



GAMES FOR ELEMENTARY SOCIAL STUDIES

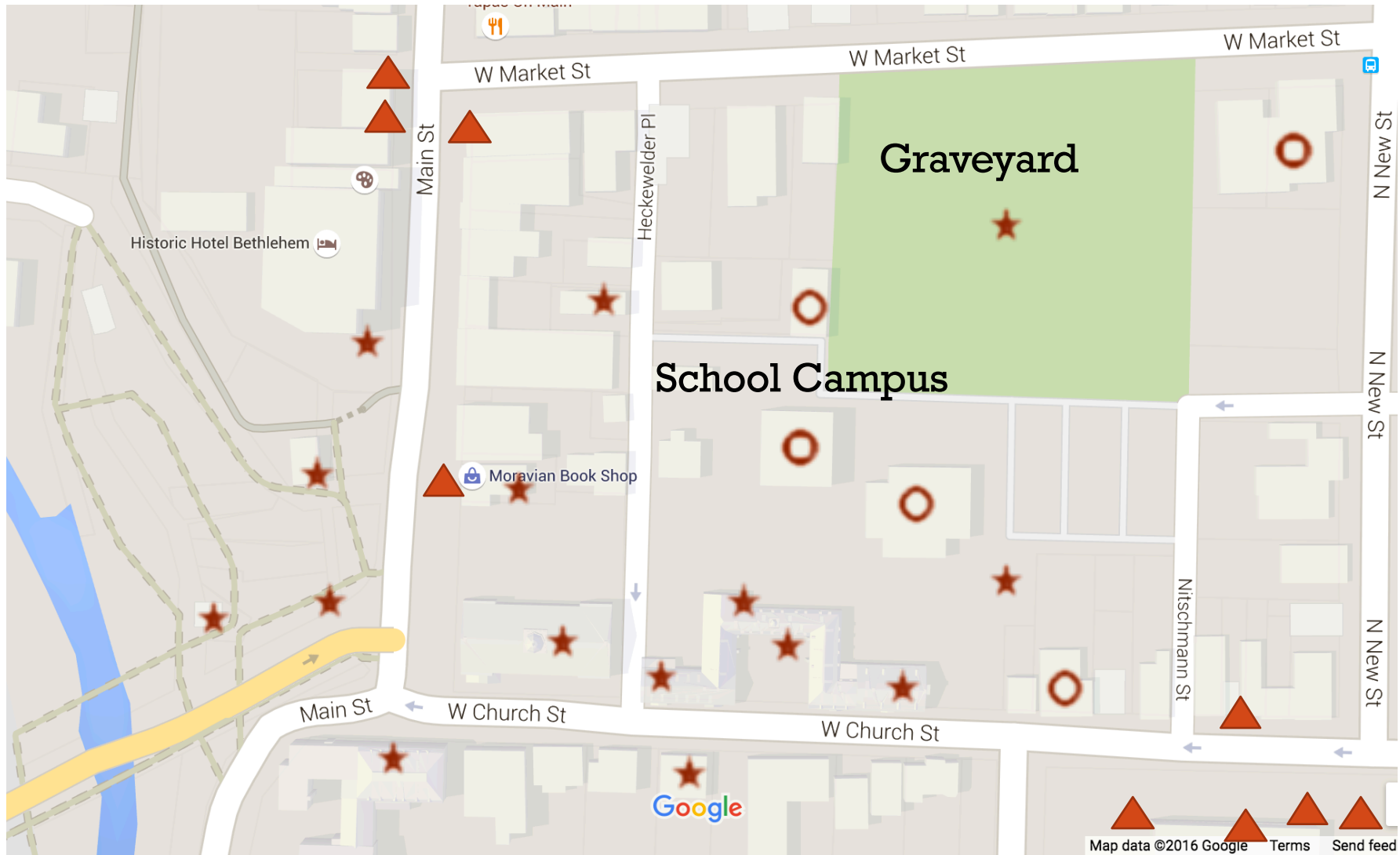


Julie Oltman, Lehigh University
@joltman1 - julieoltman.com
Thomas Hammond, Lehigh University

THE SETTING

- Games built for local private school located in a downtown, historic district.
- This location provided many opportunities for taking social studies instruction outside!
- Enthusiastic faculty
- Worked with grades 2-4
- 2 of the games are portable





- ★ Historical Sites
- School Buildings
- ▲ Government Locations



THE GAMES



Community Needs Game



Great Government Guru Game



Moravian History Mystery

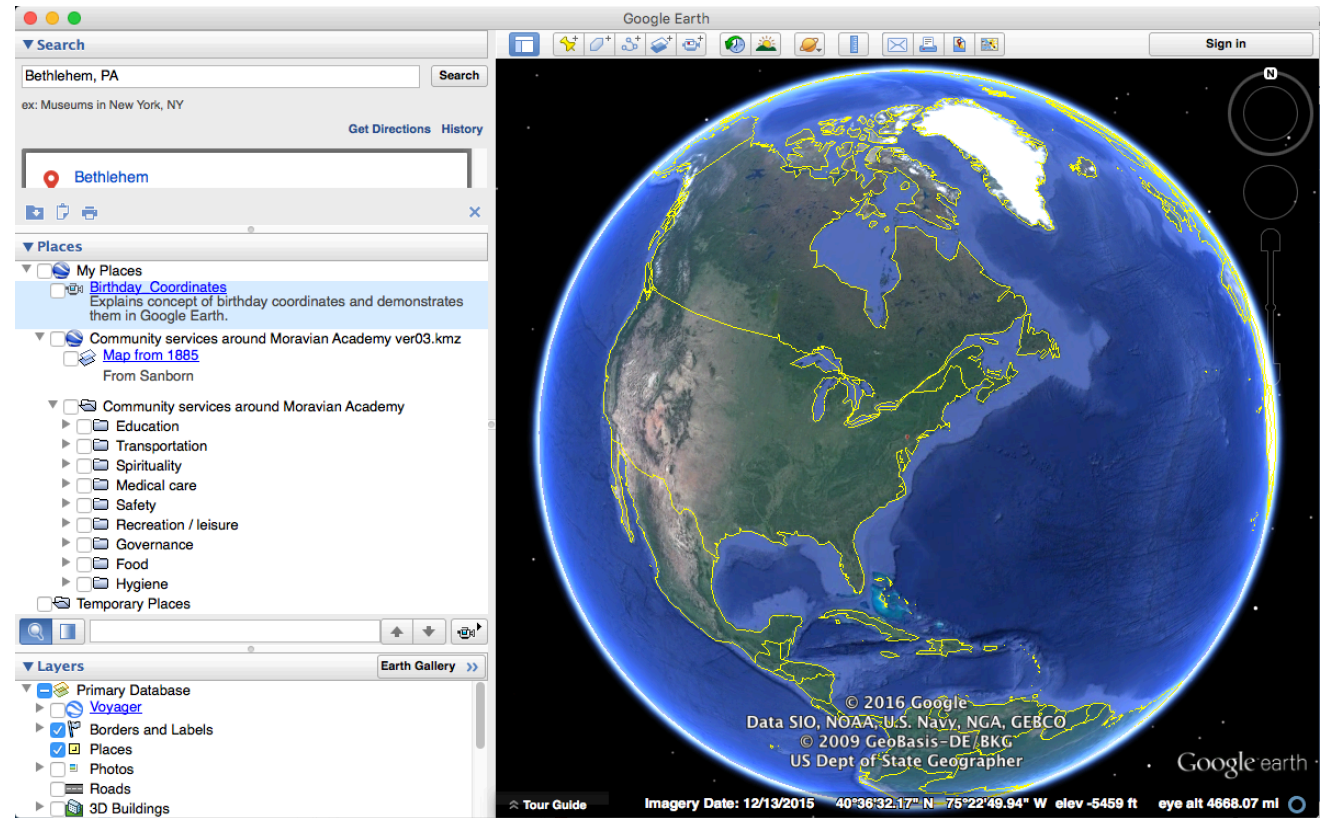


COMMUNITY NEEDS GAME

- Teaches concept of “community needs” such as food, water, safety, and education
- QR codes are placed around the school campus on people, places, and things that represent ways the school community meets its needs.
- Players are challenged to meet all of the community’s needs by hunting for and scanning QR codes that fulfill all the different types of needs.
- Game is embedded within a wrap-around lesson that begins with Google Earth and worksheet.
- After game, homework to reinforce lesson.



INTRO WITH IMAGINATION & GOOGLE EARTH



LET'S THINK!

Community needs activity Name: _____

What does a community need? Date: _____

1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Hammond / Oltman, Lehigh University, Spring 2015

Community needs activity Name: _____

What about the community of your *home*? Date: _____

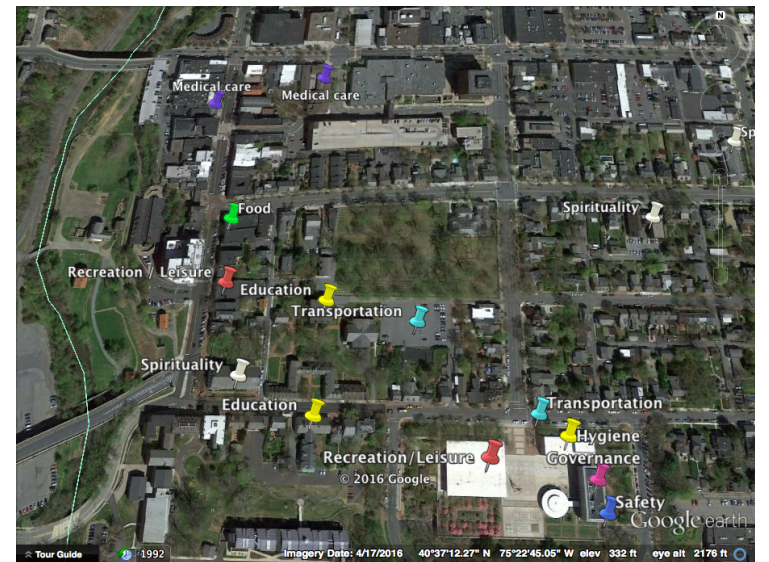
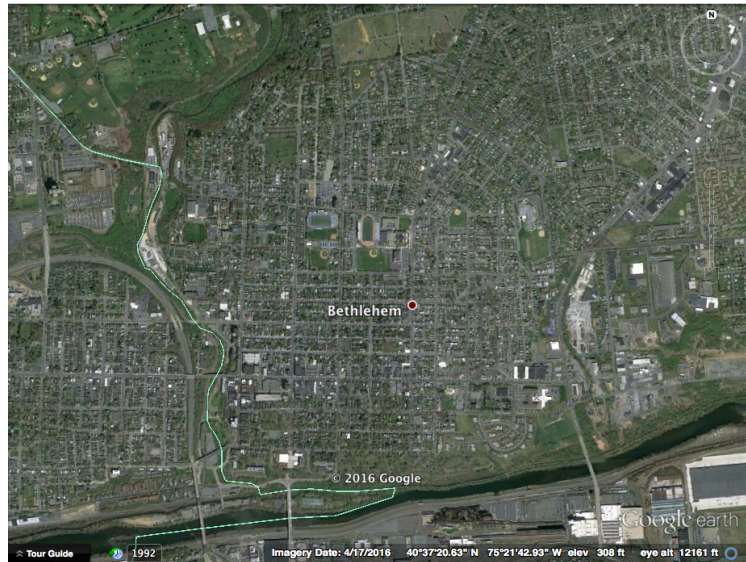
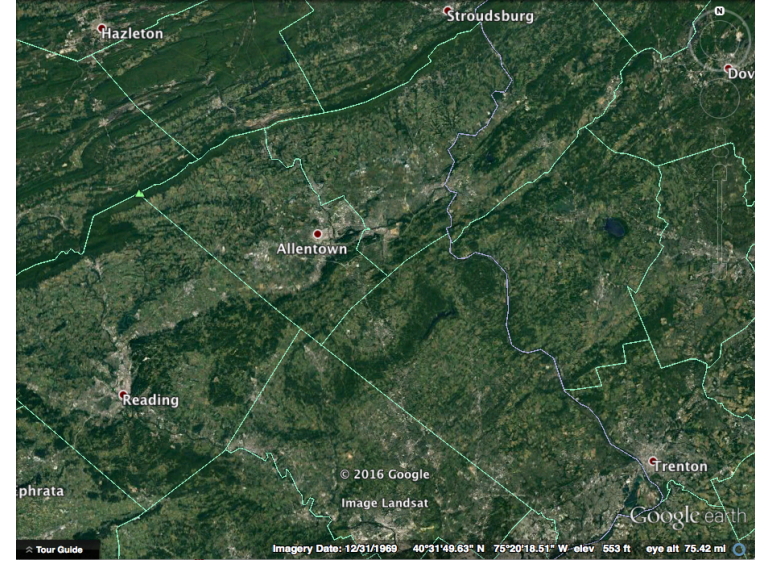
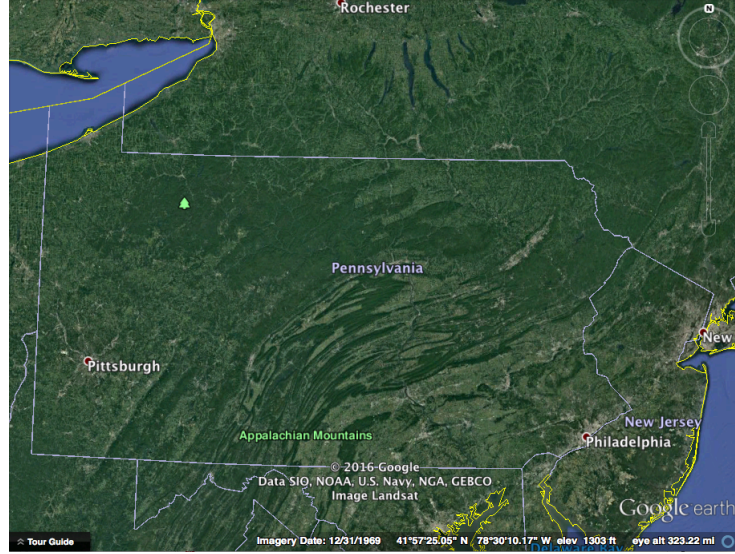
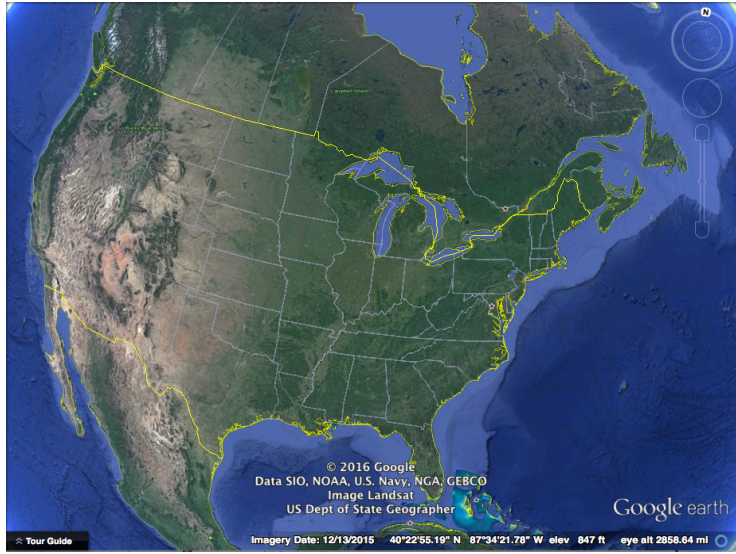
Your home is a community on a very small scale. Because it is a community, it still will have things, people, and places that meet the community's needs.

Use what we learned to name some of the things, people, and places in your home that meet your needs! You don't need to fill in every square, just see what you can think of.

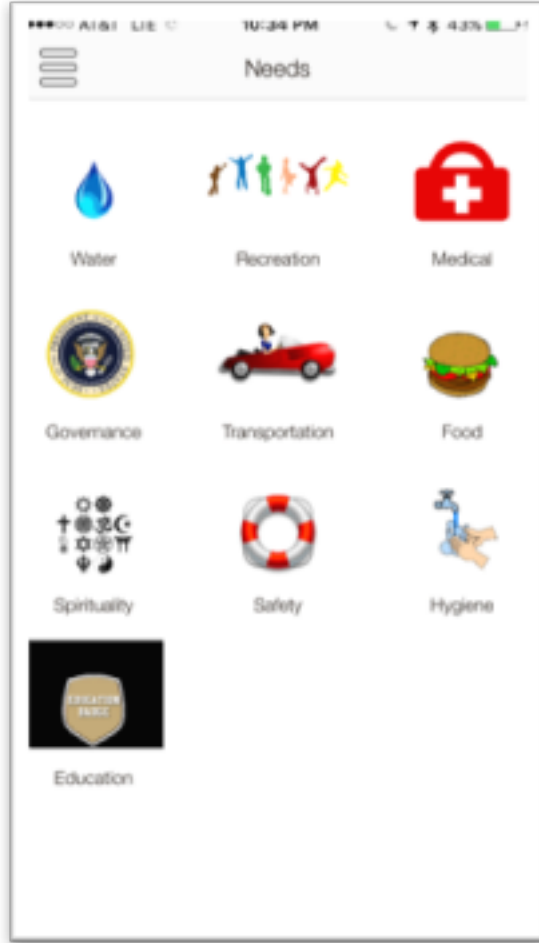
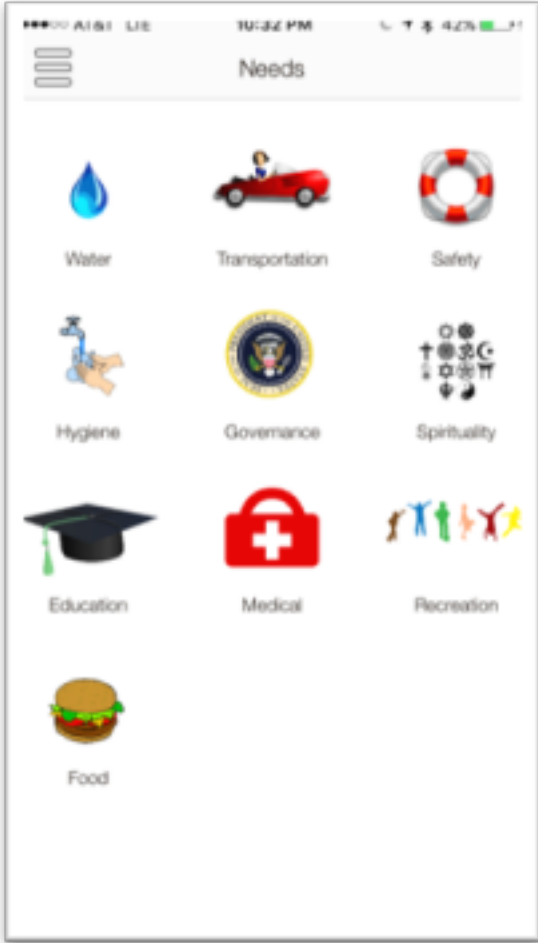
Needs	Things?	People?	Places?
<i>Food</i>			
<i>Water</i>			
<i>Safety</i>			
<i>Transportation</i>			
<i>Hygiene</i>			
<i>Medical care</i>			
<i>Governance</i>			
<i>Recreation / leisure</i>			
<i>Spirituality</i>			

Hammond / Oltman, Lehigh University, Spring 2015



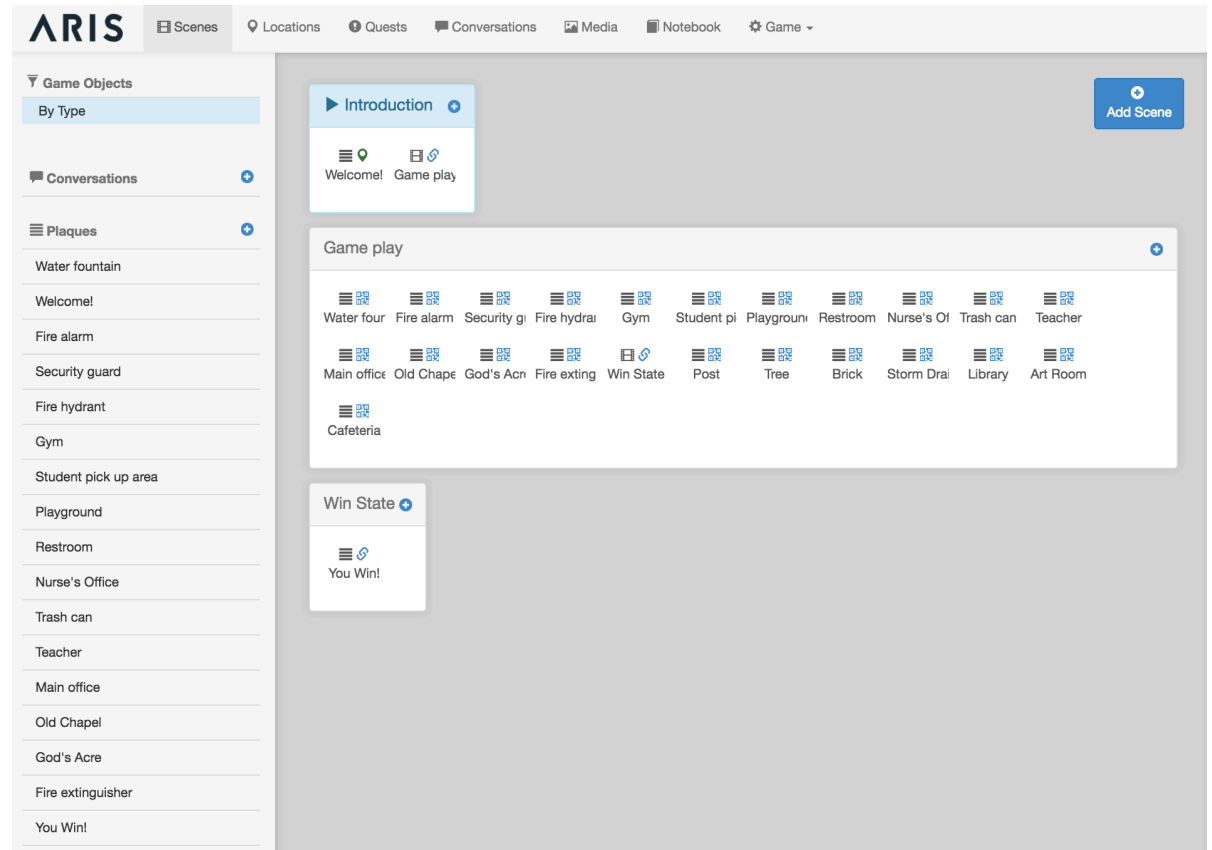


LET'S GO PLAY!



THE BUILD WITH ARIS

- Quests were "Needs"
- Players had to collect a certain number of each need to complete quest
- Game flaw:
No accountability for not knowing what need is being met

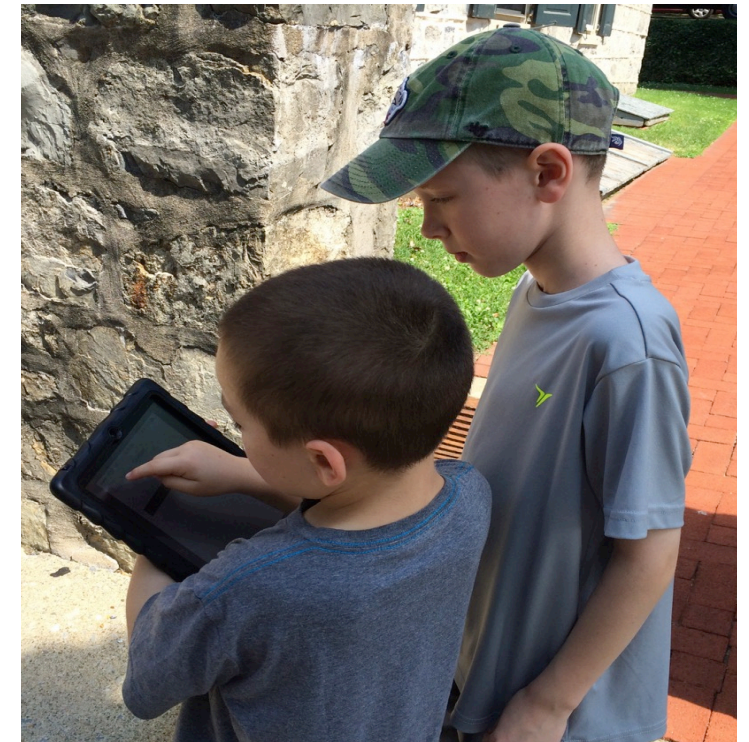


GREAT GOVERNMENT GURU GAME

- Designed for elementary students learning about the role of local government and private offices that support government interactions.
- Game is played after class has had lesson on role of government.
- Small teams of visit various locations and must decide if that entity a) **provides services**, b) **protects rights**, or c) **maintains order** and then scan the corresponding QR code.
- If the team chooses correctly the first time, they earn more “Civic Credibility Coin”.
- As teams earn more coins, they level up, ultimately becoming a Government Guru!

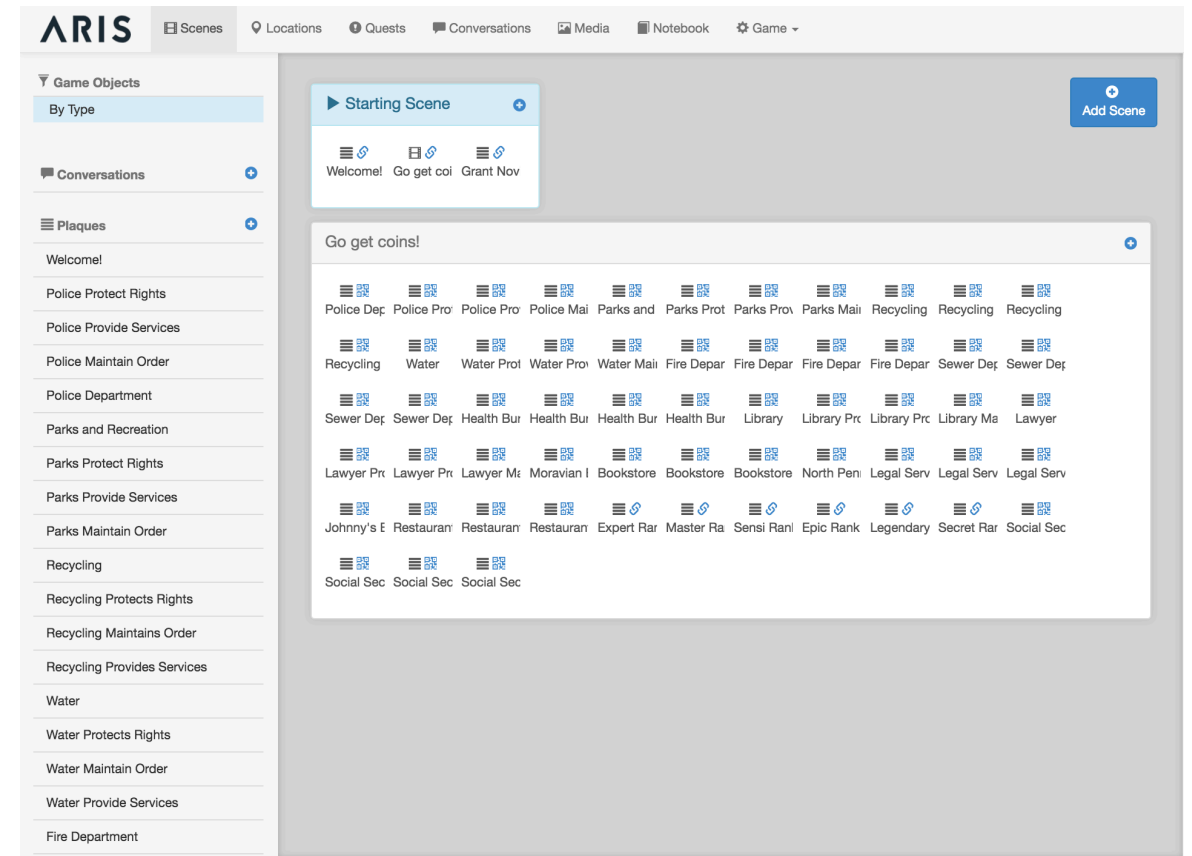


LET'S PLAY!



THE BUILD WITH ARIS

- 4 QR Codes for each location
 - 1 title & 1 for each answer
- Correct answer awarded 30 coins
- Incorrect answer took away 10 coins
- Levels determined by amount of coins earned



MORAVIAN HISTORY MYSTERY

- Embedded within a long-standing curriculum unit
- 2 iterations over 2+ years
- Most complex game we've built – basis for dissertation research
- Utilizes both GPS triggers



ORIGINAL CURRICULUM

THE FIRST HOUSE

The first house was made of Log
 One side of the house was for People
 The other side was a stable for animals
 Upstairs was a place to sleep

Draw three Moravians in the room on the right.
 Draw a cow and a horse in the room on the left.
 Draw a little girl praying in the room upstairs.
 Draw two chimneys on the roof.
 Finish the picture your own way.



Dye house

The Dye house only has 3 walls standing. The building was next to the Grist mill. The Dye house only has three walls standing because it was from the colonial Moravian times and that was a long time ago. The dyes came from natural materials.

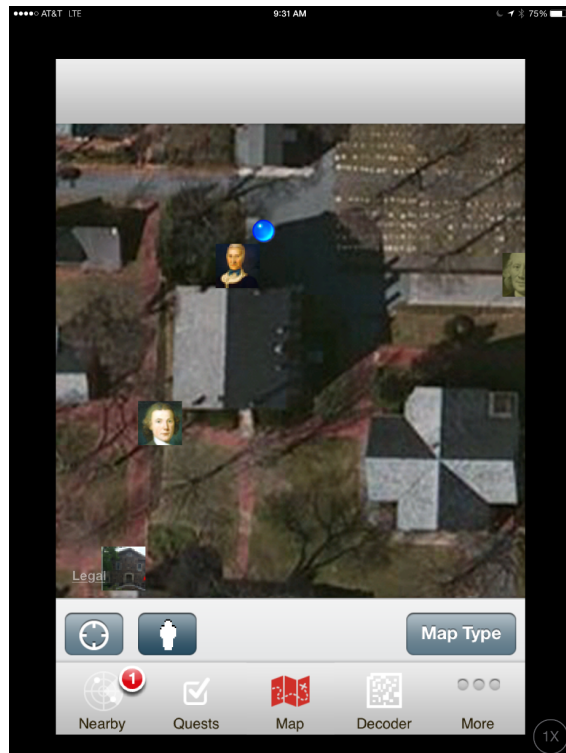


	We Know	We Think	Want to Learn
Favorite	different ribbons	Moravians are	who wore what color ribbon
My Lessons	thresh wheat berries	all gone	
Tools	boys - barn - tools		year to arrive?
Board	gender different schools		how they built
	quills - ink - walnuts		Where did they live?
	German Doors		gardening?
	Women - hats		pets?
	child/yokes/H2O		Why Moravians?
	food wild - grew		
	different houses		

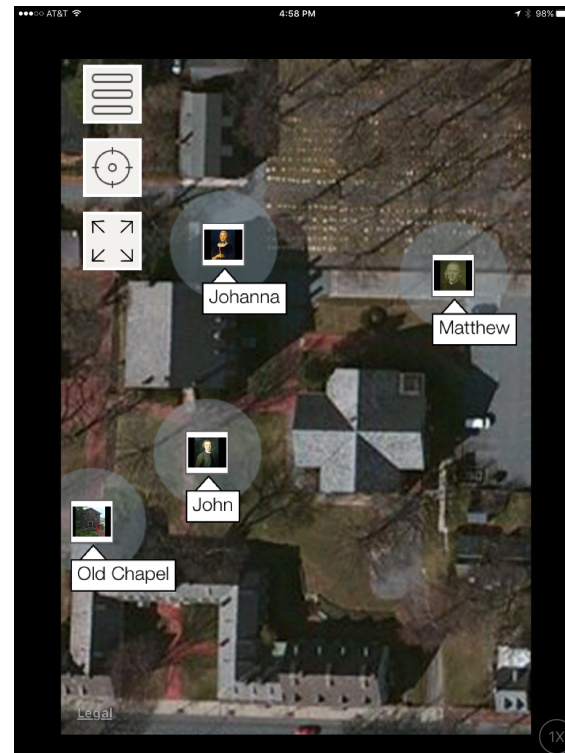


THE GAME

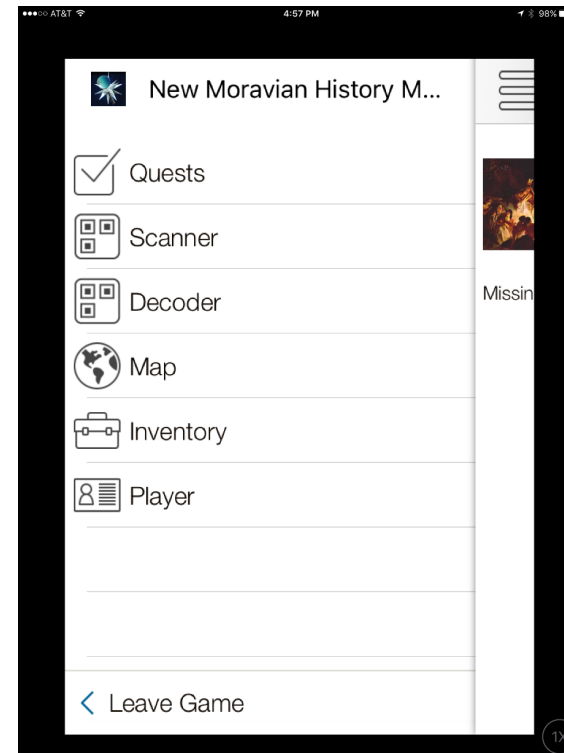
- Introduction in classroom
- Game played mid-unit
- Students played in pairs or triads



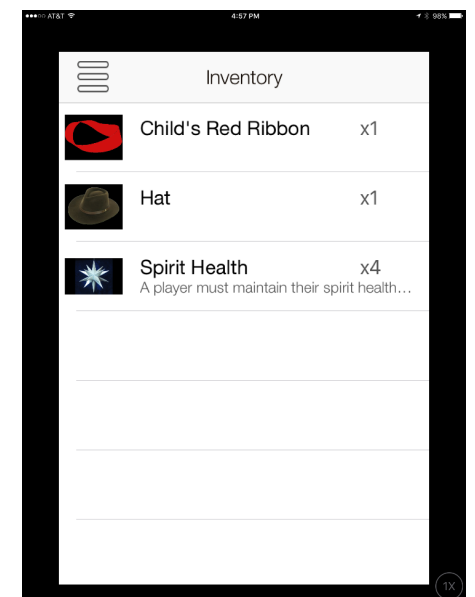
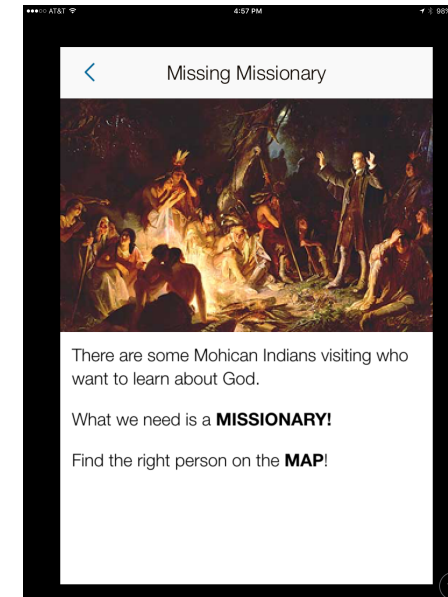
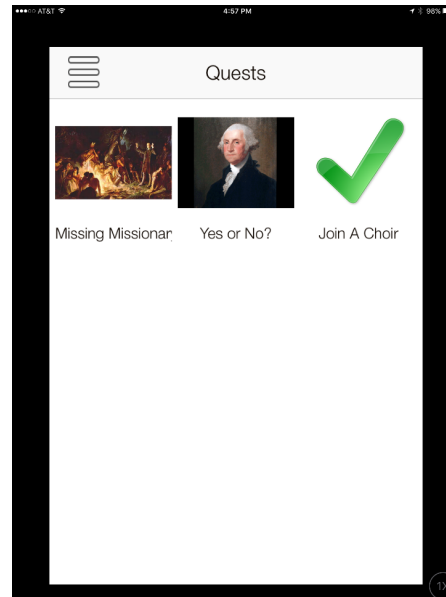
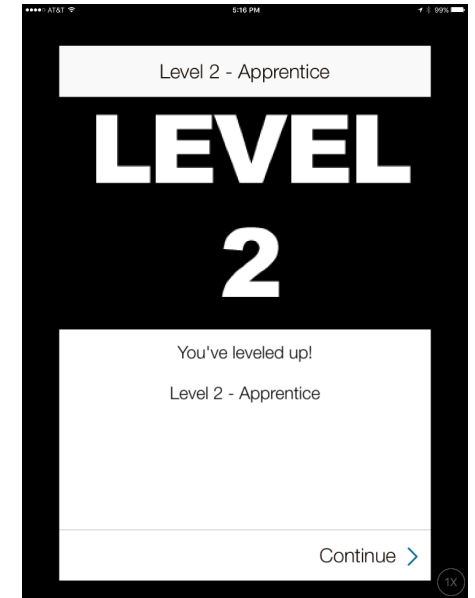
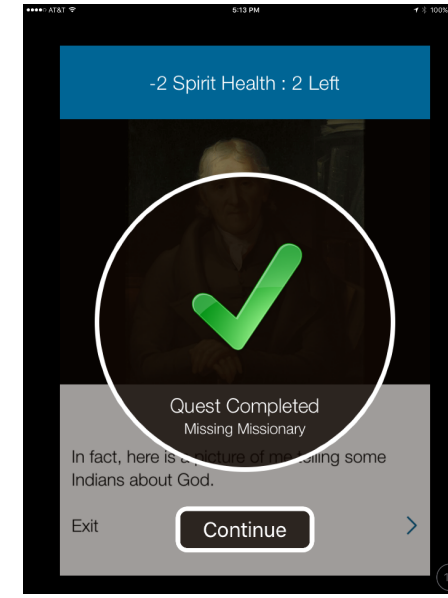
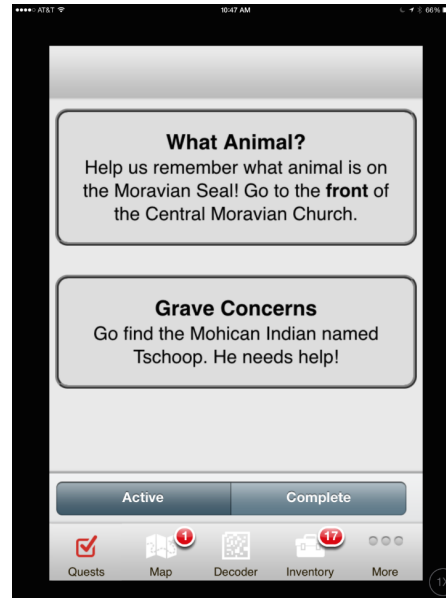
Year 1 Map



Year 2 Map



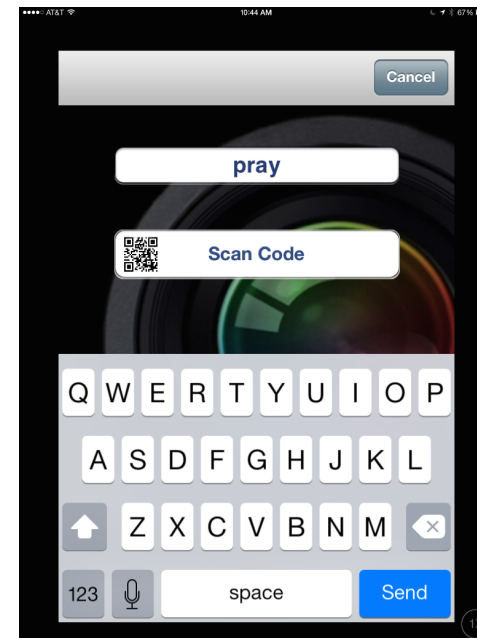
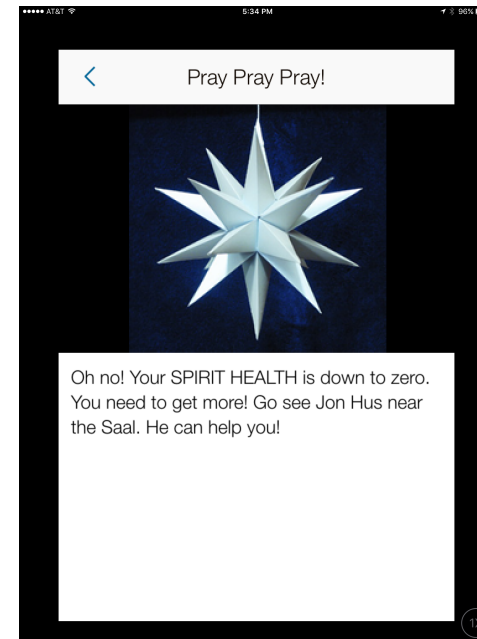
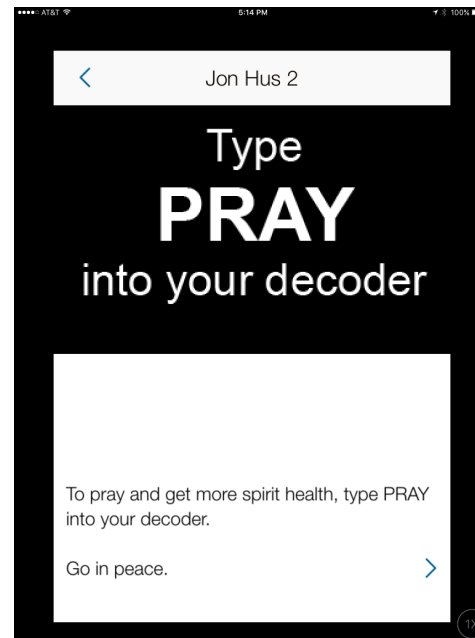
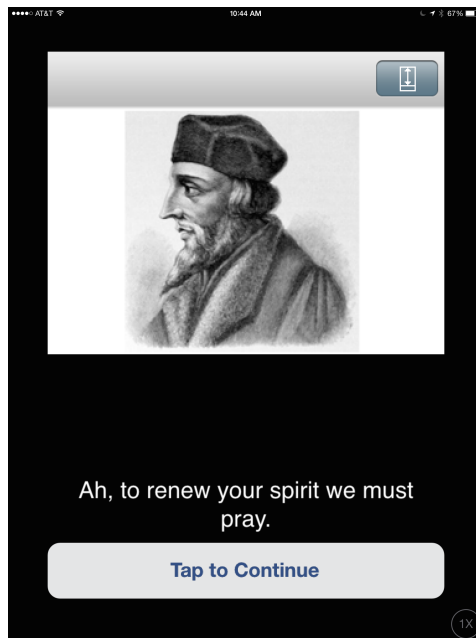
QUESTS, LEVELS, & INVENTORY!



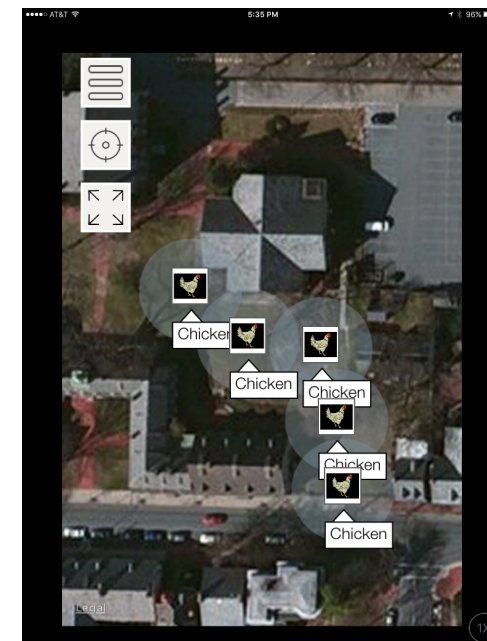
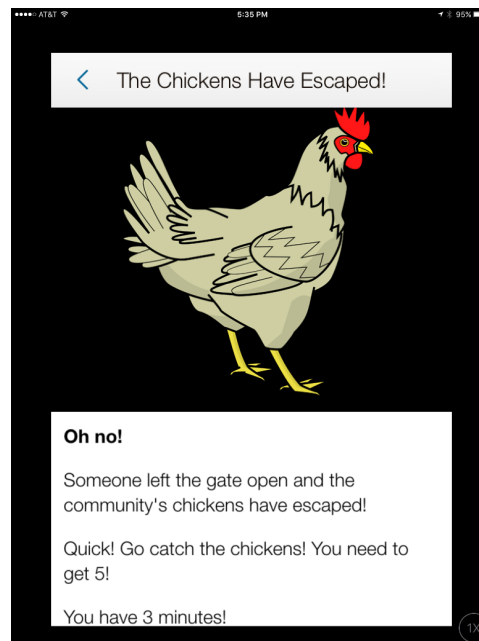
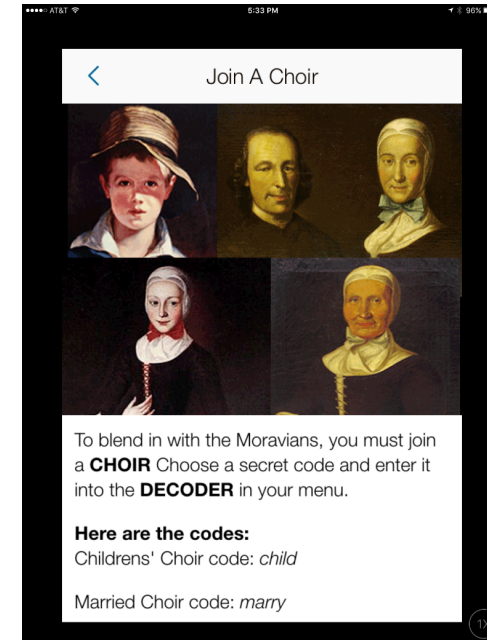
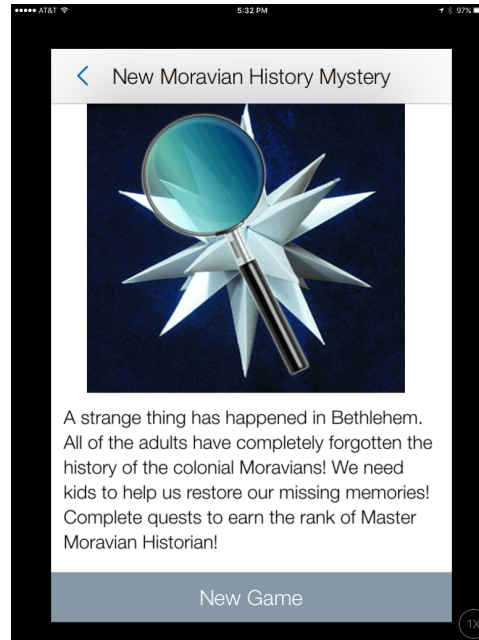
CUSTOMS OF SOCIETY



ACTION OF GAME

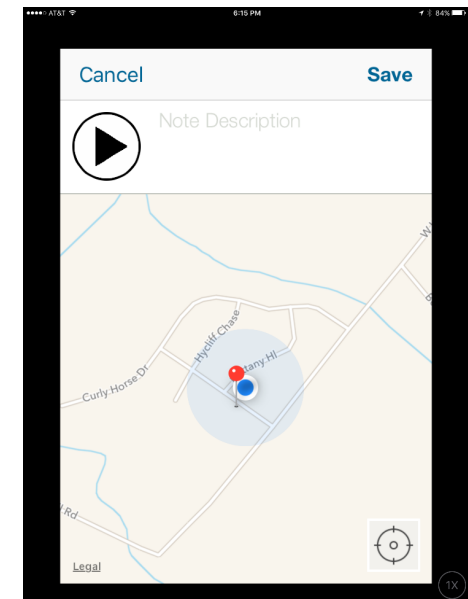
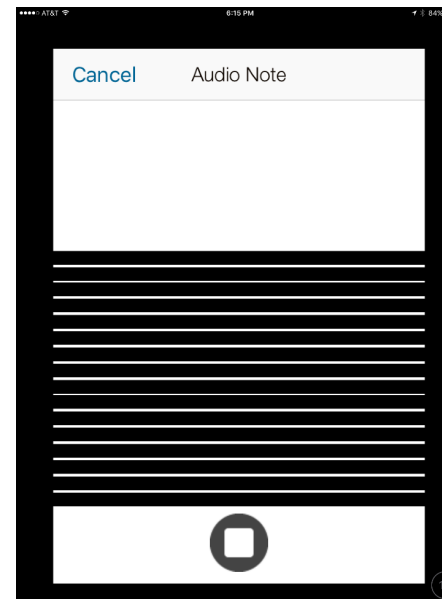
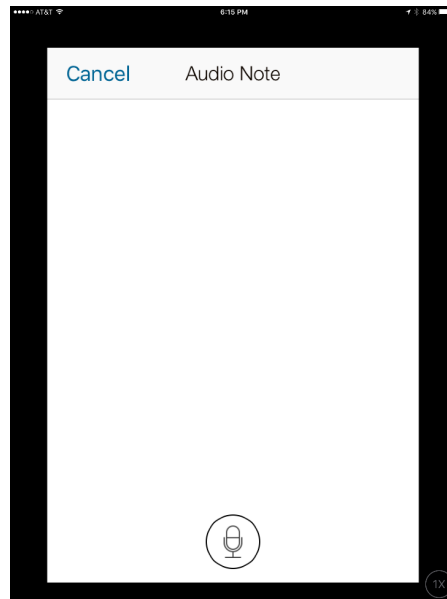
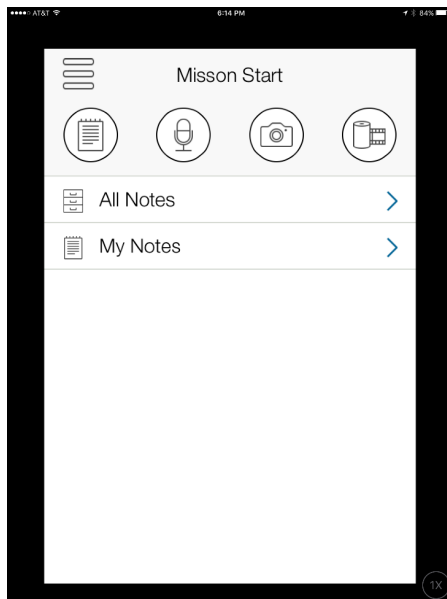
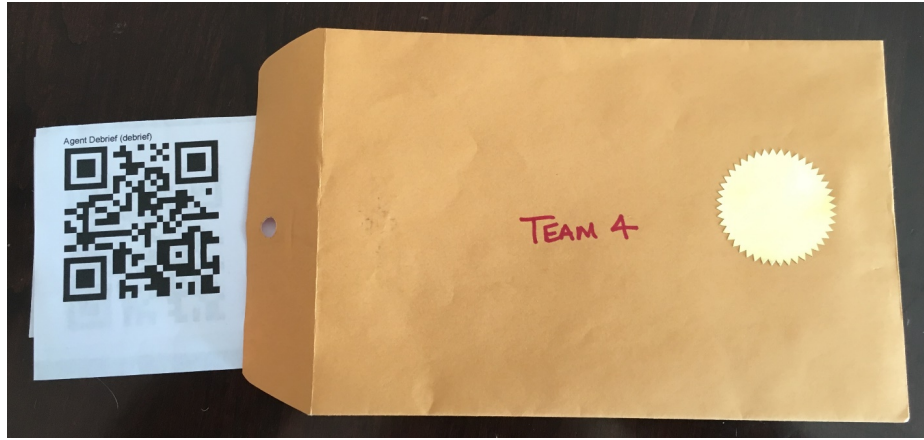


FEELING LIKE A GAME...



STEALTH ASSESSMENT

Pre and post gameplay



More on data collection in the next session!

Julieoltman.com



THE BUILD

- Levels = scenes
- To allow multiple paths, multiple quests included in one scene/level
- Level up by completing certain quests

The screenshot displays the ARIS software interface. At the top, there is a navigation bar with tabs for Scenes, Locations, Quests, Conversations, Media, Notebook, and Game. Below this, a sidebar on the left titled 'Game Objects' contains a list of characters and locations, including Matthew, John, Count Zinzendorf, Johanna, Bishop Ettwein, Tschoop, Widow Catharina, Count Zinzendorf, Bishop David Nitschmann, Susanna, John Heckewelder, Joseph, Joshua, Bishop Comenius, Countess Benigna, Samuel, John Hus, Tschoop 2, Tschoop Hint For Final Challenge, and Agent Interview Intro & Names. The main workspace on the right shows a hierarchical view of scenes and levels. The 'Starting Scene' contains 'Welcome!' and two 'Agent Inte' objects. 'Level 1' contains a variety of objects such as 'Married Pl:', 'Sisters Pla', 'Brethren P', 'Widow's F', 'Johanna', 'John', 'Matthew', 'Old Chape', 'True', 'False', and 'Pray Pray'. Below 'Level 1' is a scene titled 'Pray Pray Pray' with objects 'Type Pray', 'Level 1 - p', 'John Hus', and two 'Agent Deb' objects. 'Level 1 - part 2' contains objects like 'Count Zinz', 'Escaped C', 'Escaped C', 'Escaped C', 'Escaped C', 'Escaped C', 'Level 2 - A', 'Out of Spi', and two 'Agent Deb' objects. 'Out of Spirit Health' contains 'Bishop Ett', 'Type God', 'Level 2', and two 'Agent Deb' objects. The bottom-most visible scene is 'Level 2'. Each scene/level box has a plus icon in the top right corner, and there is a larger 'Add Scene' button in the top right of the main workspace.



CONVERSATIONS & LOCATIONS

ARIS Scenes Locations Quests Conversations Media Notebook Game

Characters

- You
- Matthew
- John
- John Heckwelder Preaching
- Count Zinzendorf
- Count Zinzendorf
- Johanna
- Bishop Ettwein
- Bishop Ettwein
- Jon Hus
- Jon Hus 2
- Tschoop
- Widow Catharina
- Widow Catharina
- Widow Catharina
- Bishop David Nitschmann
- Susanna
- John Heckwelder
- Joseph
- Joseph
- Joshua
- Joshua
- Bishop Comenius
- Countess Benigna
- Countess Benigna
- Samuel
- Samuel
- Zinzendorf Preaching
- Misson Control

Conversations Flowchart:

```

    graph TD
      Start([Start]) --> Q1[Hello. How may I help you?]
      Q1 --> A1[Do you need help]
      Q1 --> A2[I have your keys!]
      A1 --> Q2[Yes, I do!]
      A2 --> Q3[Oh, thank you!]
      Q2 --> C1[Continue]
      Q3 --> C2[Continue]
      C1 --> Q4[Can you go collect the keys to our 3 houses of worship?]
      C2 --> Q5[For your trouble, here is an ancient bible. Use it well.]
      Q4 --> C3[Continue]
      Q5 --> E1[Exit]
      C3 --> Q6[You must pick them up in the right order! Oldest to newest.]
      Q6 --> C4[Continue]
      C4 --> Q7[You should now see them on the map]
      Q7 --> E2[Exit]
  
```

ARIS Scenes Locations Quests Conversations Media Notebook Game

Location Triggers

By Type

- Johanna
- John
- Matthew
- Count Zinzendorf
- John Hus
- Bishop Ettwein
- Tschoop
- Widow Catharina
- Count Zinzendorf
- Bishop David Nitschmann
- Tschoop's Ghost
- John Heckwelder
- Joseph
- Susanna
- Countess Benigna
- Joshua
- Samuel
- Bishop Comenius
- Tschoop
- Plagues
- Old Chapel
- Chicken
- Chicken
- Chicken
- Chicken
- Central Moravian Church

Map Satellite Search Box

Location Trigger: Matthew

Latitude: 40.61971179133006
 Longitude: -75.38002211208345

Availability Range: 12 Meters

When in range, trigger: Immediately By Touch

Save Delete Cancel



GAME DESIGN IMPLICATIONS

For **young** learners:

- Geospatial skills require significant scaffolding
- Reading requirements needed to be both grade level and not distracting to gameplay.
- Video content was not received well in initial testing.
- Certain types of gaming activities were popular and well received such as collecting items, typing codes, and figuring out the right order.
- Curriculum content needs to be an active part of the game experience and not provided as "additional info".
- Teachers provided valuable insights that guided the researcher's design process.



QUESTIONS?

Julie Oltman

julie.oltman@lehigh.edu

@joltman1

julieoltman.com

Dr. Thomas Hammond

hammond@lehigh.edu

arisgames.org



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Julieoltman.com

