

Informed Decision-Making in Classrooms among High School Students regarding Nuclear Power Use in India

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Abstract : The economic development of any country is based on the policies adopted by the government from time to time. If these policies are framed by the opinion of the people of the country, there is need for having strong knowledge base, right from the school level. There should be emphasis to provide in education, an ability to take informed decisions regarding socio-scientific issues. It would be better to adopt this practice in high school classrooms to build capacity among future citizens. This study is an attempt to provide a different approach of teaching and learning in classrooms at the high school level in Indian schools for providing opportunity for informed decision making regarding nuclear power use. A unit of work based on the 5E instructional model about the use of nuclear energy is used to build knowledge base and find out the effectiveness in terms of its influence for taking decisions as a future citizen. A sample of 120 students from three high schools using different curricula and teaching and learning methods were chosen for this study. This research used a design based research method. A pre and post questionnaire based on the theory of reasoned action, structured observations, focus group interviews and opportunity for decision making were used during the intervention. The data analysed qualitatively and quantitatively, and the qualitative data were coded into categories based on responses. The results of the study show that students were able to make informed decisions and could give reasons for their decisions. They were enthusiastic in formulating policy making based on their knowledge base and have strong held views and reasoning for their choice.

Keywords : informed decision making, socio-scientific issues, nuclear energy use, policy making

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