

WebSights features announcements and reviews of select sites of interest to physics teachers. All sites are copyrighted by their authors. This column is available as a web page at PhysicsEd.BuffaloState.Edu/pubs/WebSights/. If you have successfully used a physics website that you feel is outstanding and appropriate for WebSights, please email me the URL and describe how you use it to teach or learn physics—macisadl@buffalostate.edu.

Humanized Physics Project (HPP) website, <http://physics.doane.edu/hpp/index.htm>

This website created by a team of investigators led by Dr. Robert Fuller of THE University of Nebraska at Lincoln, contains a large collection of resources designed to help physics teachers use the human body as a context for teaching physics, particularly at the introductory level. The site provides a library of many classroom-tested activities and labs, descriptions of revised introductory physics courses using the human body theme, the complete body-themed intro physics textbook called *Fuller-cubed* (with lab manual, study guide, and instructor's guide), and video resources for sport event analysis with numeric anthropometric data. The Human Physics Project was partially supported by the National Science Foundation CCLI Program under Grant DUE#00-88712 and DUE#00-88780. This editor particularly enjoyed the rich labs and the textbook examples; my students and I are always interested in learning more about the physics underlying our own bodies.

*Submitted by Robert Fuller, University of Nebraska at Lincoln
Physics*

Vernier Video Physics for iOS (Mac iPhone, iPad and iPod touch) released for download, <http://www.vernier.com/soft/videophysics.html>

New software from Vernier Software (freely downloadable from the iTunes App Store until early December 2010) supports video analysis and capture on apple handheld and portable devices. Vernier also distributes curriculum for these devices, and I have a colleague who has loaded the Modeling Physics curriculum (free from <http://modeling.asu.edu>) teachers' guides and activities into an iPad for use when walking around from group to group in his physics classroom.

*Brought to my attention by Brad Gearhart of Alden High
School Physics*

Closing the talent gap: Attracting and retaining top third graduates to a career in teaching: An international and market-based perspective, by the McKinsey group, <http://tinyurl.com/top3rd>

This is a fascinating, freely downloadable report on teacher recruitment and retention practices by non-educational professionals from a leading (and controversial) worldwide corporate consulting organization. Starting with the statement that "the quality of an education system cannot exceed the quality of its teachers," this report examines the teacher

recruitment and retention practices in three countries, obtaining some of the best student learning outcomes in science, reading, and math: Finland, Singapore, and South Korea. These three countries approach teacher preparation from different traditions; have developed long-term policies (somewhat volatile in the case of South Korea) for teacher preparation; and have varying salaries and compensation, preparation funding, and working conditions for their teachers. The report analyzes commonalities (such as strong selectivity) and noteworthy features (teacher certification financing) of these systems, and projects strategies and costs for applying some of these ideas to U.S. teachers and schools.

The report analyzes what motivates both new and (to a lesser extent) established teachers to be recruited and retained in the teaching profession (new teachers want prestige and outstanding colleagues; experienced teachers want a good work environment and some control; all teachers want competitive compensation). Report recommendations for improving U.S. student learning outcomes include several taken from a cost/benefit analysis: focusing money on STEM teachers, school leadership academies, additional pay for teachers in high-needs schools, and supplementary merit pay and student outcomes-based teacher supplementary pay for teachers willing to undergo additional scrutiny (on an opt-in basis in a two-tiered system containing traditional compensation). I was particularly intrigued by the report's claims regarding the impact of the oversupply of K-6 teachers in the United States and the growing impact of the oversupply of secondary teachers in Korea on teacher "quality" (defined by teacher candidate class standing or standardized test scores) in those areas of the working profession—the report insinuates that oversupply may correlate with decline. Report descriptions that strike a familiar chord include: real starting salary slippages for teachers since 1980, the loss of the captive population of the brightest women college graduates from teaching to the general workforce since the 1970s, the widely publicized use of some elementary education programs as "college cash cows," and discussion of common misperceptions regarding the teaching profession (my college elementary education colleagues are quite demanding, and N.Y. public school teacher salaries are better than widely perceived). The report is driving an agenda centered on teacher "quality," but there are many important and interesting ideas in it that are worth considering and addressing.

*Brought to my attention by Jari Lavonen, Physics and
Chemistry Education, University of Helsinki.*