bad habits were reinforced. There is no substitute for good teaching, no matter the sex of the teacher. Would that other faculty were similarly concerned when otherwise intelligent people are unsuccessful in their classes. But the tendency in education all too often is to blame the students rather than also to consider the quality of instruction.

Nicholas Nicholas misreads my intent. Taken a different way, when a field looks so *unlike* the population of students from which it draws, the field itself needs to consider where problems might lie. My children also attended Maryland suburban high schools; both daughters took physics. Fortunately, the teacher was good, and both emerged still liking physics, though the liking expressed itself in different directions. I concur that bad teaching can kill interest of all but the most determined students. I do not argue for proportional representation. Yet I wonder, as white males' proportion of the overall student population dwindles, will physics shrink into a smaller pool, fated to see continued decline? Or will the discipline try to access talent in untapped pools by actually competing for it?

In many historically black colleges and universities, the number of African American physics majors is increasing. Other countries have higher participation of women in physics than the US. Women receive more than 25% of the physics PhDs in Turkey and France, for example, compared with around 15% in this country. What do they know that we don't know? And what do they do that we don't do?

Kristofer Gryte also misreads my intent. I believe that the current structure of physics education and of the physics community has created the field's demographics. It is hard to argue that some populations "might be geared"—a euphemism indeed—toward physics when they do not have full opportunity to explore the possibilities, to study, to experience, and to consider careers in physics-related fields. Such euphemisms suggest predispositions (nature) that don't reside in the gene pool. Rather they emerge through teaching and learning (nurture) that supports the curiosity in all of us about how our world works.

I will not take on the larger issue of "field chauvinism," since I believe that many concepts in physics are exceedingly accessible, even to young children.

We need to go after the problem areas. I do not think physics should be a high-school elective. I agree with Nobel laureate Leon Lederman that it should probably be the first high-school science course and that the teaching of physics concepts should begin in prekindergarten.

Gryte mistakenly pits equity against excellence. Gender-free and colorblind considerations can only be achieved by first taking both gender and color into account. Excellence and equity are inextricably linked; they rise and fall together no matter how much we wish it otherwise. If they fall, physics—and the publics it serves—loses.

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Points or knobs on lightning rods

I offer an addendum to Philip Krider's article "Benjamin Franklin and Lightning Rods" (PHYSICS TODAY, January 2006, page 42). The science historian J. D. Bernal wrote the following:[1]

In 1780, Franklin's patriotic, or rebel, tendencies led King George III to insist that the lightning conductors at Kew Palace (near London) should have round knobs instead of Franklin's recommended sharp points.

A contemporary wit wrote,

"While you, great George, for safety hunt,
And sharp conductors change for blunt,
The nation's out of joint.

Franklin a wiser course pursues,
And all your thunder fearless views,
By keeping to the point."

Sir John Pringle (1707–82), the President of the Royal Society, could not agree to the knobs and was induced to resign his Presidency.

Reference

1. Quoted material is abridged from J. D. Bernal, *Science in History*, Penguin Books, Harmondsworth, UK (1969).

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