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The Impact of FETCH! on Children's Perceptions of Science and Science Careers

FOCUS GROUP REPORT

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AUGUST 9, 2007

Delivered to:

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Background and Objectives

In June of 2007, American Institutes for Research (AIR) conducted two focus groups to support WGBH in gathering feedback from children aged 7 - 10 on the FETCH! television program.

The main objectives of the focus groups were to: 1) gain insight into children's previous perceptions of scientists and whether or not such perceptions related to the demographic composition of the groups or informed their perception of scientists and scientific careers, and 2) determine how FETCH! supports or challenges these perceptions and how the series might be enhanced to inspire children to consider careers in science.

The focus groups were conducted on Wednesday, June 6 and Thursday, June 7 at AIR's facility in Concord, MA.

Methodology

AIR recruited children using a variety of recruitment methods. These methods included:

- The posting of flyers throughout the greater Boston area.
- Recruiting individuals from our internal database.
- "Snowballing": Asking recruits to provide the names of others who might qualify for the study.

AIR collaborated with WGBH to develop a list of screening questions to ensure that the groups contained a demographically diverse sample.

AIR's goal was to recruit a total of 20 children aged 7 - 10. It was not required that children be familiar with FETCH!, though our sample did reflect a balance of children who were and children who were not familiar. AIR mailed a copy of FETCH! Episode 201, "Ruff Ruffman Breaks the Mold," to all children prior to the focus groups so they could become familiar with the program. Participation in the 2 hour long focus groups was voluntary, and each child received a \$50 honorarium.

AIR recruited 18 children between the ages of 7-10. The following table provides detailed demographics of the 18 children.

**Table 1:
Focus Group Demographics (n = 18)**

Characteristic	Frequency (%)
Gender	
Male	10 (56%)
Female	8 (44%)
Age	
7	3 (16%)
8	2 (11%)
9	7 (39%)
10	6 (33%)
Race/ethnicity	
White	11 (61%)
Asian	5 (28%)
Black/ African-American	2 (11%)

Informed Consent

Before each focus group, AIR mailed a form to parents and guardians that provided information about the study. Participation required that the children assented to participating, which they indicated by signing the form. Parents also provided consent for children to participate in the focus groups by signing the form.

Data Collection Instruments

Prior to the focus groups, AIR and WGBH collaborated on the focus group script. AIR and WGBH agreed on a survey to distribute to the children prior to and after viewing the video segments to gather their initial perceptions of scientists and scientific careers. See below for a list of the survey questions that we asked children before and after watching the video segments.

- What kind of job do you want to have when you are an adult? Why?
- Think about all the adults you know who have interesting jobs. What kind of work do they do? (Pre-survey only)

- How much do you like science?
 - I love science
 - I like science, but I don't love it
 - I only like science a little bit
 - I do not like science at all

- Do you know anyone who uses science in his or her job? (Pre-survey only)
 - Yes
 - No
 - I don't know

- What do you think it would be like to use science in a job?
 - It would be fun
 - It would be fun sometimes
 - It would not be fun
 - I don't know

- What kind of people become scientists?

- Would you like to be a scientist someday?
 - Yes
 - Maybe
 - No
 - I don't know

- Which of the following pictures show scientists? (This question was followed by a set of pictures, all of whom were scientists represented in the video segments)

An AIR staff member helped the children with spelling, explained questions as needed, and provided ample time for the children to respond to the survey. After the survey was completed, the facilitator collected them and then began showing the five video segments in the following order outlined below:

- Brain
- Rollercoaster
- Weather Girl
- Zoo Chef
- Doggie Teeth

Following each segment, the facilitator led discussion to elicit childrens' perceptions of scientists and scientific careers. Discussion was based on the following main questions:

1. Did you enjoy watching this video segment? Why or why not?
2. Did the video segment teach you any new ideas? If so, what kinds of new ideas did you learn?
3. Was there a scientist in this segment? If so, how would you describe the scientist in this particular segment?
4. What kinds of things does this scientist/adult do in his or her job?
5. Do you think you would like doing this kind of work? Why or why not?

After the group viewed and discussed each video segment, the facilitator administered the survey again to gather feedback on whether or not the perceptions of science and scientific careers had changed after watching the segments.

To conclude the group, the facilitator led a discussion where we asked children to discuss their survey responses and general reaction to the video segments.

Results

Most Children Reported Enjoying Science Before and After Watching FETCH!

We asked children to indicate how much they liked science. Though we didn't observe any major changes in responses between the pre-survey and post-survey, we did observe that children overwhelmingly had an appreciation for science both before and after watching the video segments. In the pre-survey, 16 children said they loved (n = 8) or liked (n = 8) science. In the post-survey, 15 children indicated that they loved (n = 11) or liked (n = 4) science. Two children, who had indicated in the pre-survey that they had liked science, indicated in the post-survey that they liked it a little. The table below shows all responses.

**Table 2:
Responses to the Question “How much do you like science?”**

	I love Science	I like science, but don't love it	I only like science a little	I do not like science at all
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Pre-survey	8 (44%)	8 (44%)	1 (3%)	1 (3%)
Post-survey	11 (61%)	4 (22%)	3 (16%)	0 (0%)

We found that regardless of whether they knew an adult who used science in his or her job, most children reported enjoying science. For example, 13 out of 18 children indicated that they knew an adult who used science in his or her job. Of those 13 children, 12 indicated that they liked or loved science prior to watching the video segments. However, of the five children that indicated they did not know of an adult who used science, four indicated that they either liked or loved science.

Watching FETCH! Raised Children’s Interest in Science Careers

We observed that the FETCH! video segments appeared to heighten some children’s interest in science careers. Before watching FETCH!, only two children reported they hoped to have a career in science (e.g., astronaut, computer engineer). After watching FETCH!, 12 children reported wanting to have a career in science. In fact, nine of the children mentioned a science-related job that was highlighted in the video segments. Imagineer was the most popular response (n=7), and we observed that children were overwhelmingly engaged while watching the Rollercoaster segment. While watching the kids design their own rollercoaster, one child remarked that “this is so cool.” The table below summarizes the pre- and post-survey responses.

Table 3:
Responses to the Question “What kind of job do you want to have when you are an adult?”
(Science careers appear in shaded boxes)

Pre-survey	Post-survey
Pizza maker	Pizza maker
Gymnast	Gymnast
Football player	Imagineer
Artist/painter	Imagineer
Teacher	Scientist
Pet shop owner	Pet shop owner
Movie director	Imagineer
Astronaut	Astronaut
Construction worker	Weatherperson
Computer engineer	Computer engineer
Teacher	Teacher
Don't know	Don't know
Architect	Architect
Writer	Imagineer or zookeeper
Game designer	Imagineer or zookeeper
Artist	Imagineer
Singer	News reporter, zookeeper, or singer
Architect	Architect, imagineer, or zookeeper

After viewing FETCH!, some children commented:

“I liked the rollercoaster one about the imagineers, because it really made me interested. Before I thought that science was sitting down and working in a lab, but now I know it can be really really fun and creative.”

“(Being a scientist) doesn't mean sitting in a lab in a coat all day working on a computer.”

Children were also more likely to report that it may be fun to use science in a job after viewing FETCH! than before they viewed the FETCH! segments. Fourteen children thought it would be fun to use science before watching FETCH!, but all the children thought it would be fun to use science in a job after watching FETCH! (Table 4).

Table 4:
Responses to the Question “What do you think it would be like to use science in a job?”

	It would be fun	It would be fun sometimes	It would not be fun	I don't know
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Pre-survey	8 (44%)	6 (33%)	1 (3%)	3 (16%)
Post-survey	12 (67%)	6 (33%)	0 (0%)	0 (0%)

Watching FETCH! Challenged Stereotypes about Science and Scientists

At the beginning of the focus group, we gathered feedback on what children already knew about scientists and whether they classified “interesting jobs” as science-related. For example, when children responded to pre-survey questions about interesting careers, they mentioned teachers nine times, architects three times, and an assortment of other jobs (see Table 5). Three children mentioned scientists and one child mentioned engineer when describing the adults they knew who had interesting jobs. The table below provides a brief summary of the jobs children indicated that they thought were interesting.

Table 5:
Pre-survey Responses to the Question “Think about all the adults you know who have interesting jobs. What kind of work do they do?”

Interesting Jobs, According to Children in Focus Groups	Instances Mentioned
Teacher	9
Architect	3
Construction-type jobs	3
Computer-related	3
Scientists	3
Artist	3
Police officer/firefighter	2
Television newscaster	2
Engineers	1
Other (Pilot, lawyer, gardener, accountant, therapist, bell maker, storekeeper, movie maker, publisher, pastry-maker)	1 each

We also sought to gather feedback from the children on what kinds of people they believed became scientists. In the pre-survey, children listed characteristics that they believed described scientists. The most common responses included, “smart people” and “people who love science,” (see Table 6).” Some children also listed archeologists, people who study the earth, people who wear lab coats, and astronomers as examples of scientists.

After viewing FETCH!, we observed that although children used some of these words again in their post-survey responses, they seemed to be positively influenced by some of the video segments and new adjectives appeared in their responses. For example, in the post-survey, after viewing FETCH!, children also described scientists as “caring,” “cooperative,” “patient,” “brave,” “respectful,” “imagineers,” “vets,” “dentists,” “people who love animals,” “people who have good imaginations,” and one student commented that “a lot of jobs involve science.” Children continued to view scientists as intelligent people after viewing FETCH!. In fact, seven children described scientists as “smart” people in the pre-survey, while 10 children used the adjective “smart” after watching FETCH! Four of these 10 had not used “smart” to describe scientists previously and, in fact, one child who answered that scientists were astronomers in the pre-survey later said scientists could be “anyone smart” after viewing FETCH!. In addition, one student who reported that “anybody” could be a scientist on the pre-survey later said that “smart, intelligent people” were scientists. None of the children mentioned creativity or imagination when they described scientists in the pre-survey, however three children mentioned creativity and imagination after watching FETCH!.

Although children indicated that scientists were “smart” after watching the segments, their comments indicated that they were not intimidated by engaging in science related tasks. Some children commented:

“The kids got to do stuff that other people do for their regular jobs...they had real reactions, they asked questions, they didn’t pretend they knew everything. It was real”

“I like how the kids didn’t just sit back and watch the other people do it. They saw how it was done and then tried it for themselves.”

“I thought it was cool how the kids got to make things on their own and then actually got to try them.”

**Table 6:
Responses to the Question "What kind of people become scientists?"**

Pre-survey response	Post-survey response from same student
Archaeologists	Dentists
People who discover something	People who discover new stuff
Well-educated people who love science	Well-educated people who have a love for a specific kind of science. A lot of jobs involve science.
Nice people, exciting people	Smart, nice, caring, cooperative, respectful people
Smart people	Smart people. People who want to learn things.
Smart people	Smart people, patient people
Astronomers	Anyone smart
Smart people	Imagineers
No response	Imagineers, teachers, vets, zookeepers
Experimental people	Smart people who like science
People who wear a lab coat, people who love science	People who love science, animals, chemistry, different strategies
People who like science a lot	People who have a good imagination or like science a lot
Anybody	Smart, intelligent people
Smart people, clever people	Smart people, clever people, brave people
A person that likes to study the Earth and the planets, etc	People who interfere with life and earth, etc.
Smart, hard workers	Regular people who put their minds to it. A smart person.
Curious, smart, trustworthy	Smart, curious, trustworthy

During the discussion that followed each video segment, several children indicated who they thought was a scientist. Children commented:

"(scientists in the segments) were just like regular people, they weren't dressed up like you'd expect a scientist...in white coats and glasses".

"They were really smart."

"I think there was (two scientists in "Rollercoaster"), because the two people, if you want to build a roller coaster, you have to know what materials to have, and what other roller coasters have, and how to put them together"

One child, after viewing “Weather Girl”, commented on the weather anchor and said that she “[didn’t] think of a scientist as wearing make-up”.

Children also offered comments on whether the video segments taught them something new or gave them any new ideas.



“It’s exciting and a lot of fun to get to make the designs and all the loops and turns of a roller coaster. It’s exciting to make”.





“Like zoo chef, being a scientist you can have fun and do things for other people”.

To better understand children’s initial perceptions of scientists and how watching and discussing the video segments might have changed those perceptions, the surveys included a series of pictures that depicted scientists from the segments. In both surveys, we asked children to circle the pictures that included individuals whom they believed were scientists.

As indicated in the below, in the pre-survey, about half of the children circled those pictures that depicted a stereotypical scientist (i.e., wearing a lab coat and glasses). However, after watching the segments, children overwhelmingly indicated that all pictures depicted a scientist in the post-survey.

**Table 8:
Responses to Question “Which of these pictures shows a scientist?”**

	Pre-survey Frequency (%)	Post-survey Frequency (%)
	16 (89%)	18 (100%)
	16 (89%)	18 (100%)

	Pre-survey Frequency (%)	Post-survey Frequency (%)
	9 (50%)	18 (100%)
	10 (56%)	17 (94%)
	7 (39%)	18 (100%)
	8 (44%)	18 (100%)

We did not observe any substantial differences in perception of science and science-related careers based on gender, race, or age through survey responses or discussion. We did find that most children, regardless of demographic background, indicated that they liked science and thought it would be fun to use in a job.

The tables below compare attitudes towards science and scientific careers for boys and girls in both the pre- and post-surveys. The majority of boys and girls reported that they liked or loved science (80% and 88%, respectively). All the boys and all the girls reported that it would be fun, at least sometimes to use science in a job. More girls than boys (88% versus 70%, respectively) reported that they might, or definitely do, want to become a scientist someday. For boys, this proportion is slightly higher than the proportion of boys who reported that they might like to be scientists someday before viewing FETCH! (60%). For girls,

there were more that reported they definitely wanted to be scientists someday after viewing FETCH! (38%) than before viewing it (0%).

**Tables 8a-8c:
Attitudes Towards Science by Gender**

Table 8a: Responses to the Question “How much do you like science?”

Girls Pre and Post-Survey Results		
	Pre-Survey (n = 8) Frequency (%)	Post-Survey (n=8) Frequency (%)
I love science	3 (38%)	6 (75%)
I like science, but I don't love it	5 (63%)	1 (13%)
I only like science a little bit	0 (0%)	1 (13%)
I do not like science at all	0 (0%)	0 (0%)
Boys Pre and Post-Survey Results		
	Pre-Survey (n=10) Frequency (%)	Post-Survey (n=10) Frequency (%)
I love science	5 (50%)	5 (50%)
I like science, but I don't love it	3 (30%)	3 (30%)
I only like science a little bit	1 (10%)	2 (20%)
I do not like science at all	1 (10%)	0 (0%)

Table 8b: Responses to the Question “What do you think it would be like to use science in a job?”

Girls Pre and Post-Survey Results		
	Pre-Survey (n = 8) Frequency (%)	Post-Survey (n=8) Frequency (%)
It would be fun	4 (50%)	6 (75%)
It would be fun sometimes	3 (38%)	2 (25%)
I only like science a little bit	0 (0%)	0 (0%)
I do not like science at all	1 (13%)	0 (0%)
Boys Pre and Post-Survey Results		
	Pre-Survey (n=10) Frequency (%)	Post-Survey (n=10) Frequency (%)
It would be fun	4 (40%)	6 (60%)
It would be fun sometimes	3 (30%)	4 (40%)
I only like science a little bit	1 (10%)	0 (0%)
I do not like science at all	2 (20%)	0 (0%)

Table 8c: Responses to the Question “Would you like to be a scientist someday?”

Girls Pre and Post-Survey Results		
	Pre-Survey (n = 8) Frequency (%)	Post-Survey (n=8) Frequency (%)
Yes	0 (0%)	3 (38%)
Maybe	7 (88%)	4 (50%)
No	0 (0%)	0 (0%)
Don't know	1 (13%)	1 (13%)
Boys Pre and Post-Survey Results		
	Pre-Survey (n=10) Frequency (%)	Post-Survey (n=10) Frequency (%)
Yes	1 (10%)	2 (20%)
Maybe	5 (50%)	5 (50%)
No	3 (30%)	1 (10%)
Don't know	1 (10%)	2 (20%)

After each segment, the facilitator asked children if they enjoyed watching the segment. Most always, all children raised their hands to indicate that they had. Discussion revealed some specific feedback on the show, which was mostly positive. Some children commented:

“They were trying to teach us that being a scientist doesn't mean sitting in a lab in a coat all day working on a computer. They're saying you can make it fun by getting a different job and doing different things.”

“I liked the zoo chef. Making animals' food is being a scientist and making something new.”

“I want to be an architect because I like designing things, and a scientist - one of the people who works at a zoo or one of these people who works in Imagineering - because they're also designing and making things.”

Summary

Among the children in our sample, we found that FETCH! increased children's general appreciation of science. For example, 44% (n = 8) of children indicated in their pre-survey that they "loved science." In the post-survey, this figure increased to 61% (n = 11). We observed a similar trend when we asked children if they thought science would be fun to use in a job. In the pre-survey, 44% (n = 8) reported that it would be fun, compared to 67% (n = 12) in the post-survey.

Following are some concluding summary points:

- **The children in our sample enjoyed watching the FETCH! video segments.** We observed that children were attentive and engaged while watching all of the segments. In addition, following each segment, most children indicated that they enjoyed watching it.
- **Children expressed varying opinions on what specific science related tasks they would like to do.** This was particularly evident, for example, after children watched "Doggie Teeth." For example, while one child suggested that dogs were "cute" and that she wouldn't mind performing dental work, another remarked that dental work, in particular, would be "gross." To a lesser but still noticeable degree, children expressed varying levels of enthusiasm for other science related tasks highlighted in the other segments. For example, some children were more enthusiastic about being a weather person than others after watching "Weather Girl."
- **AIR observed no substantial differences of perceptions of science based on gender, race, or age.** Although we achieved diversity in our sample, we did not observe differences in childrens' pre- or post-survey perceptions due to demographic factors. While, on the one hand, this is an encouraging note, it is possible that we observed a ceiling effect. That is, the children in our sample may have come to the study without harboring familiar stereotypes based on gender or race, so there was little room for improvement. It is possible that more variation could be observed with a different sample of children. Also, the video segments presented a balance of male and female scientists, but featured somewhat less ethnic diversity (e.g., there were no African-American scientists). It's possible that with more diversity in the scientists represented, differences may have been observed in childrens' attitudes. We did, however, observe that both boys and girls in the sample showed a slightly increased willingness to be a scientist someday after watching FETCH!. Only one boy reported he would like to be a scientist someday in the pre-survey, while two

indicated they would in the post-survey. While no girls indicated that they would want to be scientist someday in the pre-survey, in the post-survey three indicated that they would want to be a scientist someday.

- **FETCH! broadened children's ideas of who could be a scientist and what different kinds of work scientists do.** When asked to use adjectives to describe scientists, after watching FETCH!, children used adjectives that seemed to challenge stereotypes including, "brave," "curious," "patient," "cooperative," and "imagineers." Although more children indicated after the groups that they thought scientists were "smart," when asked whether or not they thought they could do what the kids in the segments did, every child raised his or her hand. The segments seemed to appeal to childrens' interest in careers that are creative, which was a desire many children expressed in the pre-survey. Moreover, most children indicated after watching FETCH! that they thought it would be fun to use science in a job (n = 12) and that they generally thought they could do many science-related things at their age.

Of course, these data represent childrens' perceptions of FETCH! immediately after viewing the segments. We can't be certain if these positive attitudes will remain steady over time, but we observed that, for the most part, children felt strongly that they could do scientific-related work as shown in FETCH!.

Furthermore, as is true with any data collected in the context of a focus group, some children may have been influenced by the attitudes of other children or by the desire to please the researchers.

Despite these caveats, these data provide evidence that the FETCH! "formula" is successful. It appears that the most successful elements of the show include:

1. The cast, which includes "regular, everyday" children that other children can relate to.
2. Highlighting scientists and science-related jobs that are outside the stereotypical lab setting, especially those that show that scientists can be creative people.
3. Demonstrating that scientists are not just intelligent people in lab coats and glasses, but are creative, caring, and interesting people, too.

The video segment that arguably had the greatest impact on the children in the focus group was the roller coaster segment. Seven children indicated that they would like to be an "imagineer" after watching the segment. This may be due to the fact that the segment was exciting, fast-paced, and fun. WGBH may want to

consider more shows that highlight the exciting and creative outlets that science careers can offer.

Appendix A: Consent Form

Information about the Research Study

Please read this carefully.

Purpose

American Institutes for Research (AIR) has asked your child to be part of a research study. This study will help us figure out how much children like a children's educational television show produced by WGBH Boston. A total of 20 children from the Boston area will participate in this study.

Procedures

This study will take place at a focus group facility in Concord, MA. The study will last approximately 2 hours. During this time, we will ask your child to watch some video clips from the television show and discuss them in a group setting with other children in their age group. We will also ask your child to fill out a short survey about their interest and attitudes about science.

We will record the focus group discussion with an audiotape recorder. We will use your child's voice, anything they say on tape, but NOT your child's full name, to study the television show and to share examples of study findings with our research sponsor, WGBH.

Confidentiality

We will keep your child's identity and the information they supply confidential and share it only with people who have agreed to keep it confidential, such as project staff and study sponsors. All data will be recorded with code numbers in place of your child's name. A data file that links you with your child's code number will be kept in a password-protected file that only AIR can access.

Audiotapes will be secured at AIR, kept until the end of the project, and then destroyed after one year. Paper copies of data will be kept in locked cabinets or drawers and destroyed after three years.

Information Collected

We will take notes on what the children like and dislike about the television show. We will use the information your child give us, and the information we get from other children, to help improve the show for future viewers.

Benefits

Being in the study gives your child a chance to share their thoughts and feelings about the television show and can improve the show for other children who may watch it in the future.

Risks and Discomforts

Being in this study should not be risky or uncomfortable for your child. Your child may take a break at any time; they just need to let an AIR staff person know that they would like to do so.

Voluntary Participation

Your child's participation in this study is voluntary. They may stop being in this study at any time and they may pass on any questions they do not want to answer. You or your child can decide to not participate or to discontinue participation at any time without penalty.

More Information

If you have any questions or concerns about this research study, please feel free to contact the director of the research project, Dr. Christine Paulsen, by e-mail at cpaulsen@air.org, by phone at 978-371-8341, or by mail at American Institutes for Research, 490 Virginia Road, Concord, MA 01742. If you have questions about your rights as a research participant, contact the IRB Chair at IRB@air.org or toll-free at 1-800-634-0797 or c/o AIR, Attn: IRB Chairperson, 1000 Thomas Jefferson Street, NW, Washington, DC 20007.

Parent or Guardian Statement of Consent

I have read the above information. I have asked questions and received answers. I consent to allow my child _____ to participate in the study.

Signed: _____ Date: _____

Name (please print): _____

Child Statement of Assent

I have read the above information. I have asked questions and received answers. I agree to participate in the study.

Signed: _____ Date: _____

Name (please print): _____

We will give you a copy of this form.

Appendix B: Focus Group Script

Introduction and Informed Consent

Allotted time: 5 minutes

Hello everyone. My name is Chris and welcome to AIR. This is Susan who will be helping me today. Before we go any further, I want to make sure that everyone handed in their permission slips to Susan. Ok, great.

We're glad that you can be here today to let us know what you think about the show, FETCH! Tonight, we're going to watch different parts of the show and then we're going to talk about what we watched. We are going to record what we say today so the people that help make the show can listen to what you have to say.

Now, before we get started, there are just a few rules. First, it's important that everyone be quiet while we watch the videos. Second, we're going to take turns talking tonight. Like in school, if you have a question or want to say something, just raise your hand and I'll call on you. I'll sometimes write down what you say on the white board.

Do any of you have any questions? Great.

Now I'd like to quickly go around the room so you can tell me your name and what grade you are in.

Activity 1: Questions about You

Allotted time: 20 minutes

Great! Now Susan is going to hand out a piece of paper that asks some you some questions. She's also going to give you a pencil to use. I am going to read all the questions to you and the answer choices. You should answer the questions silently on your paper. Please do not say your answer out loud. We'll discuss them later.

Raise your hand if you have any questions for me.

Hand out "Questions about You" sheet (The pre-survey).

- a. What kind of job do you want to have when you are an adult? Why?
- b. Think about all the adults you know who have interesting jobs. What kind of work do they do? (1st Survey only)
- c. How much do you like science?
 - a. I love science
 - b. I like science, but I don't love it
 - c. I only like science a little bit
 - d. I do not like science at all
- d. Do you know anyone who uses science in his or her job? (1st Survey only)
 - e. Yes
 - f. No
 - g. I don't know
- e. What do you think it would be like to use science in a job?
 - h. It would be fun
 - i. It would be fun sometimes
 - j. It would not be fun
 - k. I don't know
- f. What kind of people become scientists?
- g. Would you like to be a scientist someday?
 - l. Yes
 - m. Maybe
 - n. No
 - o. I don't know
- h. Which of the following pictures show scientists? *(You may circle more than one)*

Insert pics here. Would be great to get shots of the scientists in all the segments so children can later compare who they thought was a scientist and who really is.

Thank you. Now, let's watch some of the show and discuss what you see. Remember, please stay quiet so others can hear the video.

Activity 2: Video Segments

Allotted time: 1 hour 15 minutes

Now we're ready to start watching some of the video segments.

Susan plays the DVD.

Segment 1: Brain

Allotted time: 14:30 Minutes

6. Did you enjoy watching this video segment? Why or why not?
7. Did the video segment teach you any new ideas? If so, what kinds of new ideas did you learn?
8. Was there a scientist in this segment? If so, how would you describe the scientist in this particular segment?
9. What kinds of things does this scientist/adult do in his or her job?
10. Do you think you would like doing this kind of work? Why or why not?

Now we're going to move on to our next segment.

Susan plays the DVD.

Segment 2: Rollercoaster

Allotted time: 15:30 Minutes

1. Did you enjoy watching this video segment? Why or why not?
2. Did the video segment teach you any new ideas? If so, what kinds of new ideas did you learn?
3. Was there a scientist in this segment? If so, how would you describe the scientist in this particular segment?
4. What kinds of things does this scientist/adult do in his or her job?

5. Do you think you would like doing this kind of work? Why or why not?

Now we're going to move on to our next segment.

Susan plays the DVD.

Segment 3: Weather Girl

Allotted time: 14:30 Minutes

1. Did you enjoy watching this video segment? Why or why not?
2. Did the video segment teach you any new ideas? If so, what kinds of new ideas did you learn?
3. Was there a scientist in this segment? If so, how would you describe the scientist in this particular segment?
4. What kinds of things does this scientist/adult do in his or her job?
5. Do you think you would like doing this kind of work? Why or why not?

Now we're going to move on to our next segment.

Susan plays the DVD.

Segment 4: Zoo Chef

Allotted time: 15:00 Minutes

1. Did you enjoy watching this video segment? Why or why not?
2. Did the video segment teach you any new ideas? If so, what kinds of new ideas did you learn?
3. Was there a scientist in this segment? If so, how would you describe the scientist in this particular segment?
4. What kinds of things does this scientist/adult do in his or her job?
5. Do you think you would like doing this kind of work? Why or why not?

Now we're going to move on to our next segment.

Susan plays the DVD.

Segment 5: Doggie Teeth

Allotted time: 15:00 Minutes

1. Did you enjoy watching this video segment? Why or why not?
2. Did the video segment teach you any new ideas? If so, what kinds of new ideas did you learn?
3. Was there a scientist in this segment? If so, how would you describe the scientist in this particular segment?
4. What kinds of things does this scientist/adult do in his or her job?
5. Do you think you would like doing this kind of work? Why or why not?

Activity 3: Final Questions

Allotted time: 20 minutes

1. Now, we'd like you to answer the survey again to see if your answers have changed since watching the video segments.

Administer The post-survey (Note: The post-survey will not include questions 2 & 4 from the The pre-survey).

2. Let's talk about the answers you gave on the survey. You don't need to tell us your answers if you are uncomfortable.
 - a. What did you say you wanted to be when you grew up? (Probe for scientists or engineers)
 - b. Did anyone say they like science or think it would be fun to use science in their jobs?
 - c. Did any of these segments make you think about becoming a scientist? If so, which one and why?
 - d. Did any of these segments make you think being a scientist would not be a good career? If so, which one and why?
3. Did any of the videos change your mind about what you think a scientist does? If so, how? (Probe on whether the cast behavior or comments influenced them)
4. Did any of the videos change your mind about who can become a scientist? If so, how? (Probe on gender, race and age)
5. On your survey, did anyone guess that all the pictures were of scientists? Why or why not?
6. Do you think the scientists in the videos were good role models for children your age? Which ones and why or why not?
7. Thinking about the videos you just watched, do you think the show is good for children your age? Why or why not?

Great! Well that's all we're going to do for today. Thanks for letting us know what you think about FETCH!

Susan distributes the checks to the children and makes sure all children leave with the person who dropped them off.