Designing Collaborative Learning Into Alternate Reality Games

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@Literature_Geek
Georgina Goodlander, Program Director, Smithsonian American Art Museum
Cabinet No. 1741706
To be kept in strict confidence.

<table>
<thead>
<tr>
<th>Depository</th>
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<th>Location</th>
<th>No. Items</th>
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<tbody>
<tr>
<td>E.M.</td>
<td>1833</td>
<td>East Wing</td>
<td>35</td>
</tr>
<tr>
<td>E.B.</td>
<td>1854</td>
<td>West Wing</td>
<td>40</td>
</tr>
<tr>
<td>N.W.</td>
<td>1863</td>
<td>N. Wing</td>
<td>48</td>
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<td>E.S.</td>
<td>1867</td>
<td>North Wing Left</td>
<td>53</td>
</tr>
<tr>
<td>E.S.</td>
<td>1877</td>
<td>North Wing</td>
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</tbody>
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I fear the worst. How they discovered the Cabinet among the rejected models, I know not. One thing is clear—The fire was no accident. May God protect us all.
Alternate Reality Game

Collaborative Sense-making
(prizes available)
NOT Video Games
An ARG is...

Storytelling as Archeology

“Alternate Reality Games.” Wikipedia.
An ARG is...

Pervasive Game
An ARG is...

Collaborative Sensemaking
ARGs & learning

Practice literacy skills
- Information Evaluation
- Collaborative Problem-solving
- Critical Thinking

Authentic environments
- Controls = everyday communication tools
How to design ARG narrative and puzzles to promote collaborative learning?
Collaborative Learning

Cooperative Learning
Individual Accountability

Each student is responsible for individual tasks within the group.
Positive Interdependence

Each student’s success contributes to group success.
Promotive Interaction

Students encourage each other with positive, constructive feedback.
Groups take time to reflect on their performance together and to work through controversies constructively.
Arcane Gallery of Gadgetry
(AGOG)
The Players

~60 students
(26 boys, 34 girls)
13–14 years old
8th grade Social Studies
50% “FARM” students
6% LEP students
Content Learning Design Goal

“We take history for granted because we encounter it in a format that makes it seem inevitable. We forget that it could have gone any way at any moment.”

• Develop strategies to interpret & evaluate texts.

• Differentiate between facts & interpretations.

• Challenge arguments of historical inevitability.

• Study relationships among science, technology & society.

Standards from National Council on Social Studies & National Center for Teaching Historical Thinking

* logo from playthepast.org
Collaborative Learning
Design Goal

Apply principles of Cooperative Learning

Distribute challenges so that each student is an integral component of the group’s success in uncovering the story.
Positive Interdependence

Junto => Jenius

Badge Design: Amanda Visconti
Individual Accountability

SURVEYOR MISSION #1

ARCHIVIST MISSION #3

SURVEYOR MISSION #2

CRYPTOGRAPHER MISSION #3
Promotive Interaction

• In-game characters model positive feedback

• Social media channels to share successes and requests for help
Group Processing

• Daily check-ins

• Meeting at midpoint

• Final debrief and survey
Final Mission

Come April, the truth must be known.

The pieces must come together before the time of the sending. I have hidden them with those I trust most.

Date: April 15, 2011
Time: 12:01 am
Location: [Blank]
Recipient: Charles Mason
Sender: April G.

Informant whispered these hints to help us avoid SCAR.

1. First figure out who is who; then turn the page and name the SCAR members.

2. Informers were William Backdale, John Wilkes Booth, Belle Boyd, John Bredtardes, Mary Rockin Chasseur, Jefferson Davis, Lawrence Keel, Thomas Hindman, Dr. Samuel Meld, Rufus Rhodes, Robert Enot, Edmund Nottin, Alexander Stepney, John Barrett, and Loretta Waxgasp.

3. The cinem: five Fire-Eaters were the first five people in line. The assassin, his two accomplices, and the others wore the last five people in line. University of Maryland graduates were closer to the front of the line than the women whose names were so close to that of the assassin. The assassin's successor was assassinated as the second person in line. The assassin's accomplice was standing closer to the front of the line as the actor. The actor was standing between a president and a president's vice president. A senator commissioner was standing between two men who had been US Senators in 1869. Large men were standing next to another President from the same state. The Five-Eaters were closer to the end of the line than the man who drew about in the Senate chamber. A man who fired the first shot of the Civil War was third in line. He was the same distance from a man as “Harry” was from John C.
Research Design/Methods

- On-site player interactions and online artifacts
- Field Notes by researchers
- Physical notes & artifacts created by players
- Post-game player survey (self-reporting)

Adapted from Yin, 2009, Case Study Research: Design/Methods
Player Participation

Individual Accountability

**Survey**

**JENIUS WALL**

**Blogs**

**Anton’s Blog (Day 4)**
Whewwww!!! Just finished two of the missions of cryptographer. Very happy {kinda getting into this game}.

**Individual Missions:**
- Most Fun
- Challenging
- Surprising

**~50% Students**

**TimV.** I Got A BADGE! ( :
Edit  Delete  View conversation

**Ben05** just gd with mission 1. man thats hard. i felt like a fail
Edit  Delete  View conversation

**Ben05** but feel like a boy scout when i get a badge. so proud of myself.
Edit  Delete  View conversation

**Tina05 >> April G.** HEY APRIL :)  
I finished my second mission ;)
Edit  Delete  View conversation

**Austin >> April G.** Yeah. I have been blazing thru my inventor training. :-)
Edit  Delete  View conversation
“You played 3 missions and then a master level that you have to use the skills you learned from the first 3. The last level is the group level where you put all of your skills together.”

**Ben05** Who is a cryptographraper? I NEED UR HELP!

**TanyaE** im trying to figure other things i don’t even know...

Surveyors!!! Helpp!!!!!

**Claire746 (Day 7):**
Go under collaborate→ wiki→ unsolved questions...or to → cabinet of curiosities to find the hidden key phrase, “YOU DELAY BUT TIME WILL NOT.”
But I don’t know what “A PLACE FOR EVERYTHING” means....can anybody help?”
Ben05 (Day 6):
As you know, last week we observed April G’s notes on her phone recording. The morse code translated to: Messages Across Time. This is obviously linked to the Kairograph, which can send messages to the past, present, and future...We need to work together for clues & find out why SCAR wants April!!! You can talk to me about my blog at Ben05.

Myra >> April G. i got a 67%. i don’t get it.
Edit Delete View conversation

April G. >> Myra that’s not bad, tho’, you’re almost there. Ask the JENIUS people for help on that last question.
Edit Delete View conversation

Myra >> April G. i got a 100% (:
Edit Delete View conversation

April G. >> Myra That’s cool! You get a new badge!!! 😊
Edit Delete View conversation

Myra >> April G. I Know, Right.
Edit Delete View conversation

“We had to work together and share information.”
Player Participation

Group Processing

• Collaborative Sense-making

• Cross-Order Interaction
Conclusions: engagement

“I was saving history.”
“I felt like a spy!!”

“...the past interacts with you.”
“I actually got into it and had fun.”
Conclusions: critical thinking

“It was cool – a strategizing game that keeps you thinking.”

Is this real? It's not a game to me.

Is there room for gray in real vs not-real (fact or fiction)?

It’s like beliefs.

Imaginary REAL
Conclusions: interlocking tasks

“Teamwork was needed to solve it.” “It was so intricate.”