

Dr. Boris Korsunsky
korsunbo@post.harvard.edu
<http://funstudentquotes.com>
1-781-786-5947 (voice)

HISTORY:

2000-present Physics Instructor, Weston High School, Weston, MA

Teach algebra and calculus-based advanced physics courses, including AP Physics C (Mechanics, E&M); create original curricular materials and assessment methods

2000-2005 Content Developer, Effective Educational Technologies, Cambridge, MA

Developed the content and helped design the structure for an online physics tutorial software MasteringPhysics <http://masteringphysics.com/>

1999-2000 Research Associate, Education Development Center (Newton, MA)

Developed mathematics problems for an online mathematics tutorial database Problems with a Point <http://www2.edc.org/MathProblems/>

1998-1999 Physics Teacher, Thayer Academy (Braintree, MA)

1993-1998 Science Teacher, Northfield Mount Hermon School (Northfield, MA)

1986-1992 Science Teacher, Math School No. 57 for the gifted (Moscow, Russia)

1982-1986 Teaching Assistant, Math School No. 57 for the gifted (Moscow, Russia)

SELECTED PUBLICATIONS:

- Korsunsky B., Huckins G. (2010) Physics Thirst? The survey of 9th-grade physics students. *The Physics Teacher*, April 2011 (accepted for publication)
- Korsunsky, B. (2010) “The Errors Were the Result of Errors...” promoting good writing by bad example. *The Physics Teacher*, 48, 10-11.
- Korsunsky, B. *Trophy Wives Don't Need Advanced Physics: Dubious Words of Wisdom from Physics Students*. (2009). Pi Press, New Orleans.
A collection of amusing student quotes – see the web site <http://funstudentquotes.com>
- Korsunsky, B., Agar, O. (2008) Physics First? Survey First! *The Physics Teacher*, 45, 521-524.
- Korsunsky, B. (2006) Teaching to the test: some SSS-based TTTTT. *The Physics Teacher*, 44, 434-438.
- Korsunsky, B. (2004) Ready, SET, Go! A research-based approach to problem solving. *The Physics Teacher*, 42, 493-497.
- Korsunsky, B., Love, J., Brown L., Brehmer, S., Lemley, M. (2004) *The Best Test Preparation For The AP Physics B & C*. Research & Education Assn.
- Korsunsky, B. (2001-present) Physics Challenges for Teachers and Students (a monthly column). *The Physics Teacher*
- Korsunsky, B. (2002) Improper use of physics context in math problems: the implications for learning and teaching. *School Science and Mathematics*, 102, 3, 107-113.
- Korsunsky, B. (1999). When things fall apart. *Quantum*, 9, 5, 4-8.
- Korsunsky, B. (1997). Fair and squared! *Quantum*, 7, 5, 53-56.
- Korsunsky, B. (1997). *Holt Physics Problem Workbook*. Austin etc.: Holt, Rinehart & Winston.
A collection of original problems based on the facts from the Guinness Book of Records.
- Korsunsky, B. (1995). *Important components of learning components*. *Quantum*, 5, 3, 45-48.
- Korsunsky, B. (1995). Braintwisters for physics students. *The Physics Teacher*, 33, 550-553.
- Korsunsky, B. (1995). *Instructor's Solutions Manual for Challenging Problems for Physics*. Fort Worth etc.: Saunders College Publishing.
- Korsunsky, B. (1995). *Challenging Problems for Physics*. Fort Worth etc.: Saunders College Publishing. A collection of unusual, competition-style physics problems to challenge both high-school and college students.

CONSULTING EXPERIENCE:

- 1996 – present Wrote test items for graduate-school admission test (Contractor: ACT, AIR; name of test confidential)
- 2001 – present Wrote physics test items for high-school standardized state exams (Harcourt Educational Measurement; Pearson Education; ETS K-12; ACT, AIR)
- 2005 – present Serve as a Reader (grader) of AP Examinations in Physics
- 2006 – 2008 Developed test items and teacher training materials for the AP Physics program
- 2005 – 2007 Consulted on development of qualifying exam for the new physics teachers: content development, standards alignment (American Board for Certification of Teaching Excellence)
- 2004 Taught mathematics and data analysis at the High Achievers Program (Hong Kong International School, Hong Kong)
- 2000-2005 Developed content for the online database of physics problems MasteringPhysics (Effective Educational Technologies, Cambridge, MA)
- 1998 – present Conducted workshops on science education for high school teachers
- 1996 – 1997 Coached the US Physics Team: created original challenging problems, ran the activities at the training camp, assessed the team members' performance, helped made the final selection of the team
- 1996 Wrote about 700 problems for *Physics for Scientists and Engineers* by Paul Tipler (Worth Publishers)
- 1994 Wrote about 400 problems for *Physics for Scientists and Engineers* with Modern Physics by Ray Serway (Saunders College Publishing)

EDUCATION:

Ed. D. (2003) Harvard Graduate School of Education, Cambridge, Mass. Focus: Learning and Teaching. Dissertation topic: Cognitive Mechanisms of Solving Non-Trivial Physics Problems.

Designed and conducted the original study of problem solving approaches used by Advanced Placement Physics C students in several high schools across the US. The study included both online data collection and interviews and involved more than 100 students. Both qualitative and quantitative methods of data analysis were used. Full text of the dissertation is available online at

http://www.weston.org/schools/hs/sci/apphy/korsunsky/Dissertation-pdf/table_of_contents.htm

M. S. (1992) (major: Physics/Physics Education) Moscow Open Pedagogical University, Moscow, Russia

M. S. (1988) (major: Physical Chemistry/Physics) Moscow Institute of Steel and Alloys, Moscow, Russia

HONORS AND AWARDS:

1996 - 1997 Coach, US Physics Team (sponsored by AAPT and AIP)

1999 Larsen Entering Award (Harvard Graduate School of Education, Cambridge, MA)

2002 Fulbright Memorial Fund Scholarship

2006 US Representative, International Summer School for Young Physicists (University of Waterloo, Canada, sponsored by AAPT)

2011 Winner, Amgen Award for Excellence in Science Teaching

LANGUAGES: English (near-native); Russian (native)

REFERENCES: Available upon request