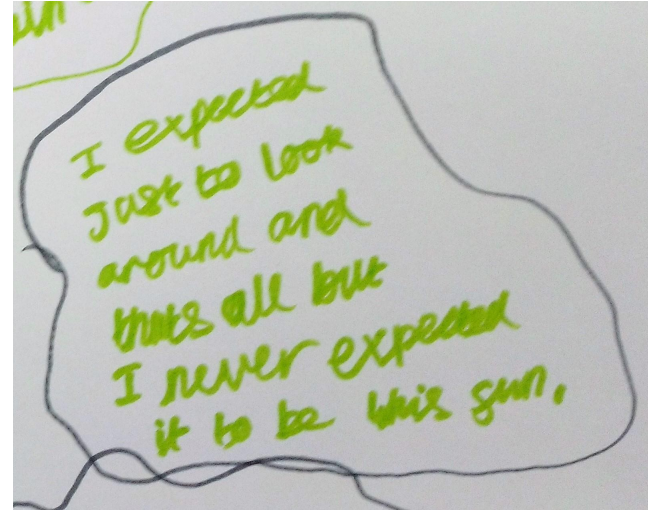
- Scavenger hunt provides basic structure
- Examples of activities:
  - Describe your surroundings
  - Multiple-choice question
  - Select your favorite items



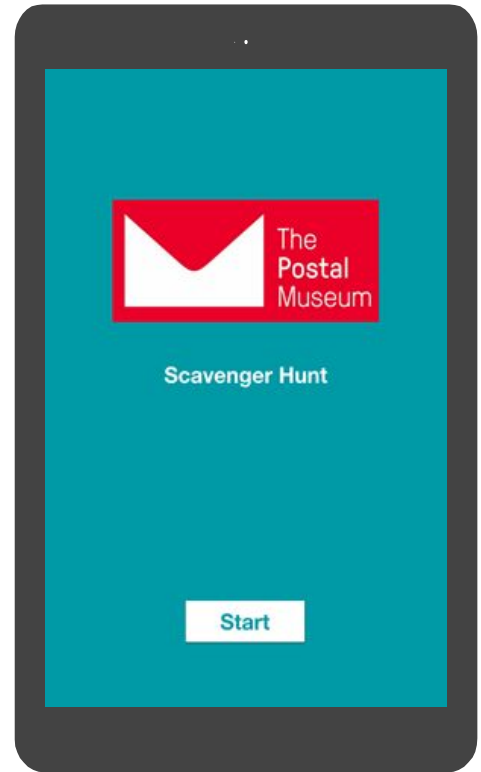
# Student Focus Group (Field Test)

## Findings

- Students finished at varying speeds
- Most students enjoyed the activities
- Students disliked activities they deemed too easy
- Teacher and chaperones gave mostly positive feedback



# Demo



<https://pr.to/4ZOHXE/>

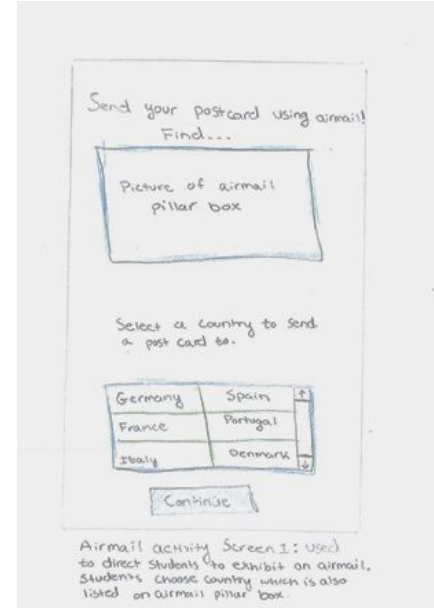
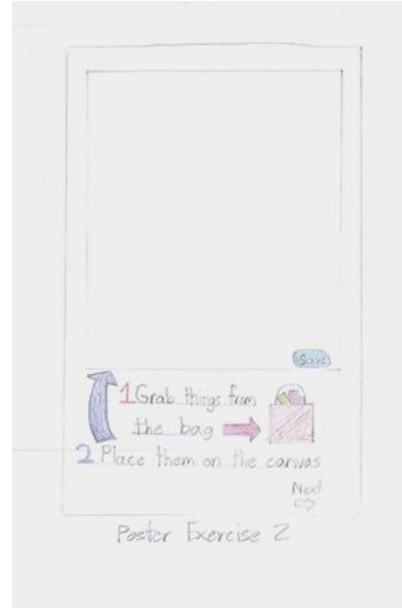
# Conclusions

- Activity proposals
- Device usage in gallery
- Group use
- Privacy concerns
- Maintenance

# Activity Proposals

Which other activities should TPM include?

- Medal sorting
- Airmail delivery
- Advertisement design





# Device Usage in Gallery

What is the best way to use a tablet during a gallery visit?

- Promote direct engagement with gallery
- Employ an eyes up approach
- Use a scavenger hunt framework
- Do not depend on chaperones

# Device Usage in Gallery

How can this usage be applied to The Postal Museum?

- Use a third party to develop an original application
- Provide post-visit material
- Have multiple versions of application

# Group Use

How should students be grouped in the gallery?

- Assign tablets to pairs of students
- Prompt sharing between partners

# Privacy Concerns

How can museums handle privacy concerns?

- Considering privacy when designing application
  - Be mindful if using photography
  - Exclude sensitive information
- Ensuring privacy when implementing application
  - Utilize cloud-sharing services
  - Clear tablet manually

# Maintenance

What must museums do to maintain tablets and their applications?

- Application maintenance
  - Ensure proper skills are available
  - Select most permanent museum content
- LearnPad maintenance
  - Dedicate member(s) of staff
  - Distribute and collect tablets

# Acknowledgments



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# POSTAL MUSEUM



# Image Citations

<https://fcbstudios.com/work/view/the-postal-museum>