

Bridging structures and values: integrating Social Network Analysis and Value Creation to study learning networks

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Elevator Pitch

Throughout education and professional development, learning often occurs through networks rather than solely within fixed institutions and programs. In the postdigital era, such learning networks encompass both online and offline forms of collaboration (Gourlay et al., 2021). Learning networks may thus include formal learning communities and workplace collaborations, but also informal interactions that can be both physical and digital. Understanding how such networks function as sites of learning and how they generate value for learning remains a central challenge for networked learning research. A round table provides a valuable opportunity to collectively examine concepts and methods used to study learning networks, exchange experiences and think about more integrated ways of studying networked learning.

At least two approaches are being applied to study post-digital learning networks. The first is social network analysis (SNA), which offers tools to map and measure the patterns of relationships between actors in a network. By analyzing these structures, such as density (how interconnected participants are), centrality (who holds influential positions), and brokerage (who connects otherwise disconnected groups), SNA helps researchers describe social processes, including how opportunities for learning, collaboration, and innovation are distributed within a network.

Drawing on both SNA and educational research, Rusman et al. (2016) proposed a framework for analyzing networked learning initiatives, bridging the traditions of networked learning (Goodyear et al., 2004) and learning networks (Sloep & Kester, 2009). Their framework identifies 11 characteristics, including focus on learning, size, density, centrality, interaction frequency, interaction channels, nature of interaction, identity, resources, learning environment and practices and processes. These characteristics can be used to describe and compare diverse learning networks and can therefore be used to better understand how learning in such networks takes place.

The second approach takes a value-based perspective. In the value creation framework by Wenger-Trayner et al. (2011), focus is on the qualitative experience of learning and participation in networks. It traces how value emerges across several cycles: from immediate value (useful interactions) to potential value (resources or relationships), applied and realized value (changes in practice and performance), and ultimately reframing value, where participants collectively redefine what success means. This framework captures the social and experiential side of learning that cannot be reduced to network metrics alone.

A logical, yet underdeveloped step in the field is to integrate these perspectives: to link the structural characteristics of networks (e.g. density, diversity, brokerage) with the value creation processes experienced by participants. How can we study the often intrinsically linked architecture of networks and the value that is created by participants learning within these networks?

This round table invites researchers and practitioners to explore how social network analysis, value creation frameworks and conceptual models of networked learning can be combined to study networked learning in a more comprehensive way. Together, we will explore questions such as:

- What experiences do participants have with analyzing or evaluating learning in networks?
- What frameworks have participants used to analyze or evaluate learning in networks?

- How can structural and experiential frameworks be integrated in order to evaluate learning in networks in a more comprehensive way?

By bringing together diverse perspectives from across the networked learning community, this round table aims to advance the methodological and conceptual agenda for studying networked learning.

Goal of the round table

The goal of this round table is to advance insights and understanding of how networked learning can be studied comprehensively, acknowledging both what networks look like (their structure, composition, and dynamics) and what they do (how they generate value for participants and communities).

Specifically, the session aims to:

- Exchange experiences with analysis and evaluation of learning within networks.
- Discuss experiences with the application of (multidimensional) frameworks in learning networks.
- Collect examples of empirical studies or ongoing projects where researchers or practitioners have successfully connected network metrics to learning outcomes, such as perceived value.
- Discuss the conceptual and methodological implications of integrating frameworks, building on the synthesis of networked learning and learning networks traditions by Rusman et al. (2016).

Ultimately, the aim is to generate ideas for future research that encourages the inclusion of multiple methodological approaches to evaluate networked learning, combining quantitative SNA with a (qualitative) evaluation of learning to better capture the complexity of value creation in learning networks.

Engagement strategy

The session will be structured to maximize collective exploration and dialogue rather than formal presentation:

- Opening (15 min): Short introduction by the hosts summarizing the rationale for integrating SNA and value creation frameworks, illustrated with a scoping review article linking Wenger's value creation framework (Wenger-Trayner et al., 2011) with Rusman's network characteristics (Rusman et al., 2016) to study networked learning in networks of care.
- Small-group discussions (30 min): participants exchange experiences and insights related to the following themes:
 - Theme 1: relevant methods and frameworks for the analysis or evaluation of networked learning (initiatives).
 - Theme 2: approaches for integrating network-oriented frameworks, such as SNA, within learning evaluation frameworks, such as the value creation framework by Wenger-Trayner et al. (2011).
- Synthesis and plenary (30 min): groups report back key insights, which are visually captured using a (digital) whiteboard.
- Next steps (15 min): collective reflection on how to advance this agenda through further research, collaborations and publications, including practical tips and tricks, specific contextual experiences and exchange of ideas for future meetings.

Expected outcome

The discussion will result in a draft conceptual model outlining how structural and value-based analyses can be integrated, and a set of methodological recommendations for studying learning in networks more comprehensively. A summary of the round table will be shared with participants and could form the basis for future collaborative activities.

References

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