FLING Family Research Large-Scale Study Design

Goals of Study

1. Develop reliable and valid instruments/strategies to assess intergenerational learning in art museum interactive spaces, and, ultimately, be useful and practical for the field to use. Most important, create data collection methods that are interesting and fun for families to do.
   a. What instruments/strategies are most effective in collecting data on what benefits?

2. Better understand how and in what ways interactive art museum experiences enhance intergenerational/family learning. (would like to find a better word than learning)
   a. What is the demographic profile of families/IG groups?
      Gender, age, social group
   b. What is the psychographic profile of the families?
      What motivates visitors to attend (identities scale?)
      What percent of families who visit the interactive space did so because it was their primary destination or reason for coming?
   c. How do families/IGGs connect interactive spaces with other museum spaces?
      What is their general museum visit pattern? Art museum visit pattern? Specific museum visit pattern?
      What percent of families who visit the museum also visit the interactive space?
      What percent visit collections/exhibitions and amenities (shop, cafe, RR)?
   d. How do families benefit from the interactive experience?
      What are the ways in which families socially engage/interact while in the interactive space?
      What do families do in the spaces?
      How do families rate importance of benefits?
      What variables are most meaningful in explaining how families rate the benefits of their experience?
      How do families remember and talk about the museum experience they just completed?
      How do individual group members differ in how they perceive which benefits happen where, if at all?

Define Family/intergenerational group: Any group of 2 or more people with at least 1 adult and 1 child under the age of 16 (younger? what is bottom and top age range for spaces?) that is not part of an organized group (school, scouts, church/temple unless attending in family groups etc. with exception of home-school groups?)

Methods/Strategies

Social Interaction Observations
Tracking and Social Interaction Coding (semi-cued, sign at entrance)
Choose random family groups as they enter the interactive space. Invite them to complete a short demographic written survey. e.g., group relationship, ages, why there?
If group fits “family/IG” definition, note time enter and leave space, calculate total minutes. (not timing at individual stations/areas) Total time in space is data for individual museums, probably not useful for larger 3-museum study as space sizes are different or we might be able to do a sweep-rate-style formula to equalize different sizes.
Using floor plan of interactive code for type of social interaction. Not counting how many times an interaction happens at a particular station but IF it happens. We will record the areas it happens for the individual museums. Larger study will not use the “where”, only the “if” and possible code for type of
interactive experience, e.g., art making, dramatic play.

Possible types of social interaction
1. Parallel/side-by-side activity/play
2. Equal engagement/co-discovery
3. Adult leads/guides/directs child/children
4. Child leads/guides/directs adult
5. Child leads/guides/directs child
6. Adult leads/guides/directs adult
7. Adult stands back, watches/supervises at a distance
8. Melt-down, fracas, argument

Analysis:
Descriptive statistics: Average Time spent in spaces, may use sweep-rate type formula to adjust for different sizes of the three galleries
Heat maps of types of social interaction, code types of stations in collaboration with research museums, e.g., drama/role play, activity/content station – elements/principles – so data can be used on meta-level (Individual museums have individual heat maps for their space.)

Family Puzzle Reflection
Intercept families/IG groups as they are about to leave museum.
Invites them to engage in a group reflection activity – offers small gift for participating.
On magnetic board, group reconstructs what they did on their visit using photographs of the various collections areas, changing exhibitions, interactive space, interactive areas in collections/exhibitions, studio/classrooms and amenities. These could be color-keyed/mounted on color paper for easy recognition by data collector.
   Red – collections areas
   Orange – changing exhibitions
   Green – interactive space
   Blue – interactive areas in collections/exhibitions
   Purple – amenities (shop, cafe, restrooms, coat check)
   White – orientation (info desk)

   Rules of the Game: As a group, reconstruct what you saw and did today at the museum. Place these magnetized images on the board in the approximate order in which you saw them, the best you can remember. You all need to come to agreement that this best represents what you did.

Data collector takes notes or records then transcribes group as they complete this task. When complete, take digital photo of board.

   Next, place these statements/tokens on the board according to where they happened for you on the museum visit.

(Tokens/statements are benefits. Multiple copies of each token, one set of tokens for each individual in the group.)

   The children have the large size tokens, the adults have the smaller tokens. You don't all have to agree on the same placement.

Data collector takes notes or records then transcribes group as they complete this task. When complete, take digital photo of board. Data collector writes up notes of conversation and observation of process of completing both tasks. How they solved the problem. What they did when they disagreed. How they talked about what they remembered, how they got someone else to remember what they did. Document order in which groups did each type of thing. Then note which benefits were placed on each type of thing by children/adults.
Analysis:
Descriptive statistics on areas groups remember visiting, rank order of memories, assessment of benefits by area, differences/similarities of benefit choices between children/adults
Create rubrics to code ways groups negotiate the puzzle – relate to observations of types of family interaction in interactive space
Link to other data sources (survey, observations, etc.)

Family Creates
Immediate post visit interview/group interaction observation and creative activity.

✓ Option 1: Keeping in the spirit of art and creativity, we invite your family to create a visual representation that communicates the value of your museum experience here today. Your creative medium will be digital photography. Take a few moments to think about your creation/composition. You can take it [anywhere] in the museum, you can be in the photograph, in which case I will be your photographer or you can create a composition that symbolically represents your experience.
[NOTE: This is dependent on degree to which photographs can be taken in the museums – may be problem. We could download the photo and email it to the family, including them in the post-post web survey sample.]
[Once the work is described ask:]
If the museum wanted to display your art work and asked you for a title, what would it be?

✓ Option 2: Keeping in the spirit of art and creativity, we invite your family to “virtually” create a work of art that communicates the value of your museum experience here today. So take a few minutes to talk about what that work might look like. What parts of the museum might it show? Would you be in it? What might it look like? What would the overall feel or tone be of your work? What would the work be made of? Would it be 2-d (painting, drawing, print, photo, collage) or 3-d (sculpture) or media installation? [We would have a list of these questions in big type on the table so groups could consult the suggestions.] When you are ready, describe it to me. [Record their description]
[Once the work is described ask:]
If the museum wanted to display your art work and asked you for a title, what would it be?

Analysis
Create a rubric that codes works for parts of museum included, presence or not of group members, feel or tone, media/type, title.
Descriptive Statistics of codes
Linked cross-tabs with other data sources

Written Survey – Immediate Post and Web-Post-Post
Post survey distributed to sample of families/IGGs upon exiting museum and all groups in above samples.
Survey assesses visitors’ assessment of degree to which benefits occurred for them while at the museum. Also collects demographic and psychographic data on participating visitors. Could use stem-sentence approach: Our family visits art museums because...
Provide pictures of areas/spaces, ask visitors to indicate if visited spaces (like DeCordova)

Post-post web-based survey email link sent to all in survey sample who provided emails. 10% is average return on web-surveys so initial sample must be large (at least 2000 per museum).

Analysis
Descriptive statistics on demographics, psychographics, and benefits, spaces/areas visited Cross-Tabulations to determine effect of variables on benefits
Cross-tabs on linked data sources (observations, family puzzle, family creates)
T-tests on post and post-post results for significance of difference

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<thead>
<tr>
<th>Research Question</th>
<th>Method/Strategy</th>
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<tbody>
<tr>
<td>What is the demographic profile of families/IG groups?</td>
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<td>Gender, age, social group</td>
<td>Post Written Survey</td>
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<td></td>
<td>Post-Post Web Survey</td>
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<tr>
<td>What is the psychographic profile of the families/IGGs?</td>
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<td>Motivation, prior experience, interest</td>
<td>Family Puzzle Reflection</td>
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<td>Post Written Survey</td>
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<td>How do families/IGGs connect interactive spaces with other museum spaces?</td>
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<tr>
<td>General, art, specific art museum visitation</td>
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<tr>
<td>Patterns of visitation to: interactive space, exhibition/collections, amenities</td>
<td>Family Puzzle Reflection</td>
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<tr>
<td>How do families/IGGs benefit from the interactive experience?</td>
<td>Social Interaction Observation</td>
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<td>Ways families socially engage</td>
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<td>Family Creates</td>
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<tr>
<td>What families do</td>
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