‘Transforming knowledge and learning through agent-based modeling’

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ABSTRACT:

The past two decades have seen a proliferation of computational agent-based models in science, business and policy. Such models enable connecting individual or micro-level behaviors with population or macro-level phenomena. Using agent-based representations can dramatically transform how we conceptualize knowledge domains and how we learn them. In this talk I situate the agent-based representation in the history of scientific representations. Drawing examples from the design and use of the NetLogo agent-based modeling environment, I make the case for agent-based representations as infrastructural to science and that it is time to initiate universal literacy in agent-based modeling.