

NORTHWESTERN INSTITUTE ON COMPLEX SYSTEMS PRESENTS

Wednesdays

@NICO

*Distribution of Knowledge and Organizational Change**



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Measurement & Quantitative Methods;
Counseling, Educational Psychology & Special Education; Fisheries & Wildlife
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Wednesday, October 29, 2008
12:00 – 1:00 PM
Chambers Hall, 600 Foster Street, Lower Level Classroom

Current conceptualizations of organizational factors that affect intra-organizational diffusion attend either to the structure of relations among organizational members or to levels of knowledge of the innovation, but rarely to both. Here we integrate the two by locating knowledge of how to implement an innovation within the social network of the organization. In particular, we use Claude Shannon's indices developed for communications systems to characterize the extent to which knowledge flows are entropic – widely distributed throughout a network. We find that the lower the entropy of the flow of knowledge from subgroup sources the greater the increase in implementation of localized reforms in nineteen elementary schools. That is, the fewer subgroups responsible for supporting a reform the greater the school-wide increase in implementation of the reform.

*Paper co-authored with Anne E. Krause (Michigan State University) and William R. Penuel (SRI International)

NICO Coffee Hour will follow for questions, networking, and collaboration.

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