

SCIENCE TEACHING AND LEARNING – GET IT RIGHT BEFORE WRITING STANDARDS

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ABSTRACT

Before designing a framework or benchmarks for standards, the nature of an objective or activity must have characteristics which are identifiable, durable, and, hopefully, recognized by others, in similar ways. Also, hopefully, there will be a rich inventory which vividly and comprehensively reflects the experiences where these objects or activities are present. I suspect 'science' do have many identifiable characteristics well recognized in similar ways by many people. I also am confident that the inventory of how science is present in our world is also a rich inventory. I seriously doubt, however, that the attempt to distil or discern standards which can adequately reflect and respect the privileged place of science in our society will amount to much of merit. The culture of modern science, especially of competitively convened research and its expert leaders does little to foster reflective and capacious, balanced, tolerant, enduring, holistic visions of the strengths of scientific endeavour. An important caveat overriding this doubt, is the possibility that IF the raising of standards reflects on the moral foundations and practices of science, its philosophy as well as the particular way knowledge is translated via intentioned, engaged and interrelated service which addresses the needs of our world, then the exercise of standards may just well be one of the best things ever to happen! Such standards would ensure our graduates will serve our future communities as agents of mutually beneficial stewardship, caring for each other. This service would be empowered by the authority of the education they have received. Such philosophical and moral insight, if we invoke its full presence in our deliberations, has ripples which can course through domains of teaching and learning, research and community service. We should be encouraged to re-vision our teaching and learning, and raise up standards which are worthy of the confidence our society has in its scientists to do good.

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