

Portal to the Public – Video Transcript

(VO) Imagine science center visitors engaged in conversation and activities with local scientists, each prepared to facilitate meaningful learning experiences.

(Scientist interacting with a family)

(Mother) That's the sun. That's an actual picture of the sun.

(Scientist) It's an actual picture of the sun, and what's happening there is that the magnetic fields reconnected, and when they did that it got really bright. And that's the same thing that happened there. If we look pointing our telescope at that part it would just get brighter.

(Kid) Pow!

(Scientist) Bam! Yeah exactly, it's like an explosion.

(VO) The Portal to the Public framework helps Science Centers create this type of rich dialog between scientists and their visitors.

The Portal to the Public framework was developed under a grant from the National Science Foundation, beginning in 2007.

The collaborating team was led by Pacific Science Center and included the North Museum of Natural History and Science, Explora and the Institute for Learning Innovation. Portal to the Public programs have now been implemented at eight sites nationwide.

This diverse set of partners created a framework that is scalable, flexible and appropriate for many types of science centers to adopt.

There are three major components to the Portal to the Public framework.

The first component is *relationship building* between Science Center staff and scientists from organizations like universities, businesses, and government agencies.

The second component is *professional development* that prepares scientists to share their work with public audiences.

The third component is *public programs* where scientists and Science Center visitors are brought together in face-to-face interactions.

(Scientist interacting with a boy)

(Kid) Yes!

(Scientist) Let's do this! So let's figure out what's in the Earth's atmosphere.

(Kid) I know, H₂O is one of them.

(Scientist) Yeah that's right.

(Father being interviewed with daughter) She learned a lot more from the actual scientist because she gets to see that that's what they do every day.

(VO) A key feature of the Portal to the Public framework is the time scientists spend involved in professional development activities. Science Center staff facilitate group workshops and become mentors to scientists.

(Tyler Robinson, Astrobiologist) The essence of what we did was develop skills for getting our ideas across to the general public, and so it involved trying out different hands-on activities that other people had designed, so maybe that would inspire us to come up with our own hands-on activities, or at least get the sense of what an appropriate activity is for the public. A lot of practice with how to interact with people, how to lead by asking questions as opposed to how to lead by just lecturing at someone, which is what we are all used to. To a science community you stand up in front of 20 and you give a lecture. That's what you do, but you don't do that at The Science Museum. You try to get people asking questions, and things like that. It's a very different way of communicating, we learned a lot about communication, and developed skills that I had never worked on, or didn't even have prior to the program.

(Bonnie Light, Sea Ice Geophysicist) One activity that I keep thinking about was the black box activity. We were teamed up and then each handed a cardboard box that had just a tiny little porthole to look through. The boxes were dark and sealed and we had to start assessing what was inside this box, and describing it. We were given a variety of different tools, and it was a really fun activity, I had never done it before.

(VO) Portal to the Public Science Center staff also help scientists choose materials and develop unique hands-on activities. The materials help scientists share their own current work with Science Center visitors.

(Guillaume Mauger, Climate Scientist) We ended up with an activity where we had kids rain from a watering can on to the state of Washington which was a big plastic bin, and we have a map with the topography of Washington showing and we had these grids that they'd rain over that would make it rain more in places where we have more rain in reality and less in other places.

(Lauren Russell, Pacific Science Center) It's really rewarding for me to be out on the museum floor and to see the scientists that I've worked with, using questioning skills and their hands-on activities to engage visitors.

(Scientist interacting with a kid)

(Scientist) Why would you want to space them out, do you think?

(Kid) Well if you space them out you might get a lot more chances.

(Scientist) A lot more chances? Yeah?

(Kid) 'Cause these two will probably get the same amount.

(Scientist) They might get the same thing. Huh?

(Scientist interacting with kids)

(Kid) Because those are stronger maybe this is a different type of bacteria.

(Scientist) How would you figure out what makes them stronger?

(Kid) By opening them.

(Scientist) Opening them! Bingo! We have to look on the inside.

(VO) Relationship building, professional development and public programs are all key components of the Portal to the Public framework. Working together, these elements lead to positive impacts on Science Center staff, scientists and of course on visitors.

(Kristin Leigh, Explora) Portal to the Public is a project that made a lot of people happy, and to us that had a lot of value.

(Dennis Schatz, Pacific Science Center) Portal to the Public allows us to meet one of our most important missions and that is connecting to the public with current science that is happening in our community. And what better way to do it than to connect a scientist who's doing the current research with the public in a one to one interaction?

(Jake VanderPlas, Astronomer) I think a big value of the program is having people meet scientists and realize that they are people.

(Jake VanderPlas, Astronomer continued) So this is what we do as astronomers, we look at other planets, and our puzzle pieces aren't quite this simple. It's the same kind of thing right? We know that water fits in right there so Earth has a lot of water.

(Visitor) Learning from an actual scientist in the field puts a little different perspective on it.

(Visitor) So we really appreciate it, this has been way more fun than we ever anticipated.

(Father and Daughter Visitors)

(Father) Yes we would. Would you come back Sofia?

(Daughter) Yes!

(Small Girl) It was fun! I had a bunch of fun doing this!