



MULTIMEDIA RESEARCH

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Review of Museum-based Segments of  
*DragonflyTV: Going Places in Science*

Report for  
Twin Cities Public Television

by  
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## INTRODUCTION

To effectively guide future museum-based segments in Twin Cities Public Television's *DragonflyTV: Going Places in Science* series, Multimedia Research implemented a formative evaluation with 19 museum educators, exhibit directors and public relations staff. After viewing segments, museum staff responded to an online questionnaire focusing on the value and credibility of the segments, how the segments represent the museum community, and interest in participating in the series.

## PROCEDURE

The following materials were mailed from TPT to each respondent:

1. Background of *DragonflyTV: GPS* series
2. Descriptions of 15 segments
3. DVD with 15 *DFTV:GPS* segments
4. Printed copy of the online questionnaire

Respondents were asked to

1. Read through #1 above as background to the project
2. Read through #4 above to have an idea of the type of feedback asked for
3. Read #2 above
4. Watch at least 4 of the 15 DVD segments, paying attention to how such museum-based segments might be valuable to their museum and the museum community
5. Complete the online questionnaire.

Respondents were given the following instructions in the online questionnaire:

Thank you for helping *DragonflyTV* consider the value of its *Going Places in Science* programs. Before answering this survey, please read the written information in your package and view at least FOUR of the 15 *Going Places in Science* segments on the DVD.

Please answer the questions below as completely as possible. If you feel your museum position or background does not permit you to answer a question, please explain why in your question response. The questionnaire first asks some background questions about current practices in your museum and then asks about the *DragonflyTV: Going Places in Science* video series in relation to your museum and the museum community as a whole.

Respondents were asked to answer questions in an online questionnaire based on their current institutional position. In the results below, questions are bolded and summary results are italicized.

## Q&As

### Background

**What is your position in the museum, zoo or aquarium?  
What audiences do you work with most?**

*The 19 respondents include 3 who are institutional directors, 7 who are mainly in education, 6 who are mainly in exhibits, and 3 marketing and public relations staff. Most respondents work in relatively small science and nature museums, spread across the country (see map on p. 3). All museums serve the “DragonflyTV” audience levels.*

Position	Audiences
Executive Director	Preschool and K-6, families holidays and weekends, public school field trips, home-school
Executive Director	Families with children, school children and teachers
Director	Visitors, children and staff
Director of Education	K-8, Service and Pre-service Educators
Director, Museum Education	Preschool through adults. Our primary target audience is 7-14 year olds and their families.
Director of Science Education	Children grades 1-6, parents, teachers
Education Specialist	K-12 students, both in classes and in other organized groups (i.e. after-school programs, youth groups, etc.), K-12 teachers
Education Theory Specialist and School and Teacher Program Manager	Pre-K-6th grade school groups and some toddler/parent programming. Teachers for teacher trainings.
Public programs manager	Mostly families with young children and school groups
Director of Education & Exhibits	350,000 visitors per year. Primary audiences include general public, school groups on field trips, evening events (rentals). Secondary audiences include teachers, scouts, special groups.
Vice President of Exhibits	I work primarily with exhibit and program developers, designers, and fabricators. The museum I work at works primarily with school and family groups.
Director of Exhibits	General audiences informally in a museum setting
Director of Exhibits	We are a museum that caters directly to families, primarily with elementary aged children. I am not typically working directly with these people unless it is for an exhibit evaluation or occasionally for a physics-based program I will deliver.
Exhibit Developer	I design exhibits for K-6 school groups and the general public audience.
Exhibit & program coordinator	K-6
Exhibit Coordinator	K-12 to adult providing special exhibits and programming for all ages.
VP Communications and Marketing	Families.
Director of Marketing and Public Relations	Media, Community Representatives
Marketing & Communications Manager	Our museum serves primary audiences of urban and suburban families with children under 12 and teacher-student groups, pre-K-grade 12. In my role, I interact with the public, with media, with museum staff and stakeholders and with the local community.

## Museum Sites of Respondents



Note that in the following results pages, respondent quotes are ordered top-down according to position: Institutional directors, Education, Exhibits, Marketing and public relations.

## Video Usage

### **Do you currently show videos or parts of videos of any kind to your public or students for in-house, outreach or promotional programming? [exclude videos in exhibits/kiosks]**

*Three of the 19 respondents explain that videos do not meet their educational presentation philosophy, equipment, time or space availability. Other respondents describe video as being used in workshops, demos, classes, camps, auditoriums, and distance learning. The value of video is to entertain and educate visitors, give visitors experiences that they would not otherwise have, and provide context and depth for topics and concepts. Some museums describe producing their own video for visitors who can't come to the museum and for promotional and fund-raising purposes.*

#### **No. What obstacles must be overcome to encourage your use of videos?**

- I would love to use them more for teacher trainings that we do for teachers. Otherwise we mainly do hands-on, educator-led programming that tries to take advantage of the natural settings outside of our sites. With that being our focus we haven't used a lot of video yet, since it doesn't always seem to fit in with our mission of introducing kids to the natural environment. However, short video clips COULD be used to introduce kids to topics and ideas, which may be hard for them to visualize on their own. The only place we currently use video is within our Rolling Rainforest traveling exhibit in a 'canopy viewer periscope' that allows kids who can't enter into the trailer at the canopy layer and walk down the stairs (kids in wheelchairs for example) to look in something and see canopy animals and plants. It is quite effective. Our other issue is that we are a small museum and with many sites so buying and maintaining expensive TV and video equipment would be an expensive expenditure. [Discovery Creek Children's Museum]
- We haven't found a need to use video in our educational programming. We prefer to focus on using some type of demonstration. Obstacles would include length of the video or the segment, time restraints with our programming, access to the television and DVD/video equipment, and organizational attitude/interest. [Nauticus, The National Maritime Center]
- I don't know. I usually do not work directly with the school groups or public. [Explorit Science Center]
- Space/hardware and a video series with a program guide that ties into current programs. [SEE Science Center]
- It's just a matter of showing education staff members what a valuable resource videos can be in their program. [Museum of Discovery and Science]

#### **Yes. Please describe your current usage of video for in-house, outreach or promotional programming. What value do videos add to any of these activities?**

- We use video in our exhibitions, workshops, video in our small theater/stage. Video helps take visitors to locales they would not otherwise be able to visit. Videos add entertainment, interest, as well as additional expertise. Video is additional 'floor interpretation,' an additional 'staff member,' if you will. [Science Spectrum]
- Only minimal usage currently. We will show educational science videos when our live performer is unable to do a science demonstration. We have a projector and theater and we show videos for private events and lectures. [Science Works Hands-On Museum]
- We sometimes show short videos for classes that are conducted at the museum. These videos help to illustrate activities or places that we cannot do or visit at the museum. [North Coast Nature Center]
- Many of the NASA DVD's that come through via both our NRC (NASA Resource Center) and through the Museum Alliance. We also use clips and parts from various miscellaneous videos (*Bill Nye*, Ed. videos, etc.) We've also created one in-house DVD virtual tour of our building (used to be a coal power plant). Videos allow us to expand our current knowledge as well as strengthen current programming without having to be the expert. Why reinvent the wheel? [Science Central]
- We show large-format films in our planetarium. Occasionally during camps we use videos to cover content in a different way - e.g. for Gross Science Camp we've used a video on the microbes found in your house. [Rochester Museum & Science Center]

- Video usage is limited because our programs are hands-on, but we do occasionally use short clips of video sequences from NASA, animal documentaries, etc. enhance and give some of our public and camp programs more context and connections of the physical concept they are experimenting with to the real world. [Science Discovery Museum]
- We distribute videos at no charge to interested teachers. The videos are about 30 minutes long and are produced specifically for classroom use. Each video is accompanied by a printed teachers' guide with ideas of how to incorporate the videos into the classroom. The videos provide access to our collections and expertise particularly for those who are not able to visit our institution, though they can also be a good pre- or post-visit lesson for a field trip. [Lemelson Center]
- We play nature oriented videos in the 'Naturalist Center', a place on the main floor designed for inquiry-based interpretive programming. The videos run throughout the day while we are open without ties to any particular program. The only exception is a dinosaur program where the instructor uses a video with computer animation of dinosaurs. [California Academy of Sciences]
- Videos are used in camp programs, classroom programs, and distance learning programs. Videos are used to deliver educational content and provide students exposure to experts and experiences that are often not available to classroom programs. Videos can provide depth and a perspective to a topic that otherwise would not be achieved in the classroom. [OMSI]
- Besides exhibit kiosks, we have regular showings of HD content in our auditorium. We provide free showings of repurposed BBC natural history material -10 hours a week (20 shows). We also have 2 AMNH biobulletin screens (52' plasma) showing and 1 SpaceView 52' plasma screen running content from Space Telescope Institute. You could argue they are exhibit kiosks but they are also on the edge crossing over into theatre and movies type presentation. [NC Museum of Natural Sciences]
- At the end of the night for our 'camp-ins' we show a science video as a way of winding down, preparing to sleep. We also utilize short in-house videos when giving presentations to either report out from a project or to garner money for a project. When used in presentations these videos are primarily intended to impress the viewer, either giving them short snapshots of what is going on at the museum, or detailing a project in a video format created by the students doing the project. [Catawba Science Center]
- In-house videos include historic documentaries on nuclear history and science and science-based videos on subjects dealing with the atom and nuclear science and individuals involved in this area. [National Atomic Museum]
- We use videos to educate and encourage support of community leaders in our capital campaign. We also use IMAX trailers on video in outreach and promotional programming. [Rubenstein Museum]
- We use in-house video in a very limited way, as an occasional part of school programming and as part of our summer camp programming where appropriate. We also have shown video presentations to the public in our planetarium. Our in-house technology often limits use of video, but from my role (as observer of programming), it does seem to engage people, meeting them on familiar ground. We do use video promotion such as TV ads and participation in local video promotion projects. Video for promotional purposes is highly effective as it creates a more compelling picture of the museum experience than many other media. [EcoTarium]

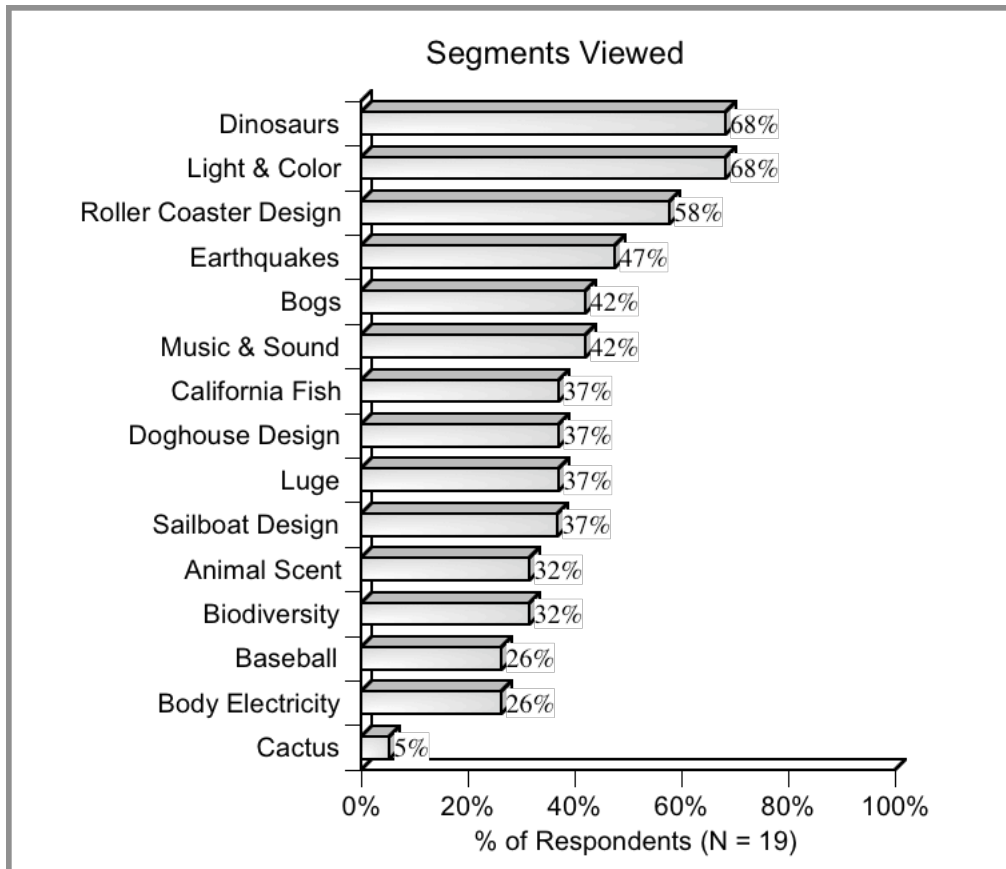
**How important is it that science materials that you use in your programming be focused on inquiry?**

*Two-thirds of 19 respondents report that it's "very important" and one-third "somewhat" important that science materials focus on inquiry. Responses are not related to position category.*

## Segment Reactions

### Which of the 15 segments did you view?

Respondents were asked to view at least 4 of the 15 segments. On average, respondents viewed 6 segments, ranging from a low of 3 to a high of 9. Viewing frequency is not related to position category. Segment choice does not appear to be related to geographical region, except Cactus was only viewed by the New Mexico representative.



## Generally, what did you like about the segments you watched?

*Reviewers are quite positive about the segments. More than half (58%) of respondents appreciate the kid-centered approach: presenting a diversity of friends, some in atypical roles, as main characters, acting empowered and narrating with enthusiasm. Half (52%) of viewers like most the connections made between experiences inside and outside the museum setting. They enjoy the variety of relationships presented and, interestingly, those who noted an exemplar chose different segments. Almost half (47%) focus on the high entertainment quality, that the segments are fun, engaging, well-written and well-edited. Two-fifths (42%) of the group are most impressed with the presentation of inquiry methods and scientific investigations, from initial curiosity through data collection and analysis.*

- They were entertaining. They were colorful, energetic, engaging. They were well written and produced. They were a good length.
- I especially liked the segments such as Bogs and Music and Sound in which the kids were able to demonstrate inquiry based activities that they could do at home or at a museum without a lot of special help. I enjoyed the variety of kids and their enthusiasm. I liked the connection between a museum experience and 'real world' exploration.
- I liked that the segments were narrated by the children and that the videos showed using scientific methods to answer questions. It put real science into use in a way that made it real and tangible for viewers.
- I liked that kids were the central characters. Also, the diversity of kids used. It was also nice to see some of the resources that the kids tapped into at the various science centers, especially the ones I've not been to.
- The segments seemed to fall into three categories: 1. Those that seamlessly connected the museum experience with the outside experience. 2. Those that emulated the science center experience in the outside experience. 3. Those where the museum/science center experience seemed secondary to the outside experience. For the purpose of connecting institutions of informal learning with self-directed activities, I was most impressed with the segments that feel into category 1 above (Dinosaurs and Biodiversity).
- They were fun, student-directed, and on topics and themes that are relevant or of interest to teens. I liked that they highlighted an interplay between museums and real life experiences. Sometimes it involved wondering about something and being curious to find out more. Other times it was using a museum as a resource to solve a problem or challenge. It was good to show that there was variety: sometimes the inquiry began with the child (Body Electricity); sometimes a museum experience prompted inquiry and experimentation (Music and Sound); and sometimes the museum experience helped to solve an existing or presented problem or challenge (Doghouse, Light and Color).
- I liked that there were both boys and girls represented, as well as students of various racial and ethnic backgrounds. I particularly liked that the girls were often in atypical roles - like the girls who rode luges. I also liked that they showed the kids taking the initiative in learning, rather than having an adult or 'expert' lead them through the exercises.
- They are fun and do a great job at showing kids doing scientific investigations. The kids are getting a chance to answer their own questions, which is empowering to any child. They are doing inquiry, and are demonstrating how to do it very well through the initial questioning to the experimentation to the generation of additional questions. All of the kids collect data and analyze it as well. The fact that many of the segments also show the kids as real friends and show that they do real kid things is great.
- I like the fun element in the segments. They were successful in portraying science as a fun thing to pursue through inquiry and experimentation. I thought that the baseball segment was the most successful in making a connection between the science center and an experience outside the museum walls. My favorite segment in all aspects was 'light and color'. The explanation of the experiments was clearer than in all the other segments I saw, and the program seemed to have the best flow of the story on how students solve the problem of putting together a colorful art exhibit without paint.
- Nice variety of the hosts (age, gender, race). Good pacing of ideas. Included measurements and experiments. Good use of the science center/museum exhibits. Good use of humor and music.



- I very much liked the connection between the museum experience and the further investigation and experimentation. In general, the young hosts seemed sincere and credible. I also liked the young hosts demonstrating the use of measuring tools, charts, and graphs.
- Very Lively. Engaging kids and plot lines. High production value. Noticeable good sound quality even.
- I liked that the students were engaged in either an inquiry-based activity or an application-based activity. The pieces were well-edited.
- The kids did real experiments in both the museums and the 'real world'. I like that they showed how they collected data and analyzed it.
- The segments showed young students' enthusiasm for science. I also liked the use of common or accessible materials for hands-hands on projects. The focus on math was good as well.
- The segments related well to exhibits at each museum and gave a quick over view of what you could expect when visiting. There were good examples of how you could use the information that you learned while visiting the science centers, by taking the information and applying it to projects or activities that you were working on at home or elsewhere. Showing how different activities and experiments relate to everyday projects gives them real meaning to the individuals involved and watching the program. Showing the importance of inquiry and experimentation to help understanding what is happening and why is essential and promotes the importance of ways individuals can use museums.
- I thought they were entertaining as well as educational. The production was very good on each segment. I loved how each team took their inquiry outside the Museum and connected it to real life.
- The kids were engaging, some good mix of boys and girls, nice touch on disability and science. Appealing mix of science in museums and inquiry experiment building on an interest kids already had.
- I liked that they're upbeat, contemporary and feel kid-directed in their inquiry. They're educational and fun, and succeed in making science engaging and relevant to 'real life' outside the museum. They show museums as a community resource, a place to go and investigate as well to discover new questions.

### **Generally, what did you not like about the segments you watched?**

*One-third (32%) of respondents suggest that more explanation of the science or experiments is needed in some of the segments they viewed. One-third (32%) of viewers comment on the editing style and music, suggesting that some segments are “frenetic” and the music “too loud.” One-quarter (26%) of the sample dislike sections that appear tangential to the main thread of the investigation; for example, kids talking about their friendships or tours of the museum city. Also, 16% point out that some segments require special equipment or special access to sites not available to the everyday museum visitor.*

- Though, I think that I understand the reason the person relationships, friendships, were included, I found them distracting and unrelated. Though energetic was good, I found the pieces frenetic at times-zipping, zooming, zapping back and forth, with sound effects. I don't think all the museums were treated equally as far as description, information about them, look at exhibits in general. Some I have a good idea what they looked like and were about, and others I don't. The city tourism, New York, was out of focus to the subject and not equal to other cities, i.e., city tour, Conventions and Visitors advertisement!
- In some of the segments the inquiry activities needed equipment or special access not available to most kids (i.e. sail boats, special access to aquarium tanks). These segments were educational and entertaining but might not result in any interest in the viewer to go out and create their own investigation.
- What I liked the most was the use of scientific investigation to answer questions the children had about science and nature. It is important for children to feel they have the means to find the answers to their questions.
- Many were pretty hokey acting. I liked the ones more where the kids were more natural. Having used a previous series of *DragonflyTV* episodes for Girls for a MS girls Science Series, the girls in my programs felt the same way.
- The segments where the museum/science center appeared extraneous to the outside experience (i.e. you could have done the whole rollercoaster design at the amusement park) were less compelling. Also, several of the scientific assumptions used in segments needed to be more clearly described (it wasn't clear why the bog experiment was carried out).

- Some were too frenetic visually and in content (Roller Coaster, Earthquake). Some showed too much running and unfocused activity and behavior in the museum (Roller Coaster highlighted running feet at park and in museum, and there were segments showing the boys both frenetically poking the buttons. Background sound and music usually complemented the segments, but in Earthquake the tone and music behind the photographs of earthquake destruction was too upbeat and inappropriate.
- I'm not sure about the museum sequences. In some instances (particularly the roller coaster segment) they seemed almost like commercials for the museums, rather than as essential parts of the segments.
- Some of the segments seemed to take place in areas of museums that may not be accessible to all kids, like where the girls used the microscopes for the micro fossils. Not all kids would have access to this area in a museum, so some children might get the wrong perception. However, it was great seeing kids use equipment that real scientists use which is very important.
- The experiments needed a clearer explanation. For example, in the 'Bogged Down' segment there was no explanation of why a large amount of dead plants in the water creates an anaerobic environment. Nor there was an explanation on why an acidic environment helps in preserving leather.
- Concept explanation wasn't always clear. Might want to show more use of scientific equipment. Sometimes used camera angles and images that were not relevant to the topics.
- Some of the video editing I found distracting and disconnected. I preferred the activities that did not require access to specific sites or specialized equipment. Those segments that relied on specific sites and equipment restricted accessibility to viewers.
- I liked dinos and smells but thought the Lighten up segment was not as good. The science was not as apparent.
- Some parts of some of the videos seemed staged - with the students sounding a bit canned. I also didn't care for the last un-answered questions on the Earthquake section. If I had been informed (as a viewer) that those questions really weren't answered yet by science, or if I had answers to them I would have liked it better.
- The sound - the music was too loud and the speaking voices were sometimes hard to hear. It was not always clear whether the ideas for the experiments were thought up by the kids themselves or assigned by adults (the show producers, a teacher, etc.)
- I thought the segments could be a little longer.
- At times the some of the videos seemed to drift from the main topic. In the Doghouse Design the shot of people with signs didn't make much sense and added nothing to the subject matter. Also, in that segment there was not a clear explanation of what was happening with the evaporative cooler as it was used in the Arizona Science Center exhibit. A better correlation of the exhibit and the components used to build the one at home is needed. In contrast the Sailboat Design, which I felt was the best of the ones I reviewed, stayed on target through the entire video. In the Earthquakes video it would have been helpful to show greater detail about the data that was being collected and what specifically was done to analyze the data. These steps seemed to be glossed over and would require greater detail for the viewer to understand and reproduce what was being done in the video.
- I didn't think the chatter regarding what the other team member was like. It was not necessary.
- I thought the music was too loud and brassy (fought with the voices) and the segments too jumpy and speeded up--thought these might have more appeal for kids than it did for me.
- I disliked the fast motion sequences. Felt that some of the segments could use more of a set-up before jumping in, and that the level of investigation and content was uneven from segment to segment. The reality show cutaways in some segments, where the kids talk about each other, were distracting and unnecessary.

## How does the inquiry experience as presented in the segments compare with what your museum defines as inquiry?

*All respondents agree that DFTV:GPS compares well with their museum's definition and practice of inquiry; that is, youth have experiences, develop curiosities and research questions, work as a team, follow a method of data collection and analysis, come to some conclusion that possibly sparks more questions. Viewers feel that the segments differ in their success of presenting inquiry.*

- Good representation. You did well with a tough assignment in such short a time. Inquiry takes time!
- The segments varied in their application of inquiry. I thought Bogs, Animal Scents and Music and Sound did an especially good job of showing the kids develop their own questions, method of investigation, data collection and analysis. This fits well with our own definition of science inquiry.
- At our museum we like to encourage children to seek out the answers to their questions. This took it to another level by allowing the children in the video to go to places and talk to professionals to gain the information they needed.
- very similar. We often have a team or a working as a team part. IE) how do you work as a team? What is my job and what is your job? etc.
- In most cases, the kids in the segments began with an experience that caused them to ask some questions. They developed some way to explore those questions and produced products. In the case of the Light and Color segment, the outside activity was not so inquiry based, but their experiences inside the Exploratorium were. However, in most other cases, the outside experience well-matched the working definition of inquiry we use.
- It represents our interactive, student directed approach. All our exhibits are hands-on and open-ended to allow different kinds of experiments and investigations. We also use everyday materials when possible to encourage connections to real life, and continued investigations at home and school. At our museum our education staff, Explorers, play an important role by facilitating some of the experiences.
- Philosophically, it is very closely aligned, though we usually deal with much larger groups so the learning is often less in depth. These types of exercises are what we WISH we could do!
- Our definition of inquiry is demonstrated well in the segments. Although in practice in our programs we don't always let the students generate their own questions or their own way of answering them, since we are often limited by time. However our more series-based programs are moving in the direction of allowing kids more control over their questions and ways of experimentation.
- We have groups of young adults learning together in the museum, but the majority of our visitors are families. At the Academy in San Francisco, as in many other museums and informal learning locations, a large percentage of visitors are families with children. Inquiry-based learning in family groups occurs during interactions among family members where relatives explain concepts to their children, and vice versa.
- Our center does not do much inquiry-based learning or programming. However, from what I know of with my educational background and knowledge of the informal science education field, I believe that these were good examples (although limited due to time) of inquiry.
- Typically my museum defines inquiry based experience as posing a question and providing the tools for students/visitors to discover the answers for themselves. In general, this was the model followed in the video segments.
- Very well
- Some were inquiry-based such as the fish, earthquakes and bog segments. While others were more application based, such as the doghouse, light and color and sailboat pieces. Finding out things such as what rots, is pure inquiry, but testing designs you create seems to me to verge on engineering, which inquiry is one component of.
- It is very close. We provide the materials for people to 'mess around' and perform experiments of their own design.
- The museum segments are very similar to the kinds of experiences children have at our museum. Some of the exhibits are even the same! The key is involving the youngsters in projects outside of the museum. The *DragonflyTV* series encourages that kind of inquiry.
- The inquiry experience as presented was done very well. It fits well within what the museum I work for defines as inquiry. There was excellent and adequate detail on what needed to be done by the participants and viewers to discover how and why something happens or works the way it does.

- It's right on target.
- Very similar
- While my role in the museum isn't educational, the inquiry experience in the segments seems very close to what we do-- inspire a passion for science and nature through discovery (and investigation). It's child-directed, moves out into the larger scope of life and community, involves hands-on investigations and sparks conversations, and leads to answers, but also additional questions.

### **What value, if any, do you think these segments have within your own museum programming?**

*One-quarter (26%) of respondents suggest that the segments would be useful for training teachers and education staff, and another quarter (26%) propose that the segments serve as a good introduction to a topic or activity. Viewers also think the segments can be used in their camp programs (21%) or in a kiosk presentation (21%). Two (11%) respondents feel the shows can encourage science fair activity, and two (11%) exhibit developers note that they obtained exhibit ideas from the segments. One-fifth (21%) of the group say that the segments are not valuable for their museum because of a hands-on philosophy or a mismatch in content (CA Academy of Sciences; Nauticus; Explorit; National Atomic Museum).*

- We would incorporate them in workshops and theater film time. I think they should be a kiosk on the floor opportunity for visitors to 'pick a program,' push a button to view program and sit and view at their own time. They would have great value to provide the link in investigation to the real world without having to 'leave the museum.' Plus just another application to whatever our activity was.
- After viewing these I can see incorporating them into our public programs when live science demonstrators are unavailable. They also have given me some program and activity ideas to pass on to my education staff.
- I would use these segments in themed class presentations and I would also use them to help train education staff in how to let children come to their own conclusions when asking questions. It is good training in how to be a coach while the children gain information and take ownership of their learning. I think it would also be fun to have these segments available for people to choose to play on a computer or video system. I really enjoyed being able to pick what interest me or was relevant to my situation.
- They'd be a good reference tool. Also, a good idea generator.
- I cannot envision using these segments with the general public, unless we were to feature them the way the 'Try Science' kiosk is used to link museums in different regions. However, there is potential for using these as we use other educational programming in camps - as an additional resource.
- They would be a great resource to use with visitors to highlight 'What is your Question?', How can you find out more at our museum? Some segments would be great to use with teachers to highlight how museums can support student inquiries and projects and lead to a better understanding of science concepts.
- I think the in-museum portions are irrelevant - unless, of course, there were a segment that showed kids visiting my museum! I think the other parts, though, could be useful as an introduction to a lesson or activity related to that subject matter.
- They are great examples of kids doing real inquiry and I would show them to our Educators as a training tool. They are great teaching tools. Also, they show great explanations of kids doing science which would be empowering for many of the kids who come to us from disadvantaged backgrounds. Also, they do a great job at describing (by kids figuring out) many key scientific ideas.
- We usually don't use videos during our programs. The value of the videos is in the message of connecting the museum experience to the outside world.
- Most likely, we would not use them in programs. After I watch all of the segments, it is possible that we might be able to incorporate it in temporary programming as a part of a traveling exhibit (if it fits the exhibition topic). There is a greater chance of showing an episode on a screen in our traveling exhibit gallery.
- I can see these segments being used in museum programs covering similar topics to show different perspectives and ideas in investigating the topics. I can also see the segments being used as an introduction to similar investigations to be conducted within a museum program.

- First I would show them around to folk to demonstrate a good model for what we do in exhibits. I think they are well targeted to young teens. Second I'm gonna see if the folks that run our video presentations might be interested in trying to run the dragonfly segments. Third I think they could be used in our library or on the exhibit floor.
- Currently these segments would just have use within camp-ins. I like the idea of using them for camp-ins and then giving the students another related activity the next morning. We also might use something like this as a pre-training piece that classes who schedule Science fair trainings with us could use in advance.
- I don't think we would use them in our programs because our philosophy is hands-on, interactive science experiences. However, they are nice for me to be able to see what types of exhibits are in other museums.
- As a person who designs and builds exhibits, I found the segments valuable. I got some ideas for new exhibits. From the educator perspective, the segments can give new ideas for teaching points and bring science and math out of the classroom and into the real world.
- These segments could be of value in my museum if they were on subjects that specifically relate to items and areas in my museum. The National Atomic Museum is a niche museum and therefore I would be looking for episodes on energy, waves and vibrations, basic physics, radiology, etc. If this were a general science museum I feel that most of the segments would fit well into general programming.
- I think the segments have high value. In fact, I'm going to have the summer camp program staff incorporate these segments into some of their themes.
- Might be helpful recruiting science fair participants.
- My role is one that gives feedback on programming ideas re: marketplace and brainstorms with program educators in the development process, but do not create programming. However, I could see using these videos as part of our summer camp, setting up investigations for campers, or even showing them in our planetarium. It could be fun to create an event around the Going Places in Science concept, sending kids on inquiries around the museum and grounds or developing investigations online that kids could do at home and at the museum. If there were segments filmed at our museum, I could see using them as outreach, promotion, or also within the museum. For example, a segment on our Tree Canopy Walkway could become an introduction to the walkway experience.

### **Comment on how credibly the segments you watched portray a museum experience.**

*Everyone feels that there are some aspects of the segments that credibly portray a museum experience and other aspects that do not.*

*The credible aspects include:*

- *Showing exhibit exploration*
- *Displaying excitement of a museum visit*
- *Showing the variety of exhibits available in museums*
- *Demonstrating that museums provide opportunities to question, experiment and learn*
- *Modeling inquiry behavior that museums hope to inspire*

*The less credible aspects are:*

- *Including access to areas and equipment not available to everyday visitor*
  - *Showing kids completing inquiries on own without guidance by educator or docent*
  - *Displaying exhibit floors absent of visiting crowds*
- Using the exhibits was credible, but it would be rare for two visitors to come to the museum with an investigation in mind and be independent enough to observe and test as the stars of the segments did. These segments would be credible if a guide, teacher, or museum educator led the experience, not just kids on their own. Of course, not all of our museums have the exhibits that the various segments highlighted.
  - Most portrayed a credible museum experience. The behind-the-scene access at the aquarium will not be available to most kids. (i.e., snorkeling in the exhibit). The other segments showed open museum exploration and interaction between the kids.
  - These segments take a museum experience to the next level. Most visitors don't take the time to think through their questions. Most people formulate the question in their head while visiting the museum, however most do

not go further. This video showed ways you can pursue interests to learn the answers to the questions you may have. Also, much of what I saw the children doing in the video would require the aid of a docent or interpreter. For instance, in the Fort Worth segment the girls were looking at the dino dig in the museum and really understanding all the equipment the scientists use when digging up bones. When they were pointing out the datum, I thought to myself, 'How many kids would really study the exhibit enough to get that without the aid of a person explaining it to them.' I thought the segments were great at showing how people can learn more at the museum if they just follow their own natural curiosity.

- Some not at all. How many aquariums will I get to put a wet suit on and swim in the tank? Some are pretty well portrayed. (roller coaster)
- The kids appeared to have access to additional resources not generally given to museum visitors. I wondered what spaces and activities they were able to take advantage of that are generally not part of the visitor experiences at these institutions. Visitors often form impressions of what they think the museum experience will be, and we've learned that it is best to ensure that their expectations match what we deliver.
- They showed the excitement of coming to a museum. Music and Sound and Light and Color were very good since they showed using a variety of exhibits and the kids commented on what was going on and how they were relevant. None of the segments showed any adult interactions. They were rarely other museum visitors seen in the museum. They sometimes had an unrealistic time with an exhibit to themselves (Doghouse - 20 minutes testing the temperature change). Sometimes they showed running, frenetic, unfocused interactions with exhibits (2 boys randomly, wildly poking buttons). Unfortunately, these are realistic behaviors, but not the ones we want to reinforce!
- I don't think it's that realistic, actually. Mainly because it is very rare for anyone to have the space by themselves to explore as these students did. Even in well designed exhibits, it is often hard to have a long, in depth, meaningful experience in an interactive area - without an educator or docent guiding you through.
- My only concern was when some kids got to use areas that I'm unsure the public can normally use. Also, they did have access to museum staff (zoo keepers) that they may not have access to as real visitors. My other question is that if the exhibit elements that the kids used could all be used by visitors the way they were or if they were given special access. However, I think many science centers do provide many opportunities to question and experiment so I think the segments are pretty realistic of many museum experiences.
- The bogged down experience seemed more like a tour of the exhibit, except for some segments in which the girls looked at the real mummies and wondered about how old they were and how were they preserved. The experience that also looked credible was the science club kids at the Exploratorium working on their assignment.
- Did a good job of mentioning the science center in each episode, where it is, and showing the exhibits. However, other than showing that the exhibits related to the show's topic, there wasn't always a direct connection of exactly what the exhibit did or how it related. A few segments had specific connections and explanations, but most did not.
- I think the hosts model exactly the type of behavior we hope our museum programs inspire in our students--to continue asking questions and investigating their world outside the classroom, applying critical thinking skills and the scientific method. While I do think the segments portray an idealized museum experience, a few of the segments I found to be believable--primarily due to the acting skills of the hosts.
- They are very credible to me as a museum professional because I know what goes on behind the scenes. I wonder what the kids feel given they don't get behind the scenes. I can put a face onto a paleo activity for instance. Can they. There are no museum personalities in the clips.
- Some pieces were credible - specifically the quick-clips showing people playing with the typical science center exhibits. The discussions happening around the earthquake exhibits are plausible, but I would say rare. The solar house exhibit, with the kids waiting 20 minutes in a non-programmatic format was not credible. I have yet to see anyone do that sort of thing within a science museum.
- The exhibits were great, but unfortunately most people do not carry out entire experiments the way the kids did. The usual museum crowds were missing. It would be nice to show some people watching the kids do their experiments.
- I don't find the youngsters at our museum using the exhibits as tools for experiments and knowledge at the level they are in the segments...
- I thought the segments did a good job of showing what was available on a visit to a museum. Though they did not cover the entire experience they went into appropriate detail on the specific topic to encourage the viewer to visit a museum or science center near them. The Light and Color segment did a very good job of showing the

variety of exhibits and experiences available on the subject. They provide enough information to entice the viewer into wanting to visit a museum in person to get the full experience offered.

- We'd all like to think that what has been displayed in the segments takes place with all our visitors but we know it doesn't.
- Our museum is more modest and the experience isn't so loud and rushed. Thinking is also part of a science experience.
- They were pretty credible in terms of the visit experience, but did zip through exhibit sections pretty quickly in many cases. Some of the investigation experiences that use museum resources, obviously, would be different for visitors. However, these are portrayed as special investigations, so I'm not concerned that visitors would expect to have unusual access to staff and resources.

### **Comment on how fairly the segments you watched represent the museum community.**

*Overall, most viewers feel the segments they watched fairly represent the museum community. One-third (37%) of respondents point out that the segments represent the larger museums, and they encourage inclusion of smaller institutions. Another third (32%) observe that museums are fairly represented as fun places to explore, to use as a resource and be inspired to learn more.*

- If you mean did the kids represent the demographics of various areas fairly, I would say, 'Yes.' I'm not sure to what else you refer.
- I think most science museums seek to encourage open exploration. We strive to create exhibits that will elicit questions and further exploration after the museum visit. In this respect, I believe the segments complemented the mission of science museums in general.
- Many kids that come to the museum each year are just as interested as the kids in these segments. They need the hands on experiences and interactions to get them involved. Without the interactive component I don't think they get as much out of the exhibits. That is why museum/zoo classes are so important. It gets the kids involved and may help make some of the children life long learners because of the spark they feel when visiting the museum.
- If you mean, do they represent a sampling of the different sizes of Science Centers, I'd say it was awfully heavy on the large Science Centers and weak on the small science centers. There are some really good smaller centers that would be valuable to use in the future.
- Museums were represented as places that kids can go to to ask questions and be inspired to learn more. That's fair.
- Most showed large museums with high tech exhibits. They also didn't show the role that education staff play in the museum experience at some smaller, hands-on museums. It would be nice to include smaller museums and some broader themes . . . although this comment is based on only 6 segments.
- I think they represent what the museum community would like to be - a destination for fun, self-directed learning for people of all ages. Particularly for middle school students who are often the hardest to reach and excite about science.
- I think the segments represent the best of the science museums in the US being used the way that all science center and museum staff hope that they will be used. Hands-on and minds-on. I think there are still many museums who do not have as many engaging and hands-on exhibits that allow visitors to experiment and try things out, however I see segments like these as inspirational and proof that the more hands-on places do generate curiosity and interest.
- Families were not represented, and they are the dominant group in many science centers. It would also be nice to have kids that have a foreign accent. In cities such as San Francisco many kids are bilingual and have a foreign accent..
- Representing the museum community - yes. The entire community - no. The sites were large centers/museums/zoos. Large budgets, square footage and staff. True representation would include medium- and small-sized institutions.
- First of all I did not 'read' the activities portrayed by the hosts to be museum directed, but rather the museums were used by the hosts as laboratories to investigate a question. As such, I know many museums with specific areas, exhibits, and activities specifically designed to serve as 'laboratories' allow visitors/students to experiment on their own. Therefore, I do believe the segments accurately represent the museum community.

- Fairly. Accurately.
- I liked the diversity of people along ethnic lines. I also felt that our science center is looked at as a resource the way the kids viewed their science centers.
- The segments I viewed seemed to fairly represent the large museum community, but our science center is very small and very different from those portrayed.
- I think that all science centers would love to see the kind of student enthusiasm portrayed on the segments. Our goal is to get young people excited about science. Though not all science museums are as large or fancy as the ones in the segments, we all share the same goals.
- The segments I watched represented science centers well. I am not sure that this would blend over into the more traditional type history and natural history museums. Of the museums shown, the segments would certainly encourage the viewer to visit and provided a very fair representation of those particular museums.
- I think it's an accurate representation.
- Our museum in a small city doesn't have nearly the glitz and 'speeded up' feel you portray. We are currently planning a revitalization of our exhibits, but I don't anticipate the breathless pace you show.
- They represented major metro museums. Small and mid-size museums and museums in smaller communities aren't represented.

***DragonflyTV: GPS attempts to link discoveries in museums or science centers with experiences beyond the museum walls. Please comment on the importance of this link.***

*All respondents feel strongly that activity in their institutions should link to the outside world. Such linkages are integral to museums' mission statements and evaluations of their museum's viability and success with the visiting community.*

- I am very grateful for your interest, effort, and goal here. Perhaps teachers from seeing these segments will understand better how to use the museum. This link is extremely important to us. In other words, this link is the essence of most of our mission statements- to make the world around us more understandable.
- Again, this is a link we strive for and can be difficult to accomplish. These segments might be a good resource for encouraging kids to make that connection and continue their exploration at school and at home.
- This link is very important as connecting science to society helps to make it 'real' for visitors. It also brings current science into view for visitors.
- I think it's critical. The discoveries that kids/people make inside the science center are bits and pieces about the big place that we call the world. Each center or museum adds a little bit more knowledge about that world. Without these places to safely explore, kids might not get the knowledge and rich experiences that teach them about the world. For example, we have a Boreal Coast Tidal Pool exhibit with live animals for the visitors to explore. Many of these kids/adults will never see the east coast, let alone a tidal pool full of these kind of animals.
- Museums should be places that help connect visitors with their environments and experiences both within and outside of museum walls. Connections across subjects and experiences are key in both formal and informal learning experiences.
- VERY. I think that these segments are wonderful at helping children and adults realize that the concepts and experiences in science museums relate to their everyday life and that visits to museums are fun, can help them learn more, and can help them solve real problems and challenges.
- VERY important. In my view, if a museum experience doesn't connect with some other part of a visitor's life, it doesn't have much potential for making a lasting impact. Also, the world does not operate in silos. Everything is interconnected and I think museums are in a unique position to make people see these connections.
- I think this link is crucial. Science should always be linked for people back to the 'real' world. What is the point of learning something unless it can be applied to the world outside the museum. Not only does that help to make a stronger impact on the learner, but the learner then begins to make other connections on his or her own.
- It is important that people learn how to use their science centers to experience and have fun with the world outside. Local programs of this kind are valuable to let people know what are some of the fun things people can do while learning in museums. For example, some people living in Bay Area may want to visit the Exploratorium after seeing the segment. Many people living in urban areas are not fully aware of how fun science centers can be.



- I believe that links in programming such as this are important. It allows the topic to become relevant to the viewer. In addition, when the science center/real world connection is made it allows the viewer to see the center as 1) a valuable educational and cultural site in the community and 2) a resource for further learning and a source for information.
- These segments portray the types of behaviors that informal learning centers hope to inspire in their visitors--to use the museum as a laboratory and continue to investigate the topics introduced. These segments explicitly demonstrate the utility of the museum as a laboratory and a resource for a depth of investigation that goes beyond the exhibit or program experience.
- Important. Folks need positive contemporary spin on what museums and scientists and researchers do.
- I love this idea of stretching the science center experience beyond the walls of the science center. The question remains: will people actually link the two beyond the walls of the science center? Furthermore, how can we encourage this type of behavior? Perhaps if we designed exhibits and take-away materials to link into the Dragonfly GPS, then we might encourage this type of external exploration. In other words, I could see a basic design for an exhibit such as the sail-boat exhibit being sent to science centers. Then students could be encouraged to make their own sailboats (within certain limited dimensions) and bring them into the science centers to test them out. That would really play into the hands of increasing interaction with the Dragonfly TV series and the Science Centers. Then I could imagine people taking this a step further - particularly if encouraged with special 'outreach days' coordinated by the local science centers with local harbors.
- It was nice to see the kids take their museum experiences and test them in the 'real world'. It gives kids the idea that science is everywhere, not just in a museum or a lab.
- Attempts to link discoveries in museums or science centers with experiences beyond the museum walls, are highly important. Students should learn to recognize the science in their daily lives and how they can use inquiry and experimentation to figure things out.
- I think the segments did an excellent job of linking experiences within a museum to those outside of the institution. This link is extremely important in providing information on what can be experienced and what to expect when visiting a variety of museums and science centers.
- The link is what a science center is all about. We want to invoke that curiosity that you take with you when you leave the museum.
- Application of science in the real world is certainly important.
- It's a critical link. Museums at their best are resources for lifelong learning in the community and can play a strong role in helping children and adults make sense of the questions they have about the world around them. The viability of museums depends in large part on their ability to be consistently relevant to their communities and their patrons.

**Please comment on how effectively this connection was made in the videos you watched.**

*All of the respondents feel that the segments, in varying degrees, are effective in making the link between discoveries within the museum and experiences outside the museum walls. However, respondents are not always in agreement about which segment is effective and why; for example, one viewer suggests that “you could have done the whole roller coaster design at the amusement park” while another feels “the roller coaster was very connected.” One respondent feels the connection in the Biodiversity segment is not strong because “they did not go outside of the zoo environment,” whereas another viewer feels this segment “seamlessly” connects the museum experience with the outside experience.*

- I think you made the connection very well, especially in the time you had to accomplish it.
- This was most effective when the kids could conduct their investigations both within and outside the museum. If the investigation required visiting an exhibit (Animal Scents, Fish) the connection to the child's life and experience is less.
- I feel this connection was effective in all the segments I watched except the Biodiversity segment at the Bronx Zoo. In that segment they did not go outside of the zoo environment and the connection wasn't strong. I think it might have been more effective if they went to the park and watched the different animals (squirrels, birds,

bugs) and related them to the level of the habitat they utilized (ground, shrubs, trees). All the other segments I watched took the kids to field sites where they could relate the museum experience to real world experiences.

- It sort of ran the gambit for me. The roller coaster was very connected, but others like the bog were slightly weaker. It's probably the difference between looking/learning about something behind glass (bog) versus hands-on as in the Roller Coaster clip.
- As I mentioned in my response to question 6, I think these segments spanned a range in terms of how effectively they made connections between the museum and the outside experience. [The segments seemed to fall into three categories: 1. Those that seamlessly connected the museum experience with the outside experience. 2. Those that emulated the science center experience in the outside experience. 3. Those where the museum/science center experience seemed secondary to the outside experience. For the purpose of connecting institutions of informal learning with self-directed activities, I was most impressed with the segments that feel into category 1 above (Dinosaurs and Biodiversity)... The segments where the museum/science center appeared extraneous to the outside experience (i.e. you could have done the whole rollercoaster design at the amusement park) were less compelling.]
- I feel they were very effective, as I stated in question 8, and have copied below: The segments were fun, student-directed, and on topics and themes that are relevant or of interest to teens. I liked that they highlighted an interplay between museums and real life experiences. Sometimes it involved wondering about something and being curious to find out more. Other times it was using a museum as a resource to solve a problem or challenge. It was good to show that there was variety: sometimes the inquiry began with the child (Body Electricity); sometimes a museum experience prompted inquiry and experimentation (Music and Sound); and sometimes the museum experience helped to solve an existing or presented problem or challenge (Doghouse, Light and Color).
- I thought it was made very effectively in the light & color and the luge segments, and fairly well in the dinosaur segment. The roller coaster one did not resonate with me.
- I think the connection was made well at the level kids can understand. The questions kids were asking were things that meant something to them or they wondered about outside the museum as well as inside the museum.
- The videos provide good TV examples of how the field experience connects to the museum experience. It is unlikely that any viewers would try most of these field experiments due to the somewhat complex set up and experiment. Perhaps in order to make a better connection with viewers future segments may focus on (or add) things you can easily try next time you go to the amusement park, local wilderness area, beach, etc.
- I believe that it was a successful connection. The episodes did show 1) real-world examples and 2) made connections to peoples' lives.
- The connection between the museum experience as a stepping stone to a continued and greater depth investigation was made clear. I found this consistent throughout the segments I watched.
- First they were fun, and by and large working in and for a museum is fun. There was nitty gritty detail. The information was not overtly spoon fed. You felt as though the kids were in control. That is how it should be in a museum. An informal experience controlled by the visitor.
- The tie-ins seemed to vary a bit. The light and color video was a heavy tie-in since the students basically re-created the exhibits at their own place. Bog was topically tied in, but other than seeing the bog people, there didn't really seem to be any large connection that spurred the kids to do the experiment. I liked the experiment, but I question whether any kid would actually do this, unless the idea was presented at the science center in some other manner. The dog-house and the fish were really neat tie-ins. I really liked how the information from the science centers developed the 'projects,' the kids took on. I still don't think kids would have sat at the house exhibit for 20 minutes, but I did like the tie-in.
- It was very evident to me. I hope it would be as clear to kids watching the show.
- The segments were excellent in showing how connections can be made beyond the museum walls. They showed ordinary kids using ordinary things to explain things of interest in their lives.
- The link was very effective providing the viewer with a realistic idea of experiences available. This showed that exhibits at the museums had real life uses and meaning.
- The connection was easily made in each of the segments. Each segment clearly defined the link from the museum experience to real life.
- Good link between museum experiences and going out into the world beyond museum walls.
- They were uneven, but for the most part it was made effectively. Earthquake and Doghouse Design were two that did this very well, as well as Music and Sound.

## What impact, if any, do you think public broadcasting of the full series of museum-based shows will have on the showcased museums?

*Eight of ten viewers (79%) feel that the series' broadcast can increase awareness of and visitation to the showcased museums. Two viewers (11%) feel that other museums might benefit similarly. One-fifth (21%) of the group note the promotional value of the segments, reinforcing perception of the museum as an educational leader. Two respondents (11%) feel the shows might have a negative impact if a featured exhibit is not available in their local museum.*

- I think the showcased museums will have greater visibility, public awareness, certainly in the markets that the programs are seen. The exhibits featured need to be there when visitors come, or it must be understood the program was based on a traveling exhibit, or disappointment will ensue.
- Possibly more local interest in visiting the museum, or more interest in visiting if traveling through.
- I think the impact will be huge for those institutions. It really adds excitement to the visitor experience and I think it will encourage people to visit those places mentioned.
- I would think that it would make a few folks want to stop by. You might reach a group of people that didn't know you had 'that'.
- It would seem that local broadcasting would help attract local visitors to these institutions. I question whether the broadcasting will have any effect on the numbers of out-of-town visits received by these institutions.
- Hopefully it will increase interest in attendance and their use as a resource.
- I think it could be significant. It showcases the museums being used in a little bit different way. I think many people see museums as field trip destinations or places to go for special events (big festivals, exhibit openings, etc.), but not always as places you go just to learn.
- I believe that these segments are great marketing opportunities for the museums showcased. I would believe that visitation and use of exhibits would increase for them.
- I feel it will motivate several viewers to go, not only to the showcased museums, but to their local science centers. The fun factor in the programs is attractive. In addition, most people in urban areas lack awareness of what museums have to offer.
- I don't think that it will have an impact on the bottom lines of revenue and increased visitation. The value is in the marketing and public relations side - 1) the center is meeting their educational mission, 2) marketing within their community that they were involved in such a project, 3) 'boasting rights' in ASTC or AZA that they were one of the sites.
- I think the segments will certainly provide promotional value within the museum's home market--possibly enhancing the public's perception of value in the museum as innovative leaders in education.
- Unfortunately we do not feature these in North Carolina PBS but I will try to use the disc to open the door. Other than that I think these videos have virtue beyond broadcasting in the form of shows in museums or course study.
- I think it will probably give the museums an attendance boost. I'd love to see other kids use the museums as springboards for scientific thought, but I doubt that will happen, unless the museum specifically gear exhibits and programs towards that end - tying in with specific *DragonflyTV* shows.
- I think these shows will serve as excellent marketing tools for the museums. I would think that attendance would increase.
- I think the museums will see higher numbers because of the series.
- I think the broadcasting of the shows will have a very favorable impact on the museums highlighted. The shows have the ability to increase awareness and interest in the individual museums as well as like museums elsewhere.
- I think it will increase attendance from both residents and tourist. A tourist may plan a stop to the showcased museum while visiting that city because of what they've seen on PBS.
- I think people who see this series would be disappointed in our museum and most kids don't have access to the inquiry-based opportunities in the series. For example, the dog house was obviously prefab and not cheap. The equipment for the swamp cooler wouldn't be found in any kid's family shed.
- The showcased museums will gain awareness and possibly an increase in visitation by local audiences or traveling audiences. It's possible that broadcasting the shows could also lead to new collaborative projects for these museums.

## **What impact, if any, do you think public broadcasting of the full series of museum-based shows will have on museums generally?**

*Eight of ten respondents (84%) feel that the broadcasted series will have a positive impact on museums generally. Respondents point out the possibilities that the series will increase interest in visiting a museum (37%); that the series will increase awareness that museums are fun (26%) and are a valuable resource (21%); and that the series might change traditional expectations about museum experiences (26%).*

- In general, a museum-based show has to heighten the public awareness of the value and fun of museums. However, museums must realize that there is a responsibility for the museum to meet public expectations, as well. Good, relevant, programming and exhibitions.
- A potential impact would be shifting visitors' expectations of a museum visit. By extending the visit beyond the museum walls, visitors might begin to view a museum as an interactive and continuing experience rather than a one time, passive exploration.
- Hopefully, it will encourage people to take a new look at their local museum or at least look with a new eye when they do visit. It may also inspire teachers to utilize museums in a different way, more as a connection to real science taking place today.
- It might peak their curiosity to stop in and visit a science center near them.
- Certainly the reminder to the public that museums are places that are fun AND inspiring is good press for all museums. Our visitor studies have suggested that kids, not their parents, are primary drivers of museum visitation. Therefore, creating programming aimed at kids should help encourage kids to advocate for visiting museums.
- Hopefully it will remind children, adults, and teachers that museums are a great resource . . . They are fun places to go where they can become more curious and learn about their world; they are places to go to answer their own questions; they are resources to help them find ways to solve problems. Hopefully they will spark increased interest and attendance and highlight their use as a resource.
- I'm not sure it would have a big impact on those museums not featured, unless the local PBS stations ran PSAs promoting local museums during the Dragonfly shows.
- I would hope that it would increase the interest kids have in going to museums! Especially science centers. Museums can still have the stigma of being boring 'look only, read only' places in the minds of many adults. However if kids can get excited about going to places like the ones shown in the segments, they will bring their parents!
- People are not fully aware of what local museums have to offer. For example, in the Bay Area there are over 80 museums, and most of them offer not only exhibits, but public programs. The choices for things to do are great. I would expect these segments to get some people interested in visiting a science center. PS: Perhaps one element missing in the true museum experience in the segments is the interaction with museum staff, and public programs.
- If the series is viewed by people who are not familiar with museums and what they offer, then it can have a positive impact on museums (Not with visitation, but rather awareness). However, I would imagine that most of the viewers are already in families or schools that already make use of their local museums/zoos/centers. So, overall, not much impact most likely.
- I can imagine impact in providing the general public with a different way to view their community museum as a laboratory resource.
- Positive. Hip. Active places to go investigate. Be yourself and interact with a museum.
- I doubt there will be much of a general effect - there may be a small increase in attendance if the shows do very well. I also do think there is an opportunity to tie into the Dragonfly shows by developing exhibits geared towards particular shows (this seems to work better with engineering style shows where people create something they can test at the science center). I think museums could also develop take-away materials that encourage visitors to do their own 'Dragonfly-style TV show' by investigating phenomena touched on in the museum.
- I think it will generate some interest in visiting museums, but I don't know how much.

- I think parents would like to see their children making the connections encouraged in the segments, so overall I see museums in general benefiting from the series.
- The broadcasting of the shows should increase the awareness and interest in similar museums in general. They should provide the viewing public with a greater knowledge of what is available and what to expect at museums and science centers in general.
- I think the full series will help promote the learning experience in museums. It will cause interest in youth and remind adults what a valuable resource their local museum is.
- I think overall it would be positive--especially for those museums who have wonderful, exciting interactive exhibits.
- It brings museums into the mind space of the target audience in a way that is as engaging and relevant as other television options. Especially important as we often 'lose' many of these kids after middle school. It also positions museums as valuable community resources and places to investigate those things you wonder about (and positions those questions as valid and worth investigating). Any increased awareness of museums as both community resources and cool recreational opportunities benefits the industry as a whole. At a time when museum visits compete with many other leisure opportunities, promoting the idea that science is not just relevant, but really fun, can only help museums around the country.

**How interested would you be in having your museum participate as a site in a future *DragonflyTV: GPS* show?**

*All but five respondents are “very interested” in participating as a DFTV: GPS museum site. “Somewhat interested” is the response from representatives of North Coast Nature Center, Rochester Museum and Science Center, California Academy of Sciences, and Milton J. Rubenstein Museum of Science & Technology. Lemelson Center for the Study of Invention and Innovation is “neutral” in interest.*

**What value for the staff of your museum would a collaboration with *DragonflyTV: GPS* have?**

*All but seven respondents suggest collaboration with DFTV: GPS has “high value.” “Somewhat high value” is the response from representatives of Rochester Museum and Science Center, California Academy of Sciences, Milton J. Rubenstein Museum of Science & Technology, Nauticus, Catawba Science Center and EcoTarium. The respondent from Lemelson Center for the Study of Invention and Innovation foresees neither high nor low value in participation.*