Clever Solutions from Complex Environments

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ABSTRACT

Learning environments are complex and the challenge for school leadership is to understand and manage this complexity to ensure that the learning objectives set by the school for their students are achieved. Efforts to understand the complexity within schools have benefitted from the development of the actiotope model of giftedness. Originally used to describe the development of exceptionality, the actiotope model shifts the emphasis from the individual (i.e., the student) to the system (i.e., learning environment). _is shift means that it is just as important to identify and quantify all of the important components within a learning environment and not just focus on those related to the individual. In this keynote, I outline the usefulness of the actiotope model to describe the learning environments in a number of different international contexts. Drawing on techniques in machine learning, I also describe efforts to model the interactions between the main components in a learning environment and the potential for the techniques to predict outcomes based upon changes in these components. The actiotope model represents a significant change in thinking about how schools can better manage their school's learning environment in order to enhance learning outcomes. More broadly, the actiotope model provides policy makers with the tools to make informed decisions on how best to manage resources, and to evaluate the success of their decisions.

KEYWORDS:
Learning Environments, School Leadership, Complexity Management