

Title:

**Studying technology: comparing agency and structure from social constructivist and social networking perspectives.**

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Abstract:

This presentation looks at a case study on the design and development of a community networking technology. Community networking refers to the use of information technology for purposes of meeting the needs of the community. Inherent in this process is the notion of participation: leaders of community networking projects are strongly encouraged to involve community leaders and members in all stages of the design process. In doing so, the hope is that community actors will gain a sense of ownership regarding the technology, and thus truly shape the technology for the community's best use. Through following the construction of one particular community networking technology, called Connected Kids, this study draws upon two methodological approaches, the social construction of technology (SCOT) and social network analysis (SNA), and summarizes findings from each approach. In contrasting these two approaches and their findings, I demonstrate how the two reflect the common division found in social theory between agency and structure. These findings demonstrate in what ways an agency-oriented approach is complemented by a structural one and vice versa. Questions I address in this paper include the following: how do actors interpret a technology, and how do these interpretations shape a technology? What role does structure play in shaping interpretations? Are some actors more powerful than others, and if so, how does one best uncover this? I conclude by showing how SNA provides a visual heuristic that helps reveal certain structural dynamics that the SCOT approach fails to show. This visualization is not the end of the story, however, but rather points the researcher towards issues, in particular power and structural issues, that need further questioning and discussion. Thus, through tacking back and forth between a SCOT and SNA approach, a researcher can gain a more complete picture of the issues surrounding technology design.