

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.

• **Phillip Morrison's PBS series "Ring of Truth" (1987) excerpts start arriving on YouTube**

http://www.youtube.com/results?search_query=ring+of+truth+philip+morrison

http://www.ovguide.com/tv_season/the-ring-of-truth-season-1-145801

<http://www.youtube.com/watch?v=JSc5eZP88dQ>

Deceased MIT physics professor emeritus Morrison was the book reviewer for *Scientific American* for many years, a member of AAPT who worked on the Manhattan Project, and was known for physics education films including working with Charles and Ray Eames on the original "Powers of Ten" video (1977; Morrison narrated and worked on the script). My favorite of his video works is the PBS six-part series "The Ring of Truth" from 1987, which is not now commercially available for purchase. Recently portions of that series have become available on YouTube. Original show topics include Atoms (atomic theory), Change (conservation of mass-energy), Looking (instruments and the telescope), Clues and Doubt (the nature of science), and Mapping (repeating Eratosthenes' experiment with a moving truck). Several still-provoking demonstration vignettes included Julia Childs cooking a diamond into carbon black in a vacuum furnace, gold beating, spreading oil on water, burning jelly donuts (my favorite), spectra of road flares, decoding the geological history of the Mediterranean basin, and observing and analyzing handheld sparklers and the electrolysis of water.

• **Reports Roundup: College Board, National Science Board's 2013 SAT Report on College and Career Readiness**

<http://www.collegeboard.com>

<http://media.collegeboard.com/homeOrg/content/pdf/sat-report-college-career-readiness-2013.pdf>

"The College Board's 2013 SAT Report on College and Career Readiness reveals that fewer than half of all SAT takers in the class of 2013 graduated from high school academically prepared for the rigors of college-level course work." This statistic is virtually unchanged during the past five years, something to keep in mind when facing those concerned parents of physics students. Unsurprisingly, the single best academic predictor for doing well on the SAT (taken by most U.S. high school students) is taking "high level" high school math: calculus, precalculus, or trigonometry. Access to AP/honors coursework also predicted success on SAT, while being ranked in the top 10% of high school graduating class only weakly predicted SAT success.

• **U.S. National Science Board releases Science and Engineering Indicators 2012**

<http://www.nsf.gov/statistics/seind12/>

This U.S. government document is subtitled "A broad base of quantitative information on the U.S. and international science and engineering enterprise," and includes representative U.S. national data on grade school and higher education, as well as indicators regarding the STEM labor force, research and patent productivity, industry, economy, public attitudes and understanding, and state by state indicators. This is a nice report for situating your classroom physics teaching efforts in the greater U.S. national and world science and engineering picture. The highlights from "Chapter 1. Elementary and Secondary Mathematics and Science Education" and "Chapter 2. Higher Education in Science and Engineering" are particularly relevant and informative to STEM educators. An iPad version is available at http://nsf.gov/news/news_summ.jsp?cntn_id=129148.

• **U.S. National Science Board releases "STEM Education Data and Trends Tool"**

<http://www.nsf.gov/nsb/sei/edTool/index.html>

Aimed at non-STEM-trained parents, students, teachers, policymakers, and other stakeholders, the tool is organized as a timeline spanning kindergarten through adult employment. The tool draws on data culled from the most recent edition of the Science and Engineering Indicators 2012 listed above, and presents these data in a less compact, but more approachable format.

• **U.S. National Science Board releases "Preparing the Next Generation of STEM Innovators: Identifying and Developing Our Nation's Human Capital"**

<http://www.nsf.gov/nsb/stem/innovators.jsp>

This report makes specific suggestions for K-20 STEM education, grouped around three themes: *Providing opportunities for excellence*, *Casting a wide net [including equity]*, and *Fostering a supportive [STEM education] ecosystem*. Each theme includes proposed policy actions and research agenda. I was particularly impressed with discussions of equity, partnerships, community, professional development, and accountability in the report. It is frankly reassuring to see the National Science Board and the National Science Foundation explicitly reaffirm their commitments to K-20 STEM education innovation.