

University networks and partnerships for sustainability: GETTING INVOLVED!



Jana Dlouhá

Charles University
Environment Centre,

[Envigogika](#)

Clemens Mader

University of Zurich



Collaborative networks – new scientific discipline

- Large body of empiric knowledge related to CN is already available
- Establishment of the new scientific discipline – based upon other disciplines: computer science, computer engineering, communications and networking, management, economy, social sciences, law
- Underlying CN theories & paradigms – different background (Camarinha-Matos, and Afsarmanesh, 2004).



CN theories & paradigms

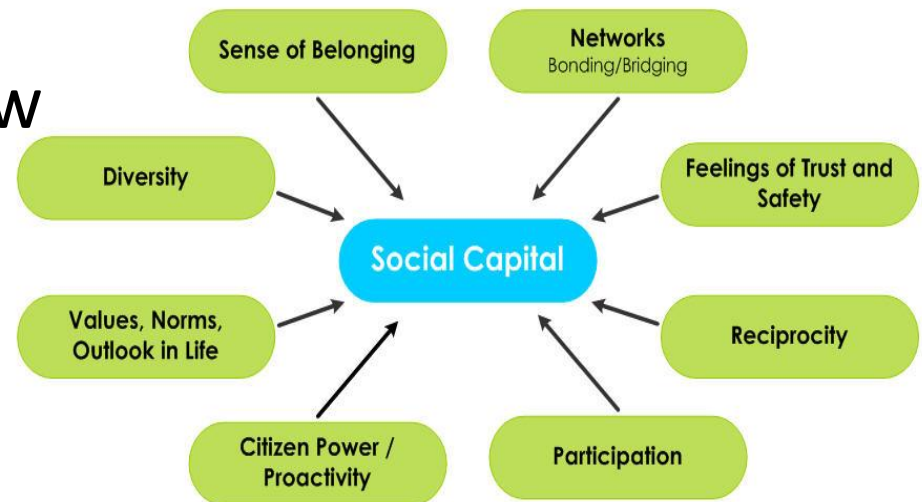
	Tool / Theory	Scope				Readiness		
		General	Limited	Very limited	Unclear	Well developed	Under developm.	Not clear
1	Benchmarking							
2	Complexity theories							
3	Decision support							
4	Distributed group dynamics							
5	Diversity in work teams							
6	Dynamic ontologies							
7	Federated systems							
8	Formal Engineering Methods							
9	Formal theories							
10	Game theory							
11	Graph theory							
12	Knowledge Mapping							
13	Memetics							
14	Metaphors							
15	ML / Bayesian Networks							
16	Multi-agent Systems							
17	Multi-agent dependence theory							
18	Newtork Analysis							
19	Portfolio theory							
20	Real options theory							
21	Scopos theory							
22	Self-organizing systems							
23	Semiotics							
24	Social Network Analysis							
25	Soft Computing							
26	Synergetics							
27	Temporal & modal logic							
28	Transaction costs theory							
29	Trust building models							
30	Web & text mining							

Social capital (Lin, 1999)

Aggregation of individuals returns **benefits** on individual, as well as the collective level.

- groups develop and maintain more or less **social capital as a collective asset**,
- this collective asset enhances group members' chances

All scholars share the view that **it is the interacting members** who make the maintenance and reproduction of this social asset possible.



<http://career.iresearchnet.com/career-development/social-capital/>

Theories of capital (Lin, 1999)

	The Classical Theory	The Neo-Capital Theories			
		Human Capital	Cultural Capital	Social Capital	
Theorist	Marx	Schultz, Becker	Bourdieu	Lin, Burt, Marsden, Flap, Coleman	Bourdieu, Coleman, Putnam
Explanation	Social relations: Exploitation by the capitalists (bourgeoisie) of the proletariat	Accumulation of surplus value by laborer	Reproduction of dominant symbol and meanings (values)	Access to and use of resources embedded in social networks	Solidarity and reproduction of group
Capital	A. Part of surplus value between the use value (in consumption market) and the exchange value (in production-labor market) of the commodity. B. Investment in the production and circulation of commodities	Investment in technical skills and knowledge	Internalization or misrecognition of dominant values	Investment in social networks	Investment in mutual recognition and acknowledgment
Level of Analysis	Structural (classes)	Individual	Individual/class	Individual	Group/individual

Academic networks with transformative potential

- HEIs - important actor in society – role in sustainability transition.
- Through networking, universities enter coalitions to discuss progress in sustainability implementation, to exchange experience and formulate joint policies.
- To achieve systemic change on higher education level in areas...

World café questions

No	Area within individual HEIs	Area within network
1	education in HEIs	role of networks for education
2	research in HEIs	role of networks for research
3	international policy advocacy in / for HEIs	role of networks for international policy advocacy
4	outreach and change of communication practices in HEIs	role of networks for outreach and change of communication practices
5	other areas (professional development, campus, students' initiatives)	role in other areas (professional development, campus, students' initiatives)

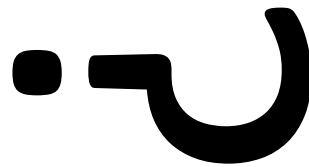
- To assess importance of networks within the education system on HE level, and investigate their role to support these different areas.
- To formulate a policy statement that calls to use the capacity of networks for transformation of science systems, and to support networks in this task.

Your ideas welcome!

Intellectual
capital



Social capital



Pre-requisites &
consequences

Thank you!

mader@sustainability.uzh.ch

jana.dlouha@czp.cuni.cz

Envigogika@czp.cuni.cz

