Road-Mapping for Community Awareness of the Concepts of Science and Technology

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A rapidly growing proportion of human activity, survival and development now relies on the use of advanced technologies and scientific insights, whose comprehension is far beyond the reach of most of the world's population. It is perfectly acceptable that specialists in each of many disciplines will drive and enable most of the technical advances. These experts will probably be those people who have pursued scholarly careers in the specalized fields, based on formal education programs of the "traditional" kind. Not everyone should be expected to undertake such professional training or careers - in fact, such a Society filled with technical experts could become sterile and lose many vital qualities of diversity and humanitarian activity. However, a significant hazard to the future quality of Society would be posed when the principal decisions made by individuals, legislators, lawyers, businesses, insurers, doctors, journalists, and even teachers have all reached beyond the ability of the average adult to make informed, logical, and rational judgments for themselves. At that point, the majority, whose will is supposed to prevail, can find themselves heavily dependent upon "others" -- who might be the appropriate honest and articulate specialists, or who might be totally uninformed of relevant facts, and unprepared to use sound logic to make possibly far-reaching decisions for the community (or humanity).

In recent decades, it would seem that high science and technology, in the hands of admirable experts, has led to a Society in which an increasing proportion of people are not equipped to evaluate, understand, and assess the elements of the world that they live in. Even more seriously, they may often not feel equipped to ask the right questions of the experts in order to make responsible decisions.

Does this mean that the Education system (at all levels) is seriously failing in its goal to develop a population that is equipped to manage its technical affairs in a responsible way? If so, then what realistc measures might be proposed to solve this problem - short of imposing technical classes on every student? In this presentation, we discuss this looming creative challenge. And we propose the elements of a Science Education Roadmap that might offer attractive options for promoting a global community of the future that is well equipped with the tools to manage its technical affairs responsibly and confidently. Further brainstorming will be invited.