Supplementary Online Materials

Stevens, C. (2011). Integrating community outreach into the undergraduate neuroscience classroom. *Journal of Undergraduate Neuroscience Education.*

I. Assignment Prompt

Science Outreach Project

Neuroscience is often perceived as (and often can be) an enterprise removed from the day-to-day experience of real people. The science outreach project is designed to give you an opportunity to think creatively about the relationship between cognitive neuroscience and real-world issues. You have considerable latitude on this project. Think broadly. Be creative. Follow your passion.

You are encouraged to work in small groups of 2-3 students in designing a project. However, if you prefer, you may also choose to complete this project independently.

What do I need to do to complete this project?

1. Individually or in a small group, decide what you would like to do.
2. Turn in a one-paragraph project proposal. Tell me what you plan to do, who is working on the project, and what you will turn in. Note that in all cases, your project should culminate in something tangible that I can evaluate – e.g., a video, a web page, a set of lesson plans, etc. **Proposal is due at the start of class on Thursday, 9/23.**
3. Note that because you have latitude in creating your project, there is not a one-size-fits-all evaluation model. Therefore, you are asked to create an evaluation rubric for your project. What does A-, B-, and C-level work look like? **Grading rubrics are due at the start of class on Thursday, 10/7.**
4. Complete your project.
5. Turn in your final product, grading rubric, and any supplementary materials **no later than Thursday, 11/4, at the start of class.**

If you are having trouble knowing where to begin, here are a few sample ideas to get you started:

- Prepare and deliver a class unit on the brain to a first grade classroom. (Note that if you are making a presentation to an outside agency or K-12 classroom, you must include some form of evaluation from the audience or supervising teacher and a post-presentation reflection on what worked well and what you might change in the future.)
- Design an informational web page on the neurobiology of anxiety for a college health center.
- Examine the evidence base for a "brain-based product" (e.g., Baby Einstein, Brain Gym) and prepare a pamphlet or video news segment describing the product and the results of your evaluation.

- Prepare an activities manual for cognitive neuroscience classes with interactive learning activities to supplement different class units (e.g., debate topics and materials, video suggestions/clips and discussion questions, popular press articles linked with research articles, etc).

Some potentially useful web sites:

Neuroscience for Kids: http://faculty.washington.edu/chudler/neurok.html
Great hands-on activities for teaching neuroscience to kids.

Nat'l Sci. Council on Developing Child: http://www.developingchild.net/
Excellent policy briefs on topics relevant to child development.

Society for Neuroscience: http://www.sfn.org/index.cfm?pagename=publications
Brain Briefings summarize key neuroscience findings for a lay audience

II. Sample student projects

The final materials for three student projects are provided in separate folders as examples of student work for the NCOP assignment. Below is a brief description of each project.

Example 1: Brain Awareness Week Curriculum Development

A group of three students designed a five-day neuroscience curriculum geared toward first and second grade teachers to be used during Brain Awareness Week. The curriculum was available both as a hard copy set of materials and electronically on CD, to be distributed to local teachers. An introduction letter to teachers provided a brief overview of Brain Awareness Week and the lesson plan contents. Separate folders contained daily lesson plans, including background and general information for the teacher, a sample lesson plan, and supplementary materials in the form of worksheets, activity guides, and movie / image files.

Example 2: Podcast

A student worked independent and developed a podcast on the challenges of popularized accounts of neuroscience research findings. This 6-minute podcast included basic information about the fMRI methodology as well as a comparison of two popular press accounts of a recent *Nature* paper on the role of sleep deprivation on neural processes.

Example 3: High School Presentation

A group of three students prepared and presented a set of three lectures for high school students on the neuroscience of drug use and addiction. In addition to professional powerpoint presentations, the students created an informational brochure to be left in the school's health center that provided a condensed summary of the key information from the three lectures. The students also created a poster that was left with the classroom teacher.