

Michael Lampert

West Salem High School, Salem, OR

High School Science Education

9th Grade Physical Science; 12th Grade Honors

Physics and 10th Grade Microelectronics



2005 Honorees



“Goggles on?... Ears plugged?...3-2-1-Boom! An airbag explodes in the classroom. The end result of several weeks of studying the issue ‘Are airbags safe?’ A few years ago, all my physics students enjoyed experimenting with

airbags. The US had unusually high numbers of infant deaths and this seemed like an ideal physics problem for the high school. I wrote a grant for equipment and my students did computer simulations and model car crashes (with an egg ‘passenger’ held in a restraint system). They attached computer sensors to a real airbag just as scientists do and then deployed the bag while video taping it. They downloaded and digitized the event. They learned that domestic airbags release at too high a speed and they devised ways to change this while still protecting the occupants. My students had a direct and memorable lesson that impacted the way they thought about physics and engineering. Along the way, they were taught all the State and National standards in science that they would have normally received in a much more mundane type of teaching.”

“I have never had students that don’t participate. They are always involved because they are excited about the design of the problem and because they can uniquely input their ideas. Very often simple things we teach don’t get translated into real life... And a test never can impart the tremendous boom that an airbag makes during deployment, nor give the lesson that you don’t want to be resting your feet on the dashboard when one of these bags goes off. My kids know that now from scientific experience. They are not all going to be physicists. I want them to make connections in the classroom to social issues in a learned and informed manner.”

– Michael Lampert

“As a parent of one of Michael Lampert’s physics students, his knowledge and his sincere dedication to teaching impress me. Michael regularly supports his students by generously offering physics help in his classroom one night each week. His students appreciate the fact that he makes time to help them outside of class, and they learn to seek help and strive for complete understanding of physics rather than accepting frustration and failure.” – Jan Olinger, parent of current and former students



Other Highlights:

Member, National/Oregon Science Teachers Association

Coach, Lemelson-MIT Inventeam, building a "watermelon ripeness evaluator"

Teacher Experiencing the Arctic and the Antarctic (2003)

Presidential Award State of Oregon (2000)

Salem Rotary Teacher of the Year (1999)

CHADD (Children and Adults with ADD) Distinguished Service Award (1999)

Coach, Toshiba Exploravision, First Place National Winner, “Defeating ADD through Biosensing Technology” (1999) and Second Place National Winner, “Anti-Quake, Securing the Future through the science of Nitinol” (1998)

Coach, Duracell Invention Challenge, Fifth Place National Winner, “Toothpaste at a Touch” (1999)

Northern Life Unsung Hero Award (1998)

Partners in Science Award (1993-1994)

Coach, United States Academic Decathlon, Three-time State champions (1999-2001)

Years Teaching: 15

Average Class Size: 28

Classes Taught Per Day: 4-8

School’s Percent of ESL Students: 6

School Type: Public, Suburban

Type of Class: Self-contained