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Teachers Group Calls for Scientific Literacy

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crease of the entropy of the part of the world where it is going on. Thus a living organism continually increases its entropy—or, as you may say, produces positive entropy and thus tends to approach the dangerous state of maximum entropy, which is death. It can only keep aloof from it, i.e., alive, by continually drawing from its environment negative entropy.

He then goes on to discuss

. . . sucking orderliness from the environment. Indeed, in the case of high animals, we know the kind of orderliness they feed upon well enough. The extremely well-ordered state of matter in more or less complicated organic compounds, which serve as foodstuffs. After utilizing it they return it in a very much degraded form—not entirely degraded form however, for plants can still make use of it. These plants, of course, have their most powerful supply of “negative entropy” in the sunlight.

The applications of this concept of entropy appear in all fields. Speech communication, order and disorder of our society and its physical environment, and, yes, even the now almost-famous Peter Principle.

Teachers Group Calls For Scientific Literacy

The nation's science teachers are proclaiming scientific literacy as the goal of their efforts for the 1970s. If they achieve this goal, the schools will be turning out people who are comfortable in science, understand its limitations and possibilities, can use it skillfully and intelligently, and who will continue its development. In other words, the science teachers are aiming at a facility in science comparable to what many now have in literature, economics or the arts, for example.

This goal was set forth by the National Science Teachers Association in a position paper published in its official organ, *The Science Teacher*, November 1971 issue. “School Science Education for the 70s” is the Association's first major statement on curriculum goals and philosophy since 1962, when the NSTA

urged the use of the great conceptual schemes of science as the framework for the development of science content and processes.

The present document also calls for attention to the social aspects of science and technology and the values deriving from science. “Scientifically literate persons,” it says, “will use the achievements of science and technology for the benefit of mankind. . . . Emphasis on values and on the social aspects of science and technology must be integral parts of any science curriculum.”

The document spells out the characteristics of a scientifically literate person and recommends Association action to implement the proposals in the statement. The NSTA is the largest organization dedicated to science education at elementary, secondary and collegiate levels.