GAME ON!
THE IMPACT OF ONGOING GAMES IN MUSEUMS
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Advanced Game
THE DOSEUM

- Located in San Antonio, TX
- Open since June 5th, 2015
- 6 Permanent Galleries
- 1 Special Exhibits Gallery
- 104,000 sq. ft. overall
- 36,000 sq. ft. outdoor space
- STEM focus
- Blend of science and children’s museum
- 480,000 visitors so far
- Weekdays average 700 visitors per day
- Weekends average 1600 visitors per day
WHY SPY? Early Planning

TEKS general math skills
- Mental Math
- Modeling
- Sequencing
- Nonstandard measurement
- Making predictions
- Problem-solving
- Selecting tools
Spy Academy: learn the skills to be a spy

Math Skills
(based on Ready To Learn)

Numbers and Operations
- Counting
- Cardinality
- Place value & grouping
- Relations
- Representing numbers
- Operating with numbers

Measurement & Data
- Measurable attributes (length, weight, capacity, temperature, time and money)
- Estimation
- Sorting & classifying
- Data collection & analysis
- Graphing

Algebraic Thinking
- Patterns
- Deductive reasoning

Geometry & Spatial Sense
- 2D & 3D shapes
- Shape attributes
- Composition & decomposition
- Position, location & direction
- Mapping
- Spatial visualizations & transformations

Skills organized into

Spy Academy

Departments

Decoder Room: patterns & sequencing

Operations: functions

Special Manuevers: measurement, direction & distance

Spatial Tactics: spatial sense & geometric explorations

Logic Lab: algebraic & deductive reasoning
RECRUITS LEARN TO BECOME SPIES
1 RECRUIT LEVEL

Solve Recruit Clues at designated Training Missions, to get the passcode for Agent Headquarters.

Choose a Temporary Recruit ID and solve the set of Missions printed on it to get a passcode for HQ.

To become a Spy Academy Agent, solve these activities:

3 Recruit Briefing
4 Spies in Disguise
8 Manual of Codes
4 Master Mapper
5 Foreign Exchange

The answers are your passcode to enter Agent Headquarters.
Passcode is 34845
1 RECRUIT LEVEL

Solve Recruit Clues at designated Training Missions, to get the passcode for Agent Headquarters.

Choose a Temporary Recruit ID and solve the set of Missions printed on it to get a passcode for HQ.

2 AGENT LEVEL

COMPLETE ASSIGNMENTS TO EARN SKILL BADGES

Children enter their PASSCODE to gain entry to Master Agent Training Headquarters (M.A.T.H.) Once inside they shed their Temporary Recruit ID in favor of a custom Agent ID, and then start to earn 6 Skill Badges.

- CODE-CRACKING
  - 4 Code Making or Breaking Assignments
- NAVIGATION
  - 4 Navigation Assignments
- COMMUNICATION
  - 4 Communication Assignments
- STRATEGY
  - 4 Logic or Deductive Reasoning Assignments
- TECH-TACTICS
  - 4 Tech Assignments
- SURVEILLANCE
  - 4 Surveillance Assignments

To become a Spy Academy Agent, solve the at these activities.
Solving assignments requires going back OUT in the exhibit with new information.
1 RECRUIT LEVEL

Solve Recruit Clues at designated Training Missions, to get the passcode for Agent Headquarters.

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2 AGENT LEVEL

COMPLETE ASSIGNMENTS TO EARN SKILL BADGES

Children enter their PASSCODE to gain entry to Master Agent Training Headquarters (M.A.T.H.) Once inside they shed their Temporary Recruit ID in favor of a custom Agent ID, and then start to earn 6 Skill Badges.

3 MASTER AGENT LEVEL

“WIN”

Complete 24 assignments for all 6 badges

Master Agents automatically join the SPY HALL of FAME.

Master Agents submit assignments for next round assignments.
PROTOTYPING
PROTOTYPING
PROTOTYPING: Testing the Game
Welcome new Spy Academy Recruits. Your training starts now!

Explore the activities to sharpen your spy skills.

Spy Challenge Game

Look for the clues to find the password for Spy Headquarters.

To get you started, here is the first number of the password:
It's easy 1: 2

Write these numbers on your piece of paper and go from here for the rest.

Are you ready to be a Spy Recruit? Choose a badge to get started.

Spy Recruit I.D.

SPECIAL SKILLS
- Witt with numbers
- Excellent memory
- Always knows what happens next

Spy Challenge Game

START:
1. 2. 3. 4. 5.
2. 3. 4. 5. 6.
3. 4. 5. 6. 7.
4. 5. 6. 7. 8.
5. 6. 7. 8. 9.
6. 7. 8. 9. 10.
7. 8. 9. 10. 11.
8. 9. 10. 11. 12.
9. 10. 11. 12. 13.

Spy Challenge Game

SPECIAL SKILLS
- Sense of space
- Premium puzzle skills
- Map-able

When you are done go to Spy Headquarters
Software developer:
Neuronic Games
Enter your passcode. If you don't have a passcode, pick up your Temporary ID Badge outside Agent Headquarters and solve the clues on the back. The answers are your passcode.
LIQUIDSPIDER

BADGES

- Code Cracking
- Communications
- Tech Tactics
- Navigation
- Surveillance
- Strategy
Recruit Clues

Strategy
Secret Bookcase

Every book tells a story but the Spy House bookshelf has another secret message for you.

The assignment: find the message on the bookshelf.

The catch: the message is in code.

The code: 20, 18, 1, 9, 14, 20, 15, 13, 15, 18, 18, 15, 23

Go to the Spy House and return to HQ with the message.
Rescue Mission

Agents left a message for you in the jungle. Their last dispatch was “You’ll need to dive right in.”

Go to Agent Rescue and use the dispatch to navigate to the hidden message. When you have it, return to HQ.
Unscramble the location
After that spy!

You know the spy is in one of these cities.

Figure out where the spy is by unscrambling the letters to reveal their location.

By the way... speed counts.

TAS
NUI
Search Clue Sheet
Each clue leads to a secret stashed somewhere inside Spy House.
The biggest secret of all: Who is Pandora Sawyer?

1. When is a spy like a mouse?

2. Can you behind you?

3. Watch your time!

4. The location is:

5. The answer hides on the table sides.
(There another clue waits for you.)
Under the clock
Under the baseboard
Behind the door molding
In the fireplace
In the drawer
In the stairs
In the drawer
In the coffee table

1. UV light in drawer points to Door Panel location
2. Door Panel gives clue to solving to Stair Safe walking up, down, up
3. Stairs give clue to unlock Fireplace.

Clue Sequence to Finale at Fireplace

Fireplace is the Finale

There's more in a drawer; please pick up your mess.

Hay más cosas en el cajón; por favor no dejes las cosas desordenadas.

Get on the ground, feel up and around. What you seek will soon be found.

Agáchate y toca el suelo por todas partes. Pronto encontrarás lo que buscas.
When your children played the Spy Game did a staff member or volunteer introduce the game to them?

(10 responses)

- Yes: 70%
- No: 30%
SPY ACADEMY VISITOR RESPONSE
As of end of April
32,830 unique registered spies
As of end of April
400 Master Spies
On average it took about 4 visits to achieve Master Spy status
12,000+ MEMBERS (AND COUNTING)
MEMBERSHIP TRENDS

45% of our visitors are members.
How many times have you been to The DoSeum since we opened in June?
(38 responses)
Have your children ever played the Spy Game and created a Spy Badge?

(66 responses)

- Yes: 57.6%
- No: 40.9%
- I don’t know: 1.5%
Did you visit The DoSeum before becoming a member? (66 responses)

80.3% No
19.7% Yes
If you visited The DoSeum before becoming a member....

On this initial visit to The DoSeum, did any of your children play the Spy Game and create a Spy Badge?

(11 responses)

- Yes: 72.7%
- No: 27.3%
How would you rate the impact of the opportunity to play the Spy Game on your decision to become a member?

(12 responses)

- Had no impact: 6 (50%)
- Definitely had an impact: 3 (25%)
MASTER SPY SYMPOSIUM
SAN ANTONIO’S MUSEUM FOR KIDS
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Origins
Oh, I think now is a perfect time to panic!
Me? Oh, I'm just testing my new device.

My Negative Wave Transmitter will slowly overload the hotel’s electronic infrastructure!
Once overloaded, your precious little InterActivity conference will come to a grinding halt! Getting to interrupt your presentation was just icing on my delicious cake...
Enjoy the final minutes of your conference!
Yes, we've been monitoring the situation, Agent Electric! We're ready to help! But, we'll need help. You're going to need to recruit the audience as field agents!
Great news! Let’s get started!
It will take a lot of negative waves to overload a whole hotel. If we block enough of them, we should be able to stop Vex’s plan.
Everyone, take a look under your tables and see if you can locate the transmitter boxes! While you're doing that, Agent Electric Kaboom will hand out envelopes with instructions on how to rewire the boxes.
I kind of figured Vex would pull something like this...
Follow the instructions in your envelope to rewire the panel and send me the information I need to block the transmitters!

Good luck, Agents!
Keep going! It's working!

Keep sending me your codes so we can block more of the transmitters!
Great job, Agents!
Goals

• Educational
• Older audience
• Immersive
• Extensible
• Flexible
• Maximize space
• Revenue-generating
• FUN!
Developing S.E.C.R.E.T.
Why involve a game company?
6 Missions
1hr+ each
6 Missions
1hr+ each

Detailed art
And story
6 Missions
1hr+ each

Detailed art
And story

10+ physical interactions
Per mission
6 Missions
1 hr+ each

Detailed art
and story

1 Gadget
Per mission

10+ physical interactions
Per mission
How do you iterate on 8 complex missions…

From Pittsburgh?!
Careful planning

• Fast and immediate iteration of individual events
• 2-4 tests of each full mission in Pittsburgh
• ~1 week of full testing in Houston per mission
• Polish and Quality Assurance
• 2 weeks installation
Iteration process

Difficulties of remote testing

1. Hard to test interactive pieces remotely
2. Trying to approximate Houston kids in Pittsburgh
3. Unfortunately, Schell Games isn’t a 1:1 replica of CMH
4. Blind map design
5. Mismatched agent travel times
1. Hard to test interactive pieces remotely
2. Approximating the Houston demographic
The Houston demographic

Testing together with CMH

- (seemingly) Infinite supply of kids!
  - A dream come true for playtesting
- Fast turnaround on testing of paper prototypes, crafts, puzzles
- Meticulously planned scheduled visits
  - 1 to 2 weeks in duration
- CMH are experts in their target demographic
- Map playtesting
3. Schell Games isn’t a 1:1 replica of CMH
4. Blind map design
5. Mismatched travel times
Leveraging the strengths of CMH
Working with museums
An outsider look

Working with museums is hard!

- Museum staff is usually working on tons of stuff
  - “Keith, you’re only working on this project right?”

- Kids destroy everything
  - But first they’ll sneeze on it

- Designing to fit a unique context
An outsider look

Working with museums is awesome!

- Each museum has its own identity
  - Leveraging it is a unique and exciting challenge
- Many interaction design challenges are already solved by the museum’s previous experiences
- Leveraging - and working together with - the museum’s existing resources is a rewarding puzzle
  - Testing, building, planning
Thank you!

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Children's Museum New Exhibit: "SECRET"
Missions

- Operation: Black Hat
- Operation: Blackout
- Operation: Bug Byte
- Operation: Corruption Reduction
- Operation: Eagle Eye
- Operation: Mind Games
86% of parents could relate skills used in S.E.C.R.E.T. to concepts being learned in school.
Number of Sales (Soft Opening)

- First Missions: 78.4%
- Follow-up Missions: 21.6%

Target Audience Penetration (April 5-24, 2016)

- On Missions: 79.2%
- Not on Missions: 20.8%
Response

Since opening, 21% of our agents have returned to complete at least one additional Mission with several Agents already completing all 6 Missions!
“The SECRET Agent experience is a must-keep! It is very stimulating and interesting!”

“The S.E.C.R.E.T. spy missions gets the imagination going...”

“This activity allowed my third grader a chance to problem solve, read, comprehend, continue to learn new things and most of all have FUN.”

“My kids were forced to follow directions, focus on a task, pay attention to detail, use math and deduction, decipher codes and patterns, convert normal items into spy gear, worked as a team and were rewarded at the end by the computer. They’re still talking about it and are using the gear to create missions at home.”
Response

“It’s like a comic book come to life!”
Next Steps
Next Steps
Questions?

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Children’s Museum of Houston

SECRET
SPECIAL ELITE CRIME RESOLUTION AND ESPIONAGE TEAM