

Understanding the challenges of science education in the 21st century: New opportunities for scientific literacy

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Understanding the Challenges of Science Education in the 21st Century: New Opportunities for Scientific Literacy

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Summary/Abstract: This essay examines the challenges of science education in the 21st century with regard to social, cultural, economic, political and pedagogical issues impacting and influencing instructional methodology and understanding of the role of science education as it affects individual, social organizational and societal progress

and functions. Drawing upon some strong practical, philosophical, and pedagogical-methodological and theoretical ideas and propositions from Hodson, as espoused in his book *Looking to the Future: Building a Curriculum for Social Activism*, the author essentially responds to this extremely rich scholarly volume in scientific literacy, philosophy, and history by supporting Hodson's advocacy of an action-oriented and issues-based curriculum as the key to renewing and activating scientific literacy to increase students' performance and national competitiveness in the global economy. The author extricates from literature, not only strong rationale for the renewal and transformational of science education in terms of perspective and approach, but also takes a critical approach in examining some of Hodson's contentions regarding strategies in confronting socioscientific issues as major pathways to the teaching and learning of science. The author examines problems, challenges, and the new opportunities that have emerged and are emerging in contemporary environmental, social, cultural and political contexts for science education to experience transformation in several ways: as a field of study, as an applied body of knowledge, as a way of living and as a competitive tool and strategy important to national goals and posterity.

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