

Teachers and teaching

The editorial¹ on 'Teachers and teaching' was very different in both tone and substance from the usual condescending bones we, in the research community, toss to 'teaching' in general.

First, I must start with a tribute to the enormous breadth and depth of Balam's learned background. Quoting both Goldsmith and Maxine Singer appropriately, in the same piece, is remarkable evidence for the basis of my case!!!.

Turning to the substance of the editorial, I believe the editor was a little too generous in his critique of the simple minded yearning and championing by the entire science establishment of *more* money for research, 'more PhD's and more papers'. As someone involved in science policy making and advice at the highest levels for some 50 years, I have been appalled by my scientific colleagues' ignorance. In their case even as they decry loudly the scientific ignorance of the public, including CEO's and politicians, they often do not know their own national GDP, the Budget deficit, or the difference from the trade deficit (of the US in my case). This is the obverse of C. P. Snow's complaint of not knowing both 'the 2nd law of thermodynamics and the Sonnets of Shakespeare'. What is worse, they do not see any connection

between 'doing science' paid for by the villagers in Pennsylvania or Texas, and building another Taj Mahal of the highest Tech machines, including \$5 MM TEM's, not to speak of supercolliders.

In the seventies, half a dozen high level scientists and engineers at Cornell, Penn State, Stony Brook, Stanford, MIT, etc. launched the science technology and society movement – the very broadest interdisciplinary program ever. For a couple of decades it flourished and spread throughout academia in the US and UK – with its attempt at making scientists literate outside their own narrowness, and non-scientists aware – not expert – in the basic novel roles of science and engineering in our society. It has slowly decayed due to lack of energetic participation by interested scientists or engineers. Today, I weep as I see the old silos of learning rebuilt, as tall as ever.

Finally, a 'verbum sapientiae satis'. The idea that we should get school children attracted to 'science', by baffling them with the same latest 'halo', magic words we use to extract money from scientifically illiterate legislators; like 'high- T_c superconductors', or 'CVD diamonds' or, heaven forgive us, 'Nano', is the most ignorant strategy of all. I believe that the research in science educa-

tion – never accessed I am sure by the majority of my colleagues, shows that we get to the youth through the Exoterica, *not* the Esoterica; the stuff they can touch and feel and fool around with, not the ones with weird euphonious names. In case readers of *Current Science* are not aware of the utter insanity of our 'science education' at least in the US, I refer them to the Annenberg Foundation's in-depth research with the year 2000 graduating class of Harvard and MIT, under the title 'A private Universe' which shows that some 90% of this cohort group attributes summer and winter cycles to the nearer or further distance from the sun. And other similar examples. Watch it on the web. And cry! Then think about how and about what science we want our fellow world citizens to know; do not ignore the education of scientists in *non-science* areas.

1. Balam, P., *Curr. Sci.*, 2009, **97**, 609–610.

RUSTUM ROY

102 MRL,
University Park,
PA 16802, USA
e-mail: rroy@psu.edu

Ranking of Indian universities by quality research

Prathap and Gupta¹ reported ranking of top 25 universities based on the number of research papers published from 1999 to 2008. The article was interesting, it was a great pleasure to see Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPIMS) among the top 10 universities as per *SCOPUS* database. However, the exclusion of some of the internationally acclaimed Indian universities such as Indian Institutes of Technology and All India Institute of Medical Sciences, New Delhi is not acceptable. All the listed universities have a number of departments including art and science, while these two are purely technical

institutes. While it is commendable that a super-speciality medical institute like SGPIMS could make it to the list of top 25 universities, but some universities having medical institutions as part of their faculty, e.g. Aligarh Muslim University and Banaras Hindu University have been excluded. Comparison of departments rather than the universities could have correlated better to conclusion of change in ranking on the basis of number of publication in place of quantity and quality combine indices. The conclusion that by inviting international co-authors, one would get better impact also appears to be quite conjectural as no

such comparison has been done between collaborating universities and non-collaborative ones.

1. Prathap, G. and Gupta, B. M., *Curr. Sci.*, 2009, **97**, 751–752.

MUKESH TRIPATHI

Department of Anaesthesiology,
Sanjay Gandhi Postgraduate Institute of
Medical Sciences,
Lucknow 226 016, India
e-mail: mukesh_tripathi@yahoo.com
