

## **Genetics Summer Workshop Feedback Form 2011 Responses**

### **1. Describe your reaction to this session:**

The methodology is relevant to the types of students I am teaching, a diverse population of inter-city kids who do not come in to my classroom with much background information or many skills.

I recognized there is a segment of my population that needs this type of teaching even if I don't use it, so I now am motivated to get to those students as well as the ones who walk in ready to learn and succeed.

I often think the students don't need to do anything to understand simple concepts, but after doing some of these activities myself with peers I can really see why it is so important to "do" instead of hear about something, even if it is a simple idea.

I needed to experience what learning using hands-on methods was like before I was ready to use this approach myself. I get it now. I'm not sure if I will be able to do it all the time, but I know now I have to try because I have very had such a dramatic change in my own comprehension so quickly – these techniques work!

I have had your full year curricula but have been using it like a bag of tricks. I realize I have been sitting on something that can be used for a much more powerful result and now I know how to do it.

### **2. Did you learn anything about teaching methods that will significantly impact the way teach your class?**

I plan to "flip" my classroom and allow class time to be used only for activities, labs and interactions that cannot be performed at home or alone.

Layering, starting simple and then increasing the complexity as you add details. I will definitely do more layering in the coming year.

I understand now how important designing a lab is for the student to actual grasp the use of the scientific method. I thought the students knew this topic since they were young, but even the teachers struggled to put the scientific method into use – and we have a background in this!

Yes, ways to express my own creativity in the classroom, push the students to do more of the work and ways to assess the students. I have a different view of the role of the students and more hope that I can consistently maintain a higher standard in the future.

I now realize that I need to make sure I am using a variety of methods that work for all types of learners. Not all activities and lessons will work for each student. I need to have different modalities for each subject, and multiple ways of teaching the same topic if they are foundational.

The operons – for the first time I can see how genes are regulated, the scale model really made this clear. When we used the hemoglobin gene afterwards and then reinforced the ideas with several other gene regulation mechanisms all these concepts flowed into a place in my brain that was not receptive before. This will change how I teach the bigger concepts (like gene regulation).

I think my classroom culture will be different because I plan to keep the students at the center of the learning experience rather than have them focus on the "sage on the stage."

Yes, as I master this approach I want to move away from my 60/40 use of lecture/hands-on, how far I go is really up to me but I can see that movement towards hands-on learning will only increase my student's success.

Facilitating smoothly was the thing I will take into every day next year in all my classes. I can see how to assess and manage time much better than how I have been doing it so far.

My students will be taking the learning into their own hands next year.

Yes, I will be adding more critical thinking questions to my courses, I already do many hands-on activities, but spending my planning time thinking of how to push the kids will change the level of depth and comprehension.

Students need to critique each other when they are designing experiments in order to understand the application of the scientific process. I will use this structure in all my classes and introduce the idea to our department.

### 3. What things should I change or definitely not change about this workshop?

The T&T Diner, this made Transcription and Translation real for me, keep this simulation in the workshops.

Keep us in the student role so we can experience what it is like to be guided into opportunities for discovery instead of told what to know. Invaluable.

Definitely keep having teachers learn to lead student-designed labs. Also, keep giving teachers the tips on how to deal with parents and administrators who are not behind hands-on teaching. Not all parents and administrators think this appropriate for high school, but we need talking points and ways to make it clear that this pedagogy is the highest level of Bloom's Taxonomy.

Our instructor! She's amazing and I want to take more workshops with her.

I really enjoyed the approach to teaching writing for free response essays and the structure to decrease the inhibition of taking risks in general.

Reading the hemoglobin gene so we could see the different factors that impact gene products. I have never thought about gene regulation other than the few examples I was used to teaching. Keep teaching about the details and going to that level with the teachers so we can bring it back to the students.

Using peer review so to critique skits (meiosis simulations) and allowing students to correct one another. This was an insight to me and I love how it worked for us as peers.

4. What type of teacher would you recommend take this workshop?

Every teacher who is trying to be the best they can be for the sake of their students.

Traditional old school teachers who still feel open to learning as well as new inexperienced teachers who are just starting out – and everyone in between.

All science teachers, I would love to bring my department!

Anyone who is using Power Points to teach.

Teachers who truly want their students to understand the material rather than simply be able to take a test or reproduce ideas.

Any biology teacher!

I would recommend this course to any IB Biology teacher, so they can understand the content immersion, critical thinking and student-designed lab skills. Also, any teacher who wants to present advanced material to the class they are assigned. Kristen presents ways to take students to a much higher level even if you are starting with unprepared students.

5. What would you say to another teacher about this workshop?

Wonderful, well worth the time and money even if you must pay for yourself (and come from the west coast!).

You will never look at pool noodles the same way again!

You will get lots of great ideas about all aspects of teaching your classes and your students will love you for it.

It was excellent, I am already talking to my department chair to purchase curricula for our department and I am vying for a professional development on-site at our school so the entire district can benefit from these methods.

Well worth the time and money, don't have any doubt about that. Be ready to be challenged and learn even if you don't think you have much more to learn on the subject.

Find a way to take it, my workshop peers were from all over the nation (and even one from Turkey). That speaks highly as to how effective and fun this workshop is.

Go take this class!

Find a way to take this course! I will be back next year, and the year after....

I would tell them to attend a CLC workshop if at all possible! A week very well spent. I'm actually excited about implementing lots of new ideas in my classroom and starting the new year as soon as possible.