

The following essay by Frank G. Splitt was published in the August 2006 issue of *The Interface*, the joint newsletter of the Institute of Electrical and Electronic Engineers (IEEE) Education Society and the American Society for Engineering Education (ASEE) Electrical and Computer Engineering Division, see <http://www.ewh.ieee.org/soc/es/Interface-Aug-06.pdf>.

BALANCING STEMs AND SPORTS: A QUESTION OF VALUES

Frank G. Splitt

Some three years ago, my wife Judy and I attended Northwestern University's *Waa-Mu Show*, "This Just In" – a musical created around the idea of breaking news. How ironic it was to receive "this-just-in" news the very next day concerning the Epilogue to what was then the upcoming paperback edition of Jim Duderstadt's book, *Intercollegiate Athletics and the American University: A University President's Perspective*. Duderstadt, President Emeritus and University Professor of Science and Engineering at the University of Michigan, wrote the Epilogue with the aim of updating readers on the progress of reform since the original publication of the book in 2000.

Some months earlier I found that the hardcover book provided a penetrating analysis of the ills besetting Intercollegiate Athletics from his unique perspective. I was especially impressed since Jim was also the author of the visionary book, *A University for the 21st Century*, that I had been recommending as a "must read" in my writings and talks on systemic engineering education reform. By virtue of his preeminent background and experience he has been serving as the "tip of the spear" – breaking a path that can be walked by the present and next generation of reformers in multiple domains of higher education as well as our nation's knowledge infrastructure. It has been my good fortune, as a member of The Drake Group, <http://www.thedrakegroup.org>, to be able to assist him in this endeavor.

The Epilogue's header took the form of the following quote from Thomas Paine's *Common Sense*, published in 1776... a quote that I had mentioned to Jim as equally applicable to his writing on intercollegiate athletics as it was to mine on engineering education reform: "*Perhaps the sentiments contained in these pages are not yet sufficiently fashionable to procure them general favour; a long habit of not thinking a thing wrong, gives it a superficial appearance of being right, and raises at first a formidable outcry in defense of custom. But the tumult soon subsides. Time makes more converts than reason.*"

With reference to this Paine quote and to my previous essay, "Modern-Day Warfare: It's All about STEMs Literacy in a Global Context," in the November 2005, issue of *The Interface*, consider the following from Robert Maynard Hutchins' article "Gate Receipts and Glory," published in the December 12, 1938, issue of the *Saturday Evening Post*: "*Since this country needs brains more than brawn at the moment, proposing football heroes as models for the rising generation can hardly have a beneficial effect on the national future.*" Hutchins, then president of the University of Chicago, wrote these prescient words during the time of the gathering storm prior to the outbreak of World War II. He deplored undue emphasis on nonacademic pursuits – condemning "sham" courses for college athletes and the pervasive cheating by schools to fashion winning teams. Guided by his personal beliefs, Hutchins abolished football at the University of Chicago in 1939.

The Interface essay was an outgrowth of a "brief" prepared for the April 2005, workshop, "What Does it Mean to be Educated in the 21st Century?" sponsored by the National Science Foundation (NSF) and hosted by Chancellor Nancy Cantor at Syracuse University. It made a point about America's obsession with sports – saying that only in seemingly complacent America can we find a general public that views sports as super cool while the study of science, technology, engineering, and mathematics (STEMs) is considered to be nerdy. A follow-up essay, "Sports in America 2005: Facing Up to Global Realities," http://thedrakegroup.org/Splitt_Sports_in_America.pdf, reflected my experience working with the International Engineering Consortium (IEC) and the Electrical and Computer Engineering Department Heads Association (ECEDHA) on the November 2005, NSF sponsored workshop, "Globalization Effects on ECE Education for the Engineering Profession," hosted by President Bill Wulf at the National Academy of Engineering.

In the latter essay it was noted that the National Academies responded to a request from concerned members of Congress with a call-to-arms report, "RISING ABOVE THE GATHERING STORM: Energizing and Employing America for a Brighter Economic Future," <http://books.nap.edu/catalog/11463.html>. The report states that "This nation must prepare with great urgency to preserve its strategic and economic strengths. The report (a.k.a. the Augustine report) goes on to say that America faces an enormous challenge because of its disadvantage in labor costs; and, that science and technology provide the opportunity to overcome that disadvantage by creating scientists and engineers with the ability to create entire new industries. It is estimated that a coordinated and sustained response to the challenge would cost the country about \$9 billion a year.

The Protecting America's Competitive Edge (PACE) Act— three bills covering energy, education, and finance – is based on 20 recommendations from the Augustine Report. It was introduced to the Congress in late January. In May the House passed a spending bill for the Department of Energy, and, in mid-June, the Science, State, Justice and Commerce Subcommittee on Appropriations approved a 2007 spending bill, that if it holds through the rest of the Congressional budget setting process, puts the House on track to pay for the entire first year of *PACE*. Unfortunately, this was accomplished by cuts in environment related programs and other worthwhile initiatives. There must be a better way to obtain *PACE* funding beyond 2007. For example, consider the following.

In his opening statement for a congressional hearing on the Augustine report, Congressman Sherwood Boehlert (R-NY) said: "Science programs still have to scrounge around for every additional cent; young scientists still have to beg for funds; our education system is still producing too many students who cannot compete with their counterparts around the world; and the federal government is still ignoring our fundamental energy problems while wasting money pandering to special interests."

A salient example of this pandering is the government's favorable tax policies on college sports, particularly the NCAA that is treated as an institution of higher education. Quid pro quo contributions from boosters and the boom in the leasing of stadium skyboxes by corporations and other big-money contributors as well as extortion-like seat taxes, are fueling the uncontrolled growth of the big-time college-sports entertainment business. This is because the federal government weakly enforces its Unrelated Business Income Tax (UBIT) law. Also, a 1999 IRS ruling allows boosters to deduct most of the donations they make to lease skyboxes, estimated to account for billions of dollars to Division I universities.

In effect, the government is subsidizing the college-sports entertainment industry that operates minor league teams and leagues for the NFL and the NBA. Elimination of this subsidy would provide substantial incremental tax revenues that could aid the implementation of the Augustine report's recommendations – helping to finance a boost in the federal investment in basic research, recruitment of future STEM teachers, and scholarships for undergraduate STEM students that want to go to college to learn. It's all a question of values and getting priorities right in higher education.

As my previous *Interface* essay concluded, a democracy has as one of its fundamental strengths the ability to bring great ideas, innovation and individual initiative, into what could otherwise be a failing system. But democracy is only as strong as the people who are willing to keep it vital and ever evolving. We all need to wake up and rise to the challenge.

###