Brain Awareness Week

Activities for Grades Kindergarten to 3rd

Neuroscience Graduate Program, University of Rochester (Rochester, NY)

A Brief Introduction…

The Neuroscience Graduate Program made its first attempt at Brain Awareness Week outreach activity this year. We were motivated by the desire to educate local children about the brain as well as by the experience this would provide our graduate students.

From March 3–6th, a group of 19 graduate students and one postdoctoral fellow participated in the outreach project led by the program director. We traveled to four local elementary schools and, over the course of the five days, worked with over 600 young students in kindergarten through 3rd grade! Schools were chosen based largely on personal connections of the participants. With such young students we worked hard to make our activities short, educational, very hands on and very fun.

We worked differently in different schools. We went from classroom to classroom or set up in the library and had classes come to us. While we could reach more students with the latter, the single classroom approach allowed a more intimate and less distracting environment for the students.

The week-long program received rave reviews from children, teachers, and parents, and proved a greatly rewarding experience for our volunteers.

Brain Awareness Week by the Numbers

Volunteers	In-class Hours	Schools	Children
x20	x40	x4	x600

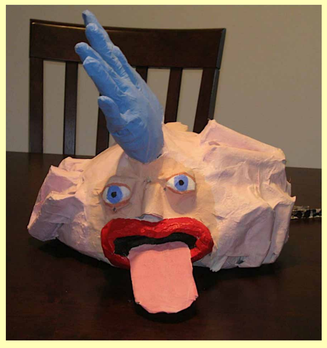
Presenting… the Brain!

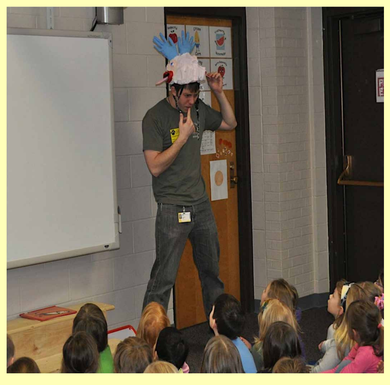
At the start of each session, we used to homunculus to introduce the senses and the representation of the outside world on the brain.

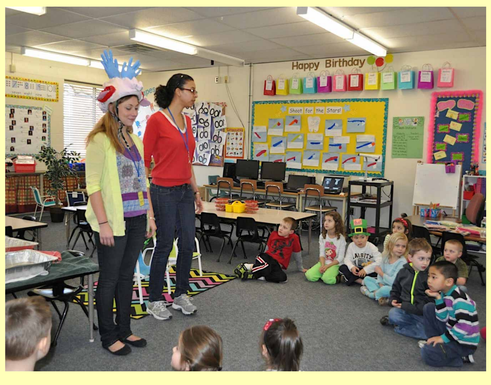
Our students made a homunculus helmet according to the instructions on:

http://students.washington.edu/nbout/extras/homonculus.html

It was a fun activity to start off BAW and it turned out very well!







The Stations

Each session was ~40 minutes long. After the introduction we split into three groups that rotated through 10 minute hands on activities about the senses. Activities were developed using web resources and trial and error before and during Brain Awareness Week. We benefitted the most from these websites:

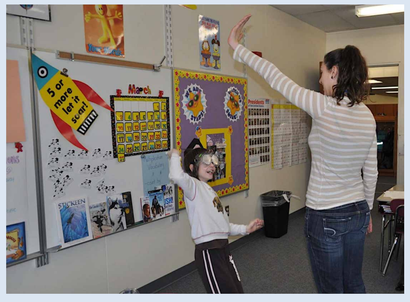
http://students.washington.edu/nbout/about/info4scientists.html
http://www.sfn.org/public-outreach/brain-awareness-week

A small group of students worked on developing initial idea and then held training sessions for the remainder of the group. We found that some of our planned activities worked better than others.

Sight

It's not so easy to throw a bean bag into a bucket when your visual field shifts…

We pitted two teams against each other – one with normal goggles and one with prism glasses.



…Or give a high five!

Older kids enjoyed jumping to give a high five (and often missing).

We also had presentations of visual illusions when larger groups of students were present.

Smell and Taste

Does your nose help you taste?

Children plugged their noses while drinking juice. They found it a lot easier to tell what kind of juice it was when they let go of their nose!

Can your nose tell you what is in the cup?

Children wore blindfolds while trying to guess the mystery smell. Peppermint was a big hit!

Touch and Temperature

What's in the mystery box?

This was a fun activity for the younger children – especially when they wore mittens. Two point discrimination worked well for older kids.

Which water is colder? Are you sure?!

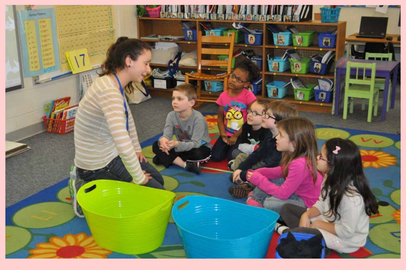
Kids learned that our receptors sense changes in temperature. Sometimes even their own hands disagreed!

Balance

We also explored the vestibular system by walking a straight line after spinning in place. The kids loved this activity but enjoyed watching the graduate students do it more!

Wrapping Things Up

At the end we brought the students together to review what we had learned and to brainstorm ways to take care of our brains. The kids had some great ideas to share! The students received brain pencils and erasers as well as some fun activities like word searches and puzzles to take home.



What the Future Holds…

- Expand program to reach more students
- Develop more activities/themes, expand to grades 4-6
- Develop custom handout materials
- Find sponsors to allow financial support for future development
- Get more undergraduate, graduate and postdoctoral students involved in Brain Awareness Week
- Develop website to share resources