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The Spirit of Science

School and college enrollments are increasing. Students are using better texts and teaching materials. Team teaching, television, language laboratories, and other innovations are coming into wider use. More attention is being given to how children learn and to how learning and teaching can be improved. Nations are helping other nations to reform and improve their educational systems. Now, into the midst of all this change, comes a proposal for a more fundamental and sweeping change than any yet seen. The Educational Policies Commission (of the National Education Association and the American Association of School Administrators) offers the radical proposal that education—all of education—be infused with the spirit of science.*

The spirit of science is defined in terms of seven underlying values: longing to know and to understand; questioning of all things; search for data and their meaning; demand for verification; respect for logic; consideration of premises; and consideration of consequences. The authors call these the values of science; one might also call them the values of rational thought.

In discussing these values, they are not talking about the education of scientists or the subject matter of science, but about the basic objectives or methods of thought that should characterize all education. What is advocated is "the understanding that the spirit of science applies to other facets of man's existence. . . . The values of which the spirit of science consists should permeate the educative process, serving as objectives of learning in every field, including the humanities and practical studies."

So great a change will require a revolution in attitudes and methods of teaching and in the methods of educating teachers. Perhaps the revolution will fail; the Educational Policies Commission speaks only for its 20 members. Some of their past statements, however, have become influential parts of the educational literature, and perhaps this one will also. If it does, the change will be revolutionary indeed, for the goal is no less than "the development of persons whose approach to life as a whole is that of a person who thinks—a rational person." The spirit and values of science "can enable each person to free himself from blind obedience to the dictates of his emotions, of propaganda, of group pressures, of the authority of others. . . . It can enable him to sift through the forces which act upon him and, to some degree, to determine and to become his own ideal self." The spirit underlying science "can enable entire peoples to use their minds with breadth and dignity and with striking benefit to their health and standard of living. It promotes individuality. It can strengthen man's efforts in behalf of world community, peace, and brotherhood. . . . Insofar as an individual learns to live by the spirit of science, he shares in the liberation of mankind's intelligence and achieves an invigorating sense of participation in the spirit of the modern world. To communicate the spirit of science and to develop people's capacity to use its values should therefore be among the principal goals of education in our own and every other country."

It is easy to criticize these lofty goals as being too idealistic, to say that other persons have espoused similar ideals, or to point out that we do not yet know how to foster the development of rational thought in all students and may never be able to do so in some. No matter, it is good to have a banner held high. And great significance can be attached to the fact that this banner has been raised in the heartland of the educational establishment.—DAEL WOLFLE

* *The Spirit of Science* can be obtained from the Educational Policies Commission, National Education Association, 1201 16th Street, NW, Washington, D.C. 20036.