

A sample of letters by physics teachers who laud Modeling Instruction.

Teachers wrote the letters in Nov. 2015, after their summer 2015 ASU Modeling Workshop. Five of these 6 teachers teach in large comprehensive high schools in metropolitan Phoenix.

Mechanical Waves and Sound Modeling Workshop (3 weeks in June. Prerequisite: mechanics)

* This past summer I was fortunate to enroll in the Mechanical Waves and Sound course. The training in both physics content and physics pedagogy is first rate. I can confidently say my experiences with the Modeling Program far exceed any staff development I have received from the school district with whom I am employed. The teaching principles I learned from the Modeling Instruction Program are much more effective than standard lecturing in helping students develop content mastery, thinking skills, and an understanding of how science is actually done.

* This last summer I was able to take three classes in the modeling program; mechanical waves and sound, physics and astronomy, and structure of matter. These classes are greatly improving my personal knowledge on physics concepts which in turn helps me explain these topics to my students in more effective ways.

* This is my second class in physics modeling. After switching to teaching using the modeling method, my students' performance in physics improved greatly. Not only are their scores better, they have reported to me that physics is much more engaging using the modeling method.

* By taking the ASU modeling classes I am getting exposed to new experiments, labs, and curriculum that are on a level you cannot get anywhere else in the country. The benefits of these classes are priceless, because the kids who then receive the instruction gain valuable insight into topics and ideas that are being taught in college. My kids directly benefit because I am getting the tools necessary to teach ideas that inspire students to become future STEM-related professionals. The more teachers who can get exposed to the curriculum and content being taught at the post-high school level, the better prepared students are for the ever-changing real world.

This past summer I took Mechanical Waves and Sound. The knowledge I gained from this summer will form the basis for my rewrite of our current wave mechanics standards. In years past I was not always well versed on waves and the math behind them, but now after taking the class I have a really good base of new knowledge and understanding to pass along to my kids, not to mention I have a greatly improved idea of what my students will be expected to do in upper level physics classes.

I can say without question, *the ASU Modeling program has made me the instructor I am today*. The community ASU provides teachers such as myself is an invaluable resource and network that provides professional camaraderie and support. The education we get at ASU is crucial to making folks like me better at teaching already a difficult subject matter. I don't think I would have ever started teaching full blown physics if it wasn't for the support and training I received from their program.

Mechanics Modeling Workshop (3 weeks in June)

* I am a 20-year veteran Physics teacher. Last summer I took an intensive 3-week immersion course at ASU (PHS 530: Mechanics Modeling Workshop) that reshaped my thinking. I found it incredibly valuable and transformative in helping me see things differently and teach things

differently. I am making real changes in the classroom and my students are benefitting from the models we developed in each unit.

* This summer, I attended my first modeling workshop for high school physics (mechanics). It was a wonderful experience and I have been having a great time implementing what I learned into my classes this school year. I have never seen my students so engaged on a regular basis as I do with modeling instruction. Some of my kids who are typically unmotivated and distracted are now on task and eager to show their understanding.

See <http://modeling.asu.edu> for more information.