

The Boiling Point (A Science-in-a-Box Presentation)



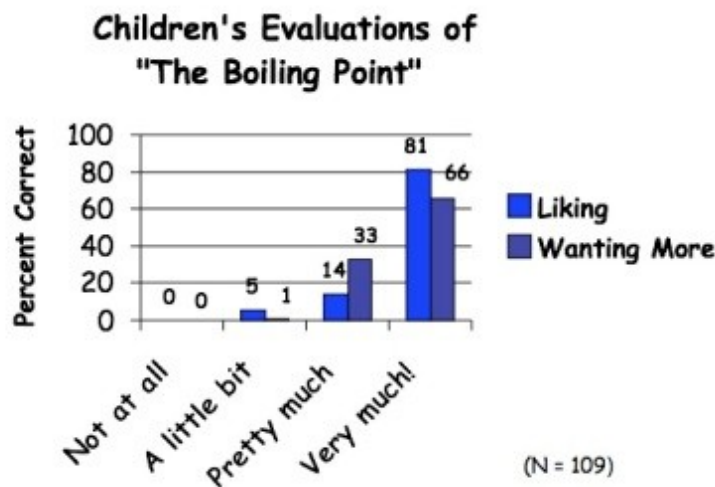
The Boiling Point, which investigates the question, “What happens to water when it boils?” was presented as a mobile science-in-a-box format at four locations during the Winter and Spring of 2008.

Girl Neighborhood Power (an after-school enrichment program)
Windsor School (4th grade classes)
Hawthorne School (Family Science Night)
Madison Children’s Museum

Girl Neighborhood Power included fourteen girls, ranging in age from 9-14. The assessment was more informal. In a pre-post assessment, they significantly increased their agreement with the statement “Science is fun.”

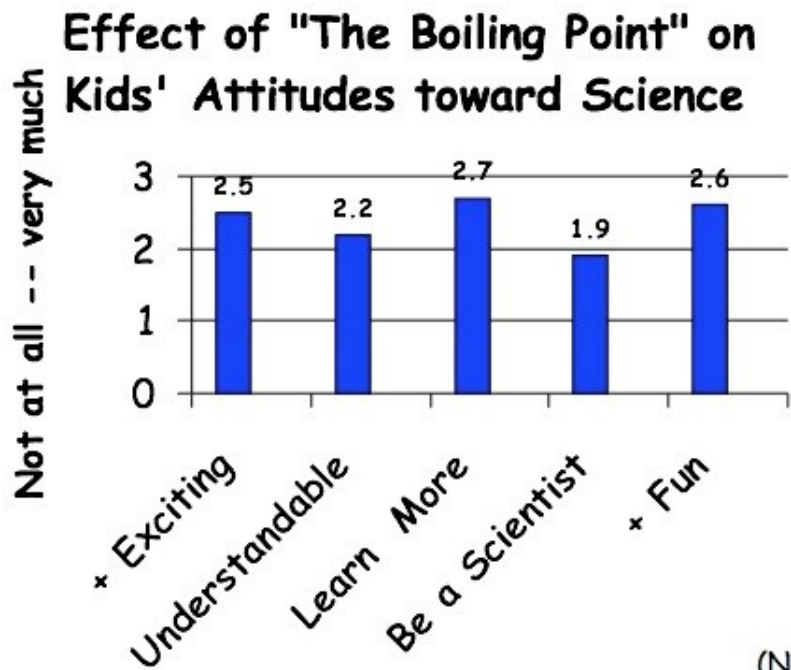
The remaining kids ranged in age from 2 to 16, with a median age of 7. Because of the chaotic nature of the venues that Science-in-a-Box plans to target, after-only questionnaires were used.

Most kids responded very positively to “The Boiling Point” and wanted to come to more shows:



When asked what effect the show had on their attitudes toward science, they were also very positive. The graph reports their agreement with the following statements:

The show made science more exciting
The show made science easier to understand
The show made me want to learn more science
The show made me want to be a scientist
The show made science seem fun

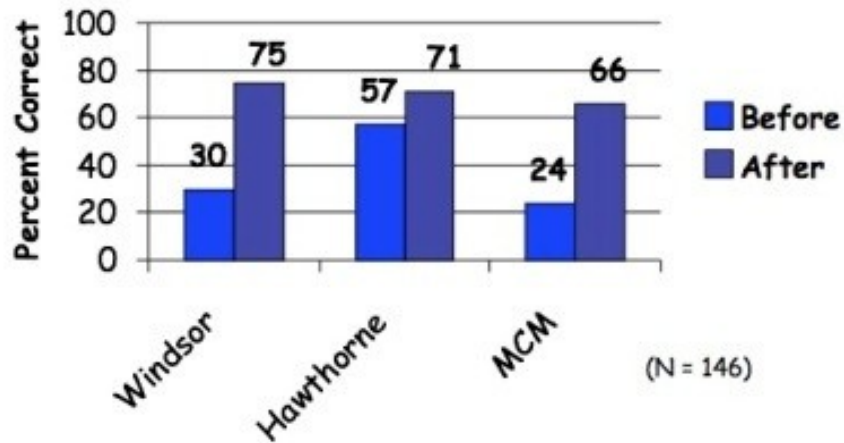


(N = 36)

Kids also improved their accuracy in answering the question “what happens when water boils?”

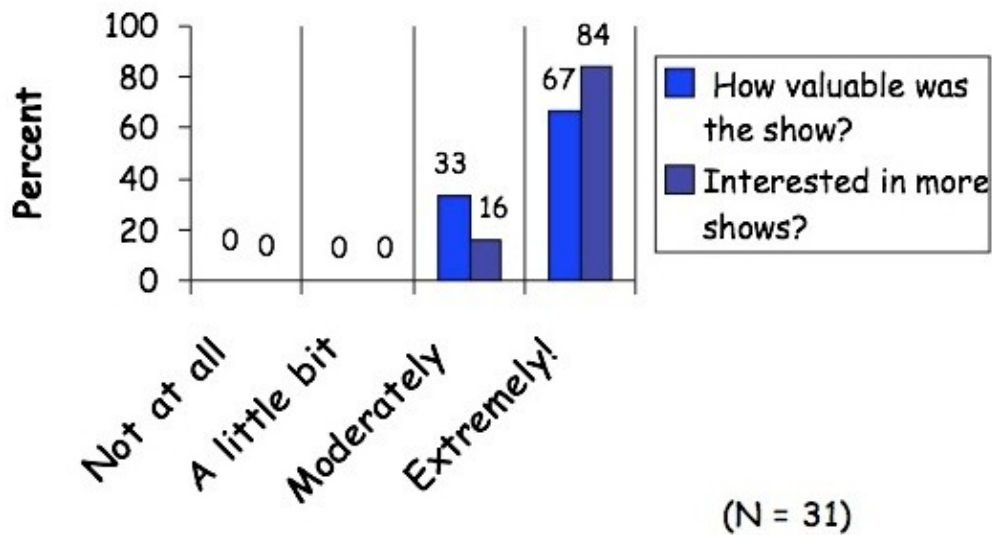
Learning from “The Boiling Point”

What happens when water boils?



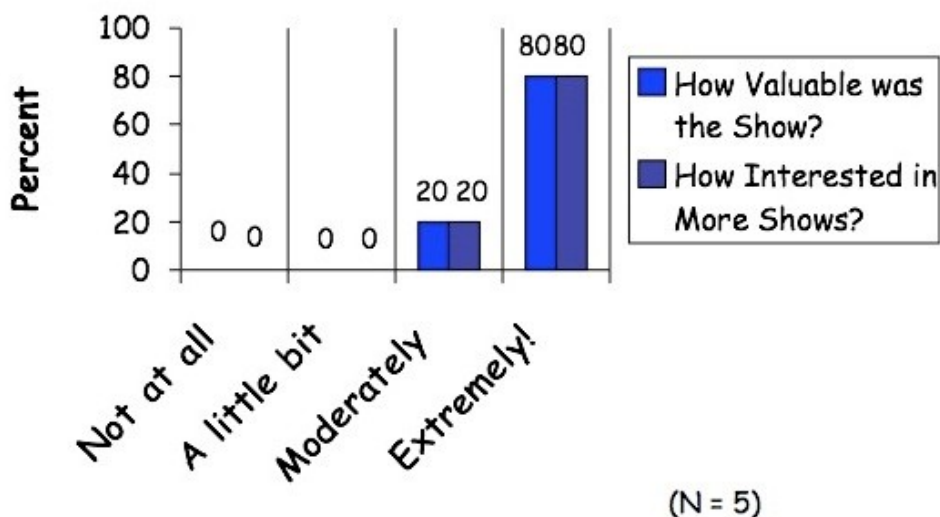
Parents found the show valuable and showed great interest in bringing their children to more shows.

Parents' Evaluations of "The Boiling Point"



Educators also responded approvingly to these two questions.

Educators' Evaluations of "The Boiling Point"



Children, parents, and educators have written enthusiastic comments. Here are some examples:

Children:

- It was awesome. I wish I could see you guys again.
- I liked when the others got to act out the molecules. I liked that we got to learn science in a fun way. I learned that acting out parts can make you look at science in real life not just through books.
 - I liked the show but most of all the experiments
 - I loved it. It was awesome. I want to be a scientist too!
 - It was amazing!!! I loved it!!! ☺☺☺☺
- I really liked the show. It taught me lots of things like molecules and more stuff about atoms. I like how you are funny and have the songs that help us remember them.
- I learned about molecules and how they were "H's" and the "O". I liked it when the balloon went inside the pot. I also liked it when some kids got to go up and be water molecules.
 - It is the greatest science show in the history of science shows

Parents:

- It makes things easier to understand science in “real” ways for kids
 - The scientists engaged the kids and “snuck” in the science.
 - Wonderful!
 - I liked the energy and audience participation.
- It was dramatic for the children. It encourages kids to think, draw conclusions and share their ideas.
 - Fun and practical science
 - Entertaining
 - Kids could see science in action.
- It was very well adapted to the target audience. There should be more shows like this.

Educators:

- Showed the process of scientific thought in a way that kept the kids riveted and parents with a smile on their faces – Great audience involvement
- It was actively engaging. Children were encouraged to draw conclusions. They have follow-up activities.
 - Great demonstrations.
- I really liked the “human” model of molecules – excellent idea; I like the orange balloon & the orange belt; helped kids visualize better
- Lots of visuals! Hands-on activities! You got students involved! You did a nice job of making atoms & molecules come alive!
 - Such a great way to learn science.

-- Joanne Cantor, Ph. D.