DESIGN AND DEVELOPMENTAL RESEARCH

Emergent Trends in Educational Research

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Emergence and Application of Interpretive Structural Modelling in Educational Research

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Interpretive structural modelling (ISM) was first proposed by J. N. Warfield (1976) to analyse a complex socioeconomic system. It is actually a management decision-making tool that interconnects ideas of individuals or groups to facilitate a thorough understanding of a complex situation through a map of relationships between the many elements involved in the complex decision-making situation (Charan, Shankar & Baisya, 2008). Warfield (1982) personally described ISM as "a computer-assisted learning process that enables an individual or a group user to develop a structure or map showing interrelations among previously determined elements according to a selected contextual relationship". ISM is a technique specially designed to support the human brain to manage information and ideas in a clear structure through an aerial view of the targeted problem. This facilitates better comprehension of any aspects of the problem. In other words, the technique is context free, irrespective of the content of the situation, enables individuals or groups to collaboratively consolidate decisions provided that the elements of the model and contextual relation is identified.

ISM involves a process of discussion and analysis that promotes development of a subject matter. The integration of knowledge of the subject matter and structured understanding of the problem would essentially derive a solid decision coupled with underlying reason. In a way, ISM is able to dissolve complex issues by allowing users to focus on two ideas at a time. The ideas and the relationships among them are discussed within the framework of the issue being investigated. The end output of the ISM process would be a visual relationship map among ideas and information. This map would reveal the underlying