

Talking Board

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THIS IS NOT A DEFINITIVE FINAL REPORT

FORMATIVE evaluation studies like this one often:

- **are conducted quickly**, which may mean
 - small sample sizes
 - expedited analyses
 - brief reports

- **look at an earlier version** of the exhibit/program, which may mean
 - a focus on problems and solutions, rather than successes
 - a change in form or title of the final exhibit/program

Mind – Formative Evaluation Talking Board

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PURPOSE

To determine:

- How interesting do visitors find the prototype?
- Do visitors experience the ideomotor effect? That is, does the disk move and appear to answer a question?
- What do visitors think is the point of the exhibit?
- Do they associate the exhibit with a OUIJA Board?
- Does the exhibit make them feel uncomfortable? In what way?
- Do they believe that this exhibit belongs at the Exploratorium?

METHOD

- The prototype was placed in the Life Sciences area on the Mezzanine. We felt that the Mezzanine would provide a quieter, more contemplative space than the prototype area downstairs.

Figure 1. The Exhibit Prototype. Photo taken in shop.



- We observed visitors as they used the prototype and then interviewed each group as they were leaving. See Appendix A for the interview questions.

DATA COLLECTED

- Data were collected on Sunday, December 12, 2004 between 12:45pm and 4pm.
- N=19 observations. N=18 interviews. Note that one of the groups observed did not wish to be interviewed.
- Demographics

Group Type	Count
Children	2 ¹
Teens	2
Adults	5
Family	6
Adult – individual	2
Child - Individual	2
Total	19

RESULTS

How interesting was the experience?

- Interest Rating

Interest Rating	Count (out of 18)
Uninteresting	1
Somewhat Uninteresting	2
Neutral	6
Somewhat Interesting	7
Interesting	2

- The prototype was interesting because
 - The way, or mechanism, by which the planchette moves was interesting (2 visitors)
 - It seemed to spell out answers to visitors' questions (2 visitors)
 - It reminded visitors of a OUIJA board (2 visitors)
 - It was novel (1 visitors)

¹ One group of children declined to be interviewed.

- The experience was not interesting because
 - It didn't 'work' (Visitors provided no further explanations) (4 visitors)
 - The planchette did not move (4 visitors)
 - It did not spell anything (2 visitors)
 - It simply did not appeal to them (1 visitor)

What did visitors try to do at the exhibit?

As part of their interview, we asked visitors what they were trying to do at the exhibit prototype.

- See if the board would spell something (8 visitors).
- Ask a question and see if the board would 'answer' (5 visitors)²
- See how the disk moves on the air cushion (3 visitors)
- Nothing in particular (2 visitors)

Did visitors experience the ideomotor effect?

That is, did the disk move and appear to spell a word or otherwise 'talk'?

- 10 out of the 13 visitors who looked for a 'message' reported that the exhibit did not work for them. That is; the disk either did not move (4 visitors), or it did not spell anything (i.e., move anywhere) meaningful (5 visitors).
- 2 visitors claimed that it spelled something meaningful to them:
 - Visitor14: It answered our question and we didn't feel like anyone was moving it.
 - Visitor19: I was trying to get an answer to my question. It was correct, so it weirded me out.

What did visitors think was the point or the main message of the exhibit?

- To show how the mind works (7 visitors)
 - More specifically, to show how we interpret randomness (2 visitors)
 - More specifically, to explore the subconscious (4 visitors)
- To demonstrate air pressure (3 visitors)
- To spell something (3 visitors)
- To explain the board game (2 visitors)
- To connect with another dimension (1 visitor)
- To have fun (1 visitor)
- To teach about research (1 visitor)
- It had no point (2 visitors)

² As opposed to the previous bullet, these visitors asked the board a question.

What did the exhibit remind visitors of?

- A OUIJA Board (15 visitors)
- An air hockey table (1 visitor)
- Nothing (2 visitors)

Did visitors feel uncomfortable at the exhibit?

- 16 visitors reported that they did *not* feel uncomfortable using the exhibit.
- 2 visitors, on the other hand, said that they did feel uncomfortable. They explained:
 - Visitor3: I saw a woman on Montel say never to touch something like that because evil spirits will get you (starts laughing),
 - Visitor8: (woman talking) Just that it reminded me of a Ouija board.
- 1 group whom we did not interview seemed particularly disturbed by the prototype. This was a group of three children, one girl and two boys, about 8 to 10 years old, who approached the exhibit twice. The first time they came to the exhibit, they talked to each other about the Talking Board as something 'witches' use. The girl seemed particularly agitated and refused to touch the exhibit. As the group was leaving, the planchette fell off the table. When the evaluator replaced the planchette, one of the boys asked the evaluator, "Did the witches do that?" A few minutes later, the three children returned. This time, the girl looked on as the boys played with the exhibit, and she seemed genuinely afraid. She insisted on keeping a good 15 feet away from the exhibit even though one of the boys was cajoling her to come closer. When her mother came by, she hid behind her and continued watching. When the evaluator approached the boys for an interview, they indicated that they had to leave with the rest of their group and could not stay to answer our questions.

Did visitors believe that this exhibit belongs at the Exploratorium?

- 13 visitors felt that the exhibit belongs at the Exploratorium. They explained
 - It's about science (6 visitors). For example
 - Visitor1: Yes, to show people how the air pressure changes the game. Kinda like air hockey.
 - Visitor13: it helps give a scientific explanation for the Ouija board.
 - Visitor15: Yes, it explains another factor of the unconscious mind.
 - It's interesting and fun (4 visitors)
 - People can connect to it (2 visitors). That is,
 - Visitor4: Yes. It's for the people who believe in the supernatural. It gives them a science connection.
 - Visitor9: Yes, because it's something that people can relate to.
 - Learning (1 visitor)

Visitor12: it still teaches.

- 5 out of the 18 visitors we interviewed did not think this exhibit should be at the Exploratorium
 - There’s no science (3 visitors). One visitor felt very strongly:
 - Visitor7: It’s about superstition, not science. Everything here revolves around principles of physics. This does not. It has to be the least productive use of an air table I’ve ever seen.
 - It doesn’t have a point (1 visitor)
 - It doesn’t work (1 visitor)

SUMMARY AND DISCUSSION

- Most visitors did *not* experience the ideomotor effect. Thirteen out of 18 (75%) visitors looked for a message, but 10 out of those 13 (77%) visitors did not see any message. Either the planchette did not move or it never spelled anything meaningful to these visitors. The key experience was very difficult to achieve with the current prototype, a major challenge we would need to address if we proceed with this exhibit.
- Less than 40% of the visitors we interviewed thought the exhibit showed something about how people think. The main message of the exhibit seemed to elude most visitors. This may be attributed to the fact that few visitors experienced the ideomotor effect.
- A large majority (79%) of the visitors we observed for this study associated the exhibit with a OUIJA board, known in popular culture as a tool used to communicate with spirits. This association is the exhibit’s main strength and, at the same time, its chief weakness. People know how to use the exhibit, know what to expect, and can make a ready connection between Talking Board and experiences from their own lives. For example, a few visitors we interviewed talked about how they had played with a OUIJA Board during sleep-aways. Yet, because visitors associated the OUIJA Board with the supernatural, a few visitors had very negative reactions to the exhibit, claiming that an exhibit that focuses on superstitions, with no obvious science content, has no place in a museum of *science*. A few visitors were actually afraid of the exhibit, with one 8-year old girl refusing to touch the exhibit at all.
- Visitors’ comments hint that another reason that visitors may have difficulty in accepting Talking Board as an Exploratorium exhibit lies in a misconception that an Exploratorium exhibit is an exhibit about the physical sciences. As one visitor claimed, “Everything here revolves around principles of physics.” (This is even though the prototype sat in the Life Sciences Area during this evaluation study.) Furthermore, a few visitors thought that the exhibit was about air pressure and that it was the air pressure that added the ‘science’ to this exhibit. These visitors, by no means, represent the majority. But, it is important to note this misconception as one that the Mind team would need to overcome for not only Talking Board but possibly other exhibits.
- The last two points suggest that Talking Board may not work very well as an exhibit that sits outside of a larger set of exhibits. Placing it in a thematic space may better set visitors’ expectations of the type of experiences they may have and help visitors in interpreting and seeing the *science* in these experiences.

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APPENDIX A: Interview Questions

How interesting would you say that was? Would you say that was ...

Uninteresting	Somewhat Uninteresting	Neutral	Somewhat Interesting	Interesting
1	2	3	4	5

1. What made it _____ for you?
2. Can you tell me what you were trying to do? [Probe]
3. What do you think is the point of this exhibit? Does it have a point? [What message is it trying to tell visitors?]
4. Was there anything about the experience that felt uncomfortable to you?
[If YES] What?
5. Have you used or seen something like this before, perhaps in your own life?
[If YES] Can you say more about what you saw or how you used it?
6. Do you think this belongs at the Exploratorium? Why/ why not?