Boris Korsunsky, EdD
Educational Consultant
korsunbo@post.harvard.edu
korsunskyb@mail.weston.org
voice 781-529-8030 x 7609

LIST OF AVAILABLE WORKSHOPS

1. Problem solving skills in physics (for students).
Students are taught general strategies of solving challenging physics problems. Instead of topic-specific algorithms favored by many textbooks, students are presented with universal mental tools that allow them to tackle difficult tasks confidently and effectively. In this workshop, challenging, competition-style problems are used.

2. Teaching general problem solving skills in physics (for teachers).
A variation of the previous workshop intended for teachers; focuses on the pedagogy of teaching problem solving strategies in a classroom setting. (Note: this workshop has been successfully presented since 1997 at the Mathematics, Science and Technology Conference at Phillips Exeter Academy in Exeter, New Hampshire, USA).

3. Teaching physics concepts through problem solving (either for teachers or for students).
This workshop presents physics concepts in mechanics, thermodynamics and electricity not through traditional lecture but through carefully selected sequences of problems. This approach helps the students internalize the new knowledge and apply it in new situations.

4. AP Physics: pedagogy and content (for teachers).
Intended for AP Physics teachers - just what the title suggests. Having taught AP Physics for ten years, being an AP Reader and a consultant to the College Board, I bring a comprehensive understanding of goals and requirements of the Advanced Placement program and the teaching strategies that help meet them. Workshop includes suggestions on time management in light of the AP Audit and the new “lab time” requirement.

5. Using multiple choice questions effectively: learning and teaching, assessment, educational research (for teachers).
Many educators consider multiple-choice questions to be just a simple and quick method to grade/mark a test. However, well-constructed multiple-choice questions can be used much more comprehensively. They help identify student misconceptions and other weaknesses and remedy them; they can also be used as a method of “just-in-time” assessment of student knowledge and its development. Finally, they can be used as a tool in educational research. We will discuss ways of constructing useful multiple-choice style assessments and their appropriate use in the context of the educational goals before the educator.

6. Physics for chemistry teachers (for teachers).
This workshop presents physics concepts relevant to chemistry (atomic physics, nuclear physics, thermodynamics, electricity, wave and quantum optics). The purpose is to strengthen the physics background of those who frequently teach related chemistry topics but feel that they would like some more background knowledge.

7. Science Education: Links between Research and Practice (for teachers).
This workshop reviews latest results of educational research and suggest effective pedagogical strategies based upon such research. Suitable for teachers of all science disciplines. No fads, just the facts!

8. Gender Issues in Science Education (for teachers).
I use my familiarity with research literature and my own teaching experience to delve into this "politically charged" aspect of education and isolate effective teaching strategies that are based on sound empirical data and allow the teacher to effectively engage the students of either gender in science classes. Suitable for teachers of all science disciplines.

NOTE: Each workshop can be customized depending on the audience's needs, the length of time available, the age and education level of the students, experience of teachers, etc.

If interested, please contact Boris Korsunsky via e-mail or phone.