

# **Executive Summary**

## **DragonflyTV *GPS: Going Places in Science***

### **Study of Collaborations between Museums and Media**

#### **Introduction**

As part of the Summative Evaluation of the DragonflyTV *GPS: Going Places in Science* series, between July 2005 and November 2006, RMC Research conducted a study of the collaboration between the DragonflyTV (DFTV) production staff and its science center and museum partners. Central to the innovative DFTV series, the collaboration involved museum professionals in the production process and presented science museums and centers as sites of learning and of fun on national television. It also offered professionals in the two industries a ground-breaking opportunity to learn about another format for informal science education.

More than a single collaboration, the experience involved fifteen unique partnerships, between DFTV's consistent and relatively small content and production staff and the staff of fifteen diverse informal learning institutions. Thirty-three people, including educators, curatorial and public relations staff in the partnering institutions and DFTV staff members, were interviewed for the study. Baseline and final interviews were conducted to capture both initial expectations about the collaboration and ideas about learning in informal science education venues, and to collect actual collaboration stories and reflections on participant learning.

#### **Findings**

##### **Building a Successful Collaboration**

The study presents a number of findings related to conditions necessary for and challenges of building successful media-museum partnerships. These related to building effective communication strategies, recognizing a shared mission, and clearly articulating the roles and responsibilities of the partners. In addition to these universal elements of successful collaborations, a number of concerns specific to the museum and media work cultures and environments also emerged. While many of these findings would be true in any cross-industry collaboration, others are unique to how televisions and museums work. Selected observations included:

- Recognizing that the two sets of partners shared a common mission was crucial in building trust and understanding, and in allowing these quickly-established and intense partnerships to move ahead.
- On other media projects, museum staff had typically not been asked to review rough cuts. This stood out as an indicator of how engaged they became in the collaboration.
- The very different timelines along which museums and television produce their products was a source of tension between partners.
- Partners on both sides of the collaboration often began with little understanding of the other institution's organizational structure or the roles and relationships of different positions within the organizations.

- The very different uses of the term “interactivity” in the television and museum worlds initially impeded effective communication.
- Television thrives on having access to diverse experiences, but capturing these sometimes meant confronting and accommodating museum rules and regulations.

### **Outcomes**

The study also presents findings related to the outcomes of the collaboration, including museum and television partners’ appraisals of the value, quality, and potential use of the science inquiry segments produced through the collaborations, and the cross-industry learning which resulted from the process of collaborating. Some of the findings related to outcomes included the following:

- Museums were unanimously enthusiastic about the final products, although in some cases publicity value was a factor in their assessment of the overall product.
- DFTV staff demonstrated a growing understanding of museum staff desires for establishing the uniqueness of their institutions and covering specific exhibits or features of their institutions.
- Museum staff looked forward to using their segments for both educational and marketing ends.
- Museums were particularly happy with the segment’s value in giving them national publicity and recognition. They saw potential marketing value, but they varied in their success leveraging the segment for local publicity at the series’ premiere.
- DFTV’s inclusion of inquiry both in the museum and outside the museum walls inspired several of the partners. Many of the museum educators were particularly enthusiastic about using DFTV as a model and inspiration for linking their institutions to real-world concerns and investigations.
- Discussions with the museum educators illuminated some points of overlap in what television and museum education can achieve, as well as opportunities for complementing each other.
- Television can provide non-local experiences, present in a few minutes processes that occur over long periods, and reach large audiences.
- Museums are more adept at providing opportunities for longer term learning and showing the messiness of actual investigations.
- In a few cases, the collaboration inspired reflection on media use within museums.

### **Conclusion**

The collaboration study examined fifteen different collaborations between DFTV’s consistent and relatively small content and production staff and the staff at fifteen different informal learning institutions. The “one-to-many” structure of the project allowed DFTV staff members to use the experience gained in one collaboration to inform their work with the next, while each set of museum partners experienced the collaboration as a one-time event.

Individual participants from both sets of institutions entered the process with varying knowledge of informal science education and of work in one another’s fields of education

(television or museums). For instance, DFTV's content and senior staff had a good grasp of science education concepts, while production staff members were relative newcomers to the field. Museum educators also ranged in the depth of their experience in science education and inquiry-based learning, and represented institutions with different histories and emphases, such as research or hands-on experiential agendas, different content areas. They also brought very different levels of experience with television production or with the media more generally to the partnerships.

While DFTV staff shared a fairly narrow view of science education, as shaped by the agenda for DFTV *GPS* segments, and more broadly through excluding consideration of other audio-visual formats, from radio to iPods to IMAX films, museum educators were often involved in a range of experiences, from exhibits to after-school programs. DFTV staff originally approached the museums intending to focus on a particular exhibit, assuming that this would be the logical fit for a DFTV inquiry segment, but over the course of the season realized the need to explore the range of museum experiences which might be applicable to a science investigation story.

Despite the very different starting points and the fact that DFTV was clearly the lead partner, the collaborations were overall judged a great success. Only one potential partner backed out after preliminary discussions, and DFTV successfully accommodated the needs of fifteen different institutions. The result was a set of highly individual science investigation segments that incorporated the science center as a source of content or starting point for a broader investigation. Museum partners were ultimately very pleased with their segments, including the representation of the institution and of the science. DFTV staff felt that working with these partners opened their eyes to new content that they would not otherwise have considered for the show. Creating a direct link to museum exhibits lead the producers to new types of investigations and storylines. The resulting investigations range from the design of a doghouse to the creation of an art installation, which expanded the format that had been applied to earlier seasons of the series. The segments portray museums as fun places for gaining knowledge in science, applicable to a range of interests and endeavors.

The collaboration also "pushed the envelope" on DFTV's earlier approach to inquiry. Although some of these segments were more challenging to produce from the DFTV perspective, they were also among the most innovative.

A significant lesson DFTV learned over the course of the season was an expanded range of strategies for partnering more effectively with museums and their various departments. Collaboration participants had to meet a number of challenges, both those that are common to all collaborations, such as articulating shared goals and clarifying roles and responsibilities, and those that were unique to these partnerships, such as tensions between educational outcomes and publicity considerations (likely to arise any time the media are involved) and the unique uses of terms ranging from "casting call", to "inquiry-based" and "interactivity".

All participants gained exposure to and a new understanding of work conducted in another arena of informal science education. Museum staff learned that not all television productions are the same, and expanded their understanding of the kinds of science learning experiences which television can offer. The TV producers broadened their

understanding of learning in museums, and expanded their sense of what “scientific inquiry” can mean. In many cases, the collaborations also occasioned reflection on practices within each profession. The DFTV were able to quickly integrate their experiences and reflection into the next round of stories and partnerships, while museum professionals will take the lessons they learned back to their institutions, a diffusion which will happen more gradually and will be harder to document decisively.

Each set of partners learned about the other—their work cultures, the media they work in, and their points of continuity as informal science educators. They also expanded their own visions of potential learning experiences, and developed a better understanding of how to work in media-museum collaborations in the future. But perhaps most important, the collaboration opens space for a new dialogue about strengths, limitations and potential for informal science education in different settings.