



CENTER FOR RESEARCH  
AND EVALUATION

# **Science Days and Fun Days: How These Special Events Drive COSI Guest Attendance Report**

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*October 2, 2013*

*Prepared for:  
COSI*

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# Science Days and Fun Days: How These Special Events Drive COSI Guest Attendance Report

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## Background/Purpose

COSI offers special event programming on a monthly basis designed to enhance the guest experience: primarily Science Day and Fun Day special events. Science Days are events that highlight science topics, especially those dealing with our specific areas of focus, and celebrations surrounding events with a science theme, such as Space and Stars Day. On the other hand, Fun Days are events that are appealing to guests and are simple to implement, such as appearances by local sports teams, celebrities, performance groups, etc. COSI would like to better understand the impact special events have in driving guest attendance. The purpose of this remedial evaluation is to explore the degree of impact these two types of special events have on COSI guest attendance. The results of this evaluation will be used to inform and guide future special events program development.

## Evaluation Question

The overarching evaluation questions that directed this study are as follows:

- What role, if any, do Science Days and Fun Days special events have in drawing guests to COSI?
- In influencing them to return to COSI?
- How do Science Days and Fun Days compare with one another regarding their impact on COSI guest attendance?

## Methods

This study ran from March 2013 through September 2013. Guests coming to COSI during a Science Day or Fun Day event were approached and invited to complete a short pen and paper questionnaire. We used the continuous ask format in order to attempt to exclude subject recruitment bias and to include as many guests as possible in the study. The questionnaires were modified for the particular Science Day event or Fun Day event that was being offered that day. We chose to collect 50 questionnaires during each event for consistency in data between events.

Quantitative data from all instruments of this evaluation study were analyzed for central tendencies. Qualitative data obtained were analyzed to detect patterns and trends in participant responses. Category titles were developed for the detected patterns and trends, guest responses were listed under the most appropriate category, and response frequencies were calculated for each category.

## Findings

Due to reaching data saturation, we chose to close the study in September 2013 rather than continuing it to March 2014. A total of 435 questionnaires were collected from five Science Day events and four Fun Day events. Table 1, on p. 2, describes which of the guests visiting that day were COSI members, why they chose to visit COSI that day, who helped make up the party they visited with, and how often they usually visit COSI.

Table 1: Guests visiting COSI during special event days

		Frequencies	
		Science Day	Fun Day
<b>Member</b>	Yes	104 (44.3%)	89 (44.5%)
	No	131 (55.7%)	110 (55.0%)
<b>Why we came to COSI today</b>	For a specific COSI exhibit/event/movie	69 (29.4%)	54 (27.0%)
	For the children/children wanted to come	35 (14.9%)	31 (15.5%)
	Visiting friends/relatives/ Columbus	25 (10.6%)	20 (10.0%)
	Special occasion	19 (8.1%)	10 (5.0%)
	Time with family/friends	18 (7.7%)	17 (8.5%)
	It's educational	16 (6.8%)	5 (2.5%)
	Heard about COSI from family/friends	14 (6.0%)	12 (6.0%)
	It's fun to visit COSI	13 (5.5%)	16 (8.0%)
	Weather	10 (4.3%)	12 (6.0%)
	We are reciprocal members of another museum	5 (2.1%)	1 (0.5%)
	Have not been to COSI before/ for a long time	4 (1.7%)	11 (5.5%)
<b>Today I came ...</b>	with other adults and children	158 (67.2%)	140 (70.0%)
	with children only	51 (21.7%)	36 (18.0%)
	with other adults	22 (9.4%)	22 (11.0%)
	alone	4 (1.7%)	1 (0.5%)
<b>Ages of children</b>	0-5 years	89 (37.9%)	102 (51.0%)
	6-12 years	135 (57.4%)	84 (42.0%)
	13-17 years	40 (17.0%)	13 (6.5%)
<b>I have been to COSI this often in the last 18 mo.</b>	0 times	100 (42.6%)	86 (43.0%)
	1-3 times	71 (30.2%)	58 (29.0%)
	4-6 times	35 (14.9%)	26 (13.0%)
	7-9 times	12 (5.1%)	16 (8.0%)
	over 10 times	15 (6.4%)	14 (7.0%)
<b>Total attendees</b>		<b>235</b>	<b>200</b>

We were interested to see how many of our guests were aware there was either a Science Day or Fun Day event being presented at COSI on the day they chose to visit and, if they were aware of the special event going on, how they had found out about the event prior to coming to COSI. Additionally, we wanted to know if they had come to previous Science Day or Fun Day events and, if so, whether or not that had influenced them to visit COSI that day. This information is presented in Tables 2 & 3 on the following page.

Table 2: Guest knowledge of special event prior to visit

Guests visiting COSI when a Science Day event was being held			Guests visiting COSI when a Fun Day event was being held		
		Frequency			Frequency
Knew about the <b>Science Day</b> event prior to coming today			Knew about the <b>Fun Day</b> event prior to coming today		
	Yes	96 (40.9%)		Yes	102 (51.0%)
	No	139 (59.1%)		No	97 (48.5%)
How I knew about the event before I came to COSI					
Guests visiting COSI when a Science Day event was being held			Guests visiting COSI when a Fun Day event was being held		
		Frequency			Frequency
Mail/Newsletter		12 (5.1%)	Mail/Newsletter		16 (8.0%)
Email		22 (9.4%)	Email		22 (11.0%)
COSI website		38 (16.2%)	COSI website		30 (15.0%)
other website		2 (0.9%)	other website		1 (0.5%)
TV		1 (0.4%)	TV		1 (0.5%)
Radio		1 (0.4%)	Radio		9 (4.5%)
Newspaper		3 (1.3%)	Newspaper		2 (1.0%)
Social media		3 (1.3%)	Social media		0
Word of mouth		6 (2.6%)	Word of mouth		5 (2.5%)

Table 3: Influence of special events on COSI guest intent to return

Guests visiting COSI when a Science Day event was being held			Guests visiting COSI when a Fun Day event was being held		
		Frequency			Frequency
Attended a previous <b>Science Day</b> event at COSI			Attended a previous <b>Fun Day</b> event at COSI		
	Yes	37 (15.7%)		Yes	35 (17.5%)
	No	197 (83.8%)		No	164 (82.0%)
Attending a previous <b>Science Day</b> would influence me to return			Attending a previous <b>Fun Day</b> would influence me to return		
	Yes	25*		Yes	25*
	No	11*		No	5*
Attended a previous <b>Fun Day</b> event at COSI			Attended a previous <b>Science Day</b> event at COSI		
	Yes	24 (10.2%)		Yes	23 (11.5%)
	No	199 (84.7%)		No	171 (85.5%)
Attending a previous <b>Fun Day</b> would influence me to return			Attending a previous <b>Science Day</b> would influence me to return		
	Yes	12*		Yes	11*
	No	7*		No	6*

\* Response frequency too low to report valid percentages

Finally, we were interested in how likely COSI guests were to come to a future Science Day or Fun Day event, and why they would or would not be likely to come. Table 4, below, shows the results of asking this of guests who chose to attend COSI during a Science Day event and Table 5, p. 7, shows the results of asking this of guests who chose to attend COSI during a Fun Day event.

Table 4: Science Day event guests likeliness of attending future Science Day or Fun Day event and why

<b>Visited COSI During a Science Day Event</b>				
	<b>Mean based on a Likert-type rating: 1 = very unlikely; 7 = very likely</b>			
<b>Reasons to attend or not attend a Science Day or Fun Day event</b>	<b>Likely to attend a Science Day event mean</b>	<b>Number of Responses</b>	<b>Likely to attend a Fun Day event mean</b>	<b>Number of Responses</b>
Personal/family schedule	3.6	13	3.3	10
Distance I live from COSI	2.4	39	2.4	40
Kids enjoy this type of event/place/experience	5.3	12	4.8	11
Educational, hands-on	6.0	21	6.7	3
New/unique/special experience	6.0	12	5.4	10
Child is too young	3.0	6	3.0	4
Fun	5.8	12	6.0	31
Children like science	6.6	11	n/a	0
For the children	5.2	6	5.0	5
Too crowded	4.0	1	4.0	1
Don't know about these events	5.3	3	4.8	6
Expense	4.0	1	4.0	1
Just no interest	2.5	4	1.3	3
Have a membership	6.5	2	n/a	0
	<b>Total responses</b>	<b>143</b>	<b>Total responses</b>	<b>125</b>

Table 5: Fun Day event guests likeliness of attending future Science Day or Fun Day event and why

Visited COSI During a Fun Day Event				
	Mean based on a Likert-type rating: 1 = very unlikely; 7 = very likely			
Reasons to attend or not attend a Science Day or Fun Day event	Likely to attend a Science Day event mean	Number of Responses	Likely to attend a Fun Day event mean	Number of Responses
Personal/family schedule	4.6	5	4.8	6
Distance I live from COSI	2.9	31	3.0	32
Kids enjoy this type of event/place/experience	6.0	6	6.6	5
Educational, hands-on	6.3	12	5.9	8
New/unique/special experience	5.0	5	6.0	3
Child is too young	3.5	11	n/a	0
Fun	5.6	9	5.9	21
Children like science	6.2	5	3.0	2
For the children	6.0	9	6.0	13
Too crowded	1.0	1	3.0	2
Don't know about these events	4.0	3	4.7	3
Expense	4.0	1	6.0	1
Just no interest	1.0	1	1.0	1
	<b>Total responses</b>	<b>99</b>	<b>Total responses</b>	<b>97</b>

## Discussion

We found that there were a number of similarities and a few differences between the guests that chose to visit COSI when a Science Day (SD) event was being held versus a Fun Day (FD) event.

- Only about 44% of guests to both types of events were members.
- Over 25% of the guests who visited COSI when both types of events were being held came for a specific COSI exhibit or movie or event. This was the most frequently cited reason for choosing to visit COSI that day.
- The majority (SD: 67%; FD: 70%) came with other adults and children making up their group.
- For Science Days, the greatest number of children visiting fell into the 6-12 year old age bracket while for Fun Days, they fell into the 0-5 year old age bracket, with more teens coming during a Science Day (17%) than a Fun Day (7%).
- For both Science Days and Fun Days, 43% of visitors had not been to COSI previously. Of the remaining 37%, the majority had visited COSI 1-3 times in the last 18 months.

In looking at the data that help us answer the first evaluation question, “What role, if any, do Science Days and Fun Days special events have in drawing guests to COSI?”, we find that over half the visitors coming during a Fun Day event and almost half coming during a Science Day event knew the event was being offered the day they chose to come. Knowing that close to 30% of persons visiting COSI those days did so primarily because of either a specific exhibit or event or movie, we perceived the possibility of a correlation between guests knowing there was a Science Day or Fun Day event and choosing to come to COSI. Therefore, we ran a Pearson

correlation test and discovered the correlation is statistically significant at the 0.05 level (2-tailed) for Science Days and the 0.01 level (2-tailed) for Fun Days. Thus, it would be safe to conclude that the Science Days and Fun Days special events do have some impact on drawing visitors to COSI.

We also wondered if attending one or more Science Days and/or Fun Days influenced whether or not guests chose to return to COSI for later visits. The data suggests the following points in answering this question.

- Visited COSI during a Science Day
  - Almost 16% of the guests surveyed had visited COSI during a previous Science Day event.
  - Over half of those who had visited COSI during a previous Science Day event told us the Science Day event would influence them to return.
  - Although guests told us they were only slightly likely to visit COSI during a future Science Day or Fun Day, the likeliness of this increased slightly, especially regarding future Science Day events, with guests who knew there was a Science Day event going on prior to visiting COSI.
- Visited COSI during a Fun Day
  - Only about 10% of the guests surveyed had visited COSI during a previous Fun Day event.
  - Almost half of those who had visited COSI during a previous Fun Day event told us the FD would influence them to return.
  - We found that guests who visited COSI during a Fun Day event told us they were slightly more likely to visit COSI during a future Fun Day or Science Day. We again found the likeliness of this increased, especially regarding future Fun Day events, with guests who knew there was a Fun Day event going on prior to visiting COSI.
- We found that the reasons given by guests for either being likely to attend a future Science Day or Fun Day event, were quite similar, with only a few differences. This held true whether they visited COSI during a Science Day event or a Fun Day event. The main reasons given for attending a future event were that COSI provides educational, hands-on experiences in a unique and fun manner. For future Science Day events, guests also told us that their children's love of science would play a major role in attending future events.
- Guests who attended either a Science Day or a Fun Day event also gave similar reasons for not being likely to attend a future event. The major reasons given were they lived too far away from COSI to make it feasible to visit very often and/or they were busy and could not fit it into their schedules. A few guests indicated their child was too young to attend either type of event.

From the data collected, we can infer that guests visiting COSI during a Science Day or a Fun Day event range from slightly to somewhat likely to attend a future Science Day or Fun Day event, answering our second evaluation question.

Finally, we wanted to know if there was a difference in how Science Days and Fun Days compare with one another regarding their impact on COSI guest attendance. From our data we would conclude that Fun Day events appear to have slightly more of an impact on COSI guest attendance than do Science Day events.



- More persons visiting COSI during a Fun Day event were aware of the event before they came to COSI (51%) than those persons visiting COSI during a Science Day event (41%).
- Those persons visiting during a Fun Day event were slightly more likely to tell us they would come to future Fun Day and Science Day events than those guests visiting during Science Day events.

## Conclusion

In looking at our data, it appears that Science Days and Fun Days do have an impact on drawing visitors to COSI and that those visitors who came knowing there was a Science Days or Fun Day event occurring told us they were more likely to return for a future Science Days or Fun Day event than those visitors who were unaware there was a Science Days or Fun Day event occurring the day they chose to visit COSI. Additionally, we found that Fun Days had a slightly greater impact on drawing guests initially to COSI and in their likeliness of returning for future Fun Day and even Science Days events.

## Appendix A



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Thank you for taking a few minutes to share your thoughts with us.

1. First, are you a COSI member?       Yes       No
  
2. What made you think of visiting COSI today?  
\_\_\_\_\_
  
3. Today I came:    alone     with other adults     with other adults and children     with children only  
If you came with children, what are their ages? \_\_\_\_\_
  
4. How often have you visited COSI within the last 18 months?  
 0 times       1-3 times       4-6 times       7-9 times       over 10 times
  
5. Did you know COSI is hosting a Science Day event, the Engineering Challenge Day, before you arrived today?    Yes     No  
If you answered yes, please tell us how you knew the Engineering Challenge Day was at COSI today. \_\_\_\_\_
  
6. Have you attended other Science Day events at COSI?       Yes       No (If no, skip to #7)  
If you answered yes, about how many have you attended? \_\_\_\_\_  
Did attending other Science Days make you more likely to come today?    Yes       No  
Why or why not? \_\_\_\_\_
  
7. COSI also has themed **Fun Day** events that are not focused on a science topic. Have you attended any Fun Day events at COSI?       Yes       No (If no, skip to #8)  
If you answered yes, about how many have you attended? \_\_\_\_\_  
Did attending other Science Days make you more likely to come today?    Yes       No  
Why or why not? \_\_\_\_\_
  
8. On the scale below, circle the number that indicates how likely you would be to attend a **Science Day** event at COSI in the next 12 months.  

	Very Unlikely			Neither likely nor unlikely				Very Likely
	1	2	3	4	5	6	7	

Why? \_\_\_\_\_
  
9. On the scale below, circle the number that indicates how likely you would be to attend a **Fun Day** event at COSI in the next 12 months.  

	Very Unlikely			Neither likely nor unlikely				Very Likely
	1	2	3	4	5	6	7	

Why? \_\_\_\_\_

Thank you! Enjoy your time at COSI today.

Thank you for taking a few minutes to share your thoughts with us.

1. First, are you a COSI member?       Yes       No
  
2. What made you think of visiting COSI today?  
\_\_\_\_\_
  
3. Today I came:  alone     with other adults     with other adults and children     with children only  
If you came with children, what are their ages? \_\_\_\_\_
4. How often have you visited COSI within the last 18 months?  
 0 times       1-3 times       4-6 times       7-9 times       over 10 times
  
5. Did you know COSI is hosting a Fun Day event, the Week of the Young Child Family Day, before you arrived today?     Yes     No  
If you answered yes, please tell us how you knew the Week of the Young Child Family Day was at COSI today. \_\_\_\_\_
  
6. Have you attended other Fun Day events at COSI?       Yes       No (If no, skip to #7)  
If you answered yes, about how many have you attended? \_\_\_\_\_  
Did attending other Fun Days make you more likely to come today?  Yes       No  
Why or why not? \_\_\_\_\_
  
7. COSI also has themed **Science Day** events, focusing on a science topic. Have you attended any Science Day events at COSI?       Yes       No (If no, skip to #8)  
If you answered yes, about how many have you attended? \_\_\_\_\_  
Did previously attending a Science Day make you more likely to come today?  Yes       No  
Why or why not? \_\_\_\_\_
  
8. On the scale below, circle the number that indicates how likely you would be to attend a **Fun Day** event at COSI in the next 12 months.  

Very Unlikely		Neither likely nor unlikely		Very Likely		
1	2	3	4	5	6	7

  
Why?  
\_\_\_\_\_
  
9. On the scale below, circle the number that indicates how likely you would be to attend a **Science Day** event at COSI in the next 12 months.  

Very Unlikely		Neither likely nor unlikely		Very Likely		
1	2	3	4	5	6	7

  
Why?  
\_\_\_\_\_  
\_\_\_\_\_

Thank you! Enjoy your time at COSI today.