

**G**OODMAN RESEARCH GROUP, INC.  
Program Evaluation • Consultation • Market Research

*Cambridge*  
*Science Festival*  
**Summative Evaluation**  
**Executive Summary**

**PREPARED BY**

Rucha Londhe, Ph.D.  
Irene F. Goodman, Ed.D.

**SUBMITTED TO**

MIT Museum, Cambridge, MA  
WGBH, Boston

August 2007

## EXECUTIVE SUMMARY

The *Cambridge Science Festival (CSF)*, the first of its kind in the United States, was held for nine days, from April 21 through April 29, 2007, with approximately 100 events offered in 56 venues throughout Cambridge, MA. Patterned after science festivals in Europe, CSF was a public celebration, offering a wide range of science- and technology-related activities. The Festival sought to “make science accessible, interactive and FUN, and highlight the excitement of discovery and the impact of science in all our lives.” Families and school-aged youth in the community were target audiences for the festival.

A primary goal of CSF was to showcase Cambridge’s unique contributions to science and technology. Other key goals were to make science a more significant and intricate part of the local culture and community; increase civic engagement in science and technology issues; deepen the public’s understanding of the role that science plays in the fabric of their everyday lives; and foster an interest in science and technology careers among middle school children.

The lead presenter of the festival was the MIT Museum, and WGBH was the lead media collaborating partner. The other collaborators were the City of Cambridge, Cambridge Public Schools, Cambridge Public Libraries, MIT, Harvard University, and the Museum of Science.

The different types of events were: Activity, Exhibition, Tour, Talk, Performance, and Media. The festival was organized into several different themes: Innovations, Science & the Arts, Energy & the Environment, Science of Everyday Life, and Science in the City. While most of the events were ones that people could attend in person, there was also an entire stream of media offerings by WGBH (television, radio, and online) all nine days of the festival.

Goodman Research Group, Inc. (GRG) was contracted to evaluate the Cambridge Science Festival. GRG’s summative evaluation focused on establishing the profile of the festival attendees and assessing the success of the festival, including benefits for the attendees and changes in their attitudes toward science and careers in science. The process evaluation focused on understanding the challenges faced and the lessons learned by the collaborating organizations with regard to the implementation of the science festival and its various components and exploring their plans for future festivals.

GRG researchers observed and collected survey data at a cross-section of events over the nine days of CSF. These events were selected in consultation with the Festival staff. GRG also developed a web-based survey that was housed on the Cambridge Science Festival web site. The web-based survey was designed to explore the experiences of users of the Cambridge Science Festival website, and also included questions about respondents’ experiences at the festival itself. Finally, GRG also carried out a modest study of three classrooms of students and their teachers who participated in the festival through pre- and post- surveys.

## KEY FINDINGS

### **The participating attendees, families, students and collaborating organizations benefited from the festival.**

By all accounts, the CSF was successful at exposing the attendees to a number of science activities and at highlighting the role of science in their everyday lives. It provided opportunities for students to gain science-based knowledge and to experience science beyond the school curriculum. The collaborators benefited from the festival because they were able to promote the public profile of their organization.

### **Many festival events were well attended and well received.**

Based on the number of attendees, it can be concluded that several of the events were quite popular, particularly those on the weekends and at night. For example, the Science Carnival was considered a huge success and experienced a very high audience turnout. On the other hand, events scheduled during the afternoon on the weekdays had low attendance.

The media events, although a part of the festival, were different from the rest of the events and hence needed special publicity efforts. The different names of *Cambridge Science Festival* and *Science in the City* did not enhance brand recognition and led to some confusion about WGBH being in the CSF. Furthermore, a few people thought the media offerings (TV and radio shows) were actual events they could attend in person, as opposed to broadcasts.

It was encouraging to note that the majority of the attendees do want to attend the festival next year. Moreover, the majority of collaborators also want to continue to play a role in the organization of the festival next year.

### **Students gained knowledge about Cambridge and local organizations.**

Students' opinions about Cambridge as a science city changed positively after attending the festival events. They were now more familiar with various science-based organizations in the area.

### **There was good opportunity to experience science, although there no change in attitudes toward science and science-based careers.**

The festival was successful in providing attendees and students with multiple opportunities to “experience” science and, in the process, gain knowledge. It cannot claim to have brought about a substantial shift in their science-related attitudes or in attitudes toward science- and technology-based careers. However, awareness is a good first step in the direction of attitudinal change.

## **The collaborating organizations faced – and surmounted – a few challenges during the implementation of the festival.**

The organization of the CSF was a positive experience for the collaborators. Since this was the very first time a city-wide science festival was being organized, they believed they learned a lot from this premiere. Although their roles in the organization of the festival were clear, collaboration among eight different organizations was a challenge. There was confusion about processes and expectations. In addition, since it was the first time anything like this was being offered in Cambridge, the festival organizers faced the difficult challenge of creating a festival identity. These challenges, however, have helped the collaborators to learn lessons such as beginning early with the organizing process and clearing spelling out the expectation for organization of future festivals.

## **RECOMMENDATIONS**

### **Enhance the CSF promotion and marketing in future years.**

In order to achieve the goal of improved marketing of the future festivals, there must be a collaborative effort among all the key organizations involved. We recommend that these organizations meet and discuss the efforts and strategies for marketing sooner in the planning process than was done in the current year. In addition, the actual efforts for the marketing of the event will need to begin sooner than they began this year.

Improved festival promotion includes making more use of TV, local radio, and print for communicating news about the festival to reach a larger number of Cambridge residents, handing out brochures and pamphlets to Cambridge area schools, focusing on *families* as the target group for the festival, and putting more attractive banners throughout the city. Because many Cambridge residents did not receive any postal announcements, more widespread postcard mailings to households and promotional displays around the city should boost familiarity, as will publicizing early and often that this is an annual event.

Because the festival was less successful in reaching low-income under-represented minority families – who make up fairly large percentage of the city – than it was in reaching Caucasian, English-speaking families, we recommend that enhanced promotion focus on this population subset.

### **Make changes to the CSF schedule.**

We recommend more strategic placement of events during the festival time period, so that several events designed for a similar audience are not competing with each other. Another possibility is changing the format of some events to “exhibition” so that people can attend at their convenience, rather than at one set time. Taking the most popular types of events and offering them multiple times during the festival will allow people to feel they have more choices. These

recommendations should help address the greatest concern voiced by attendees about the scheduling of the festival.

### **Create a unified brand identity while also delineating the WGBH media events.**

We strongly recommend a unified name for all festival components, which we believe will yield greater brand identity. This should help alleviate some of the confusion due to the separate name for the media offerings. We also recommend that future brochures and other marketing materials differentiate the variety of activities and broadcasts.

### **Consider designing events to attract specific groups.**

If CSF wants to attract specific groups to the festival in the future, we recommend tailoring special events for these groups. This includes special interactive, hands-on activities and events for students that provide opportunities to work in smaller groups with adult supervision. We also recommend that there be inclusion of more activities and events that are directly based on middle and high school science curricula; this might help boost student attendance next year.

The festival in the future years should consider including specific activities designed to attract people from minority racial and linguistic groups or have translators for some key activities.

### **Make improvements to the CSF website.**

We recommend enhancing the CSF website so that the excellent content is presented in a more user-friendly format. For example, we recommend having a box on the home page that highlights events and activities happening at the festival at that moment. Other recommendations include allowing easier access to a particular day's activities, making it easier to print the schedule, and allowing the visitor to sort the events by more categories.

This first-ever festival was quite successful. If the festival organizers work together and incorporate the various lessons learned from the premiere, the CSF has potential to become institutionalized as a key annual event in Cambridge.