Assessments

It is that time of year again, assessment time. Between the AP exams and the CSTs, it seems like the students are getting more than their fare share of multiple choice test time. So it might be a good time to look at other ways to assess a student’s understanding of material. In science, I believe we are lucky that we have so many other ways to check for understanding from our students. There seem to be two additional ways that stand out in my classroom other than a test. The first are labs and the second are projects.

In the realm of labs, it is good to ask ourselves; what is the purpose of the lab? Yes, sometimes is it to validate some fundamental understanding and other times it is for the students to discover for themselves what the meaning is. But when do you use each of these and why do you use them when you do? I would love to say that all of the labs that I have allow students to play, discover and derive understanding of phenomena for themselves. While this is what I strive for, I also believe that students need to have some experience following a set of procedures (none of them ever read technical manuals anymore) to obtain an understanding and learn skills in science. I think that both can lead to a greater understanding of the material if done in a thoughtful way. So, I ask the question again, when do you use each of these methods? I do not presume to have the answer but I think it is a question worth asking and reflecting on.

The second type of assessments that are easy to use in physics are projects. While the topic is worthy of several newsletters by itself, I want to address one of the reasons that some teachers might not want to do them-grading. Yes it can be a bit of a pain to grade a project with multiple parts and crazy calculations. But if the students know how they are being graded upfront, they usually try their hardest to meet all of the demands of the project which makes it so much easier to grade. Oh, the power of the rubric!!! I was recently introduced to a great resource to help create rubrics: http://rubistar.4teachers.org/ This website is useful for all levels of education and rubric making skills. You can create your own or use ones that they have already created and everything in between. You can save them on the website or download them to print. When everyone knows what is expected, questions tend to decrease and the quality of the product increases (which is easier and much more fun to grade!)

Want to read more about assessment and topics associated with them? Assessment in Science: Practical Experiences and Education Research edited by, M. McMahon, P. Simmons, R. Sommers, F. Crawley, and D. DeBeats is an excellent source of information. All based in education research, the contributed reports cover just about anything you have a question on.

Physics Phunnies

To continue with the “phunnies” because we all need to continue to laugh.

Q: What did the neutrino say to the earth?
A: Just passing through.

Q: Why is electricity so dangerous?
A: Because it doesn’t know how to conduct itself properly.

Just a couple outside physics to be wellrounded.
Q: Want to hear a joke about sodium?
A: Na

Q: What did the earth say after the earthquake?
A: Sorry, my fault.