



Network awareness tool & SocialLearn: Visualising relations that matter

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Overview

- OU NL / LOOK - Social & Networked Learning
 - Professional development
 - Informal learning networks
 - Network Awareness Tool (NAT)
- OU UK / SocialLearn
 - Social Learning Analytics
 - SocialLearn & NAT
- Problemshift & University of Windsor
 - Visualising social networks & NAT



LOOK - Social & Networked Learning

Professional development

A focus on working and learning

- Learning is part of everyday work
- Work-related problems often results into learning
- Most professional learning is **not formally** organized but happens during **informal** spontaneous activities
- Does not happen in isolation



Professional development

“Make use of each others expertise, using networks”

Networked interactions allow professionals to **share** their **own** practice rather than being **passive recipients** of **expert** knowledge. (Boud & Hager, 2012)

“Knowledge **networks** will enable staff inside schools to become plugged in to the **world of ideas** outside their professional contexts, as well as offering them the chance to explore their work with the help of others outside their schools” (Southworth, 2000)



Informal learning

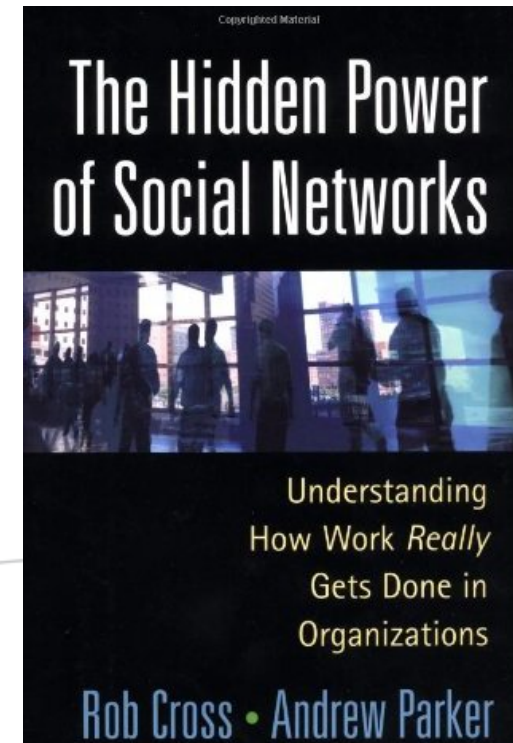
‘Problem’ of informal learning

- Ad hoc & problem-based
- Spontaneous
- Integrated in daily work practices
- Invisible

People rely on their networks for information to get their work done

What can we do?

Start with networks that energize learning,
make their work visible and make it accessible





Informal Networked Learning

‘Informal Networked Learning is situated in practice, where people rely strongly on their social contacts for assistance and development’



Theoretical Background

Social Network Theory

Network structures reveal important information about flow and shared knowledge within an organisation

Use **SNA** to study network properties such as density, clusters, holes, bridges, strong & weak ties, network paths

Social Capital

Looks more closely at the **relational resources** embedded in social ties and how actors interact to gain access to these resources

Social learning communities and networks

Looks at learning as a **social process** of participation, coconstruction, collaboration, development of a shared identity and the collective development of a particular domain and practice.





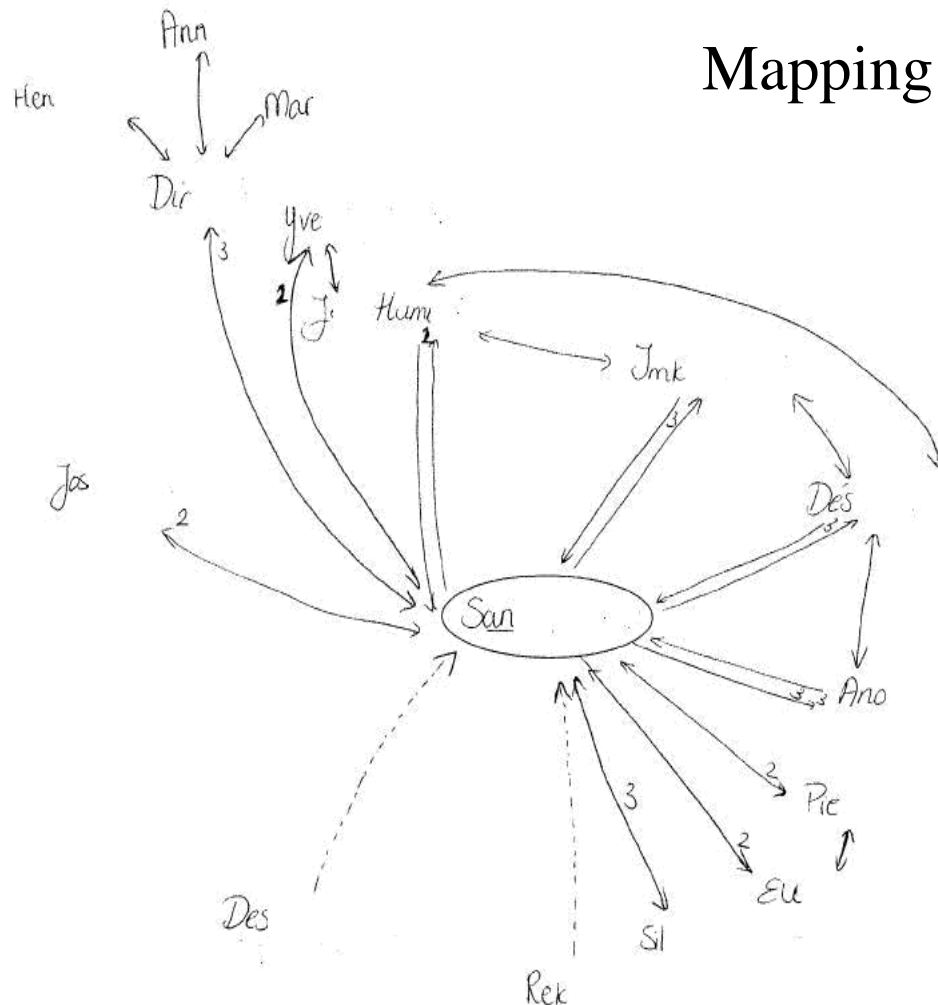
Practice-based research

Facing a double invisibility problem

- Raising cultural awareness about informal learning & professional development
- Study what you can't see



Making the invisible visible



Mapping offline networks in daily practice

Bottom-up

- Unplanned
- Residing in real practices
- No overview entire network exists

Problem-based

Ego-networks

- See how they are connected

Problem:

Time consuming
Labour intensive
Loses sense of
urgency in practice



What makes a learning tie?

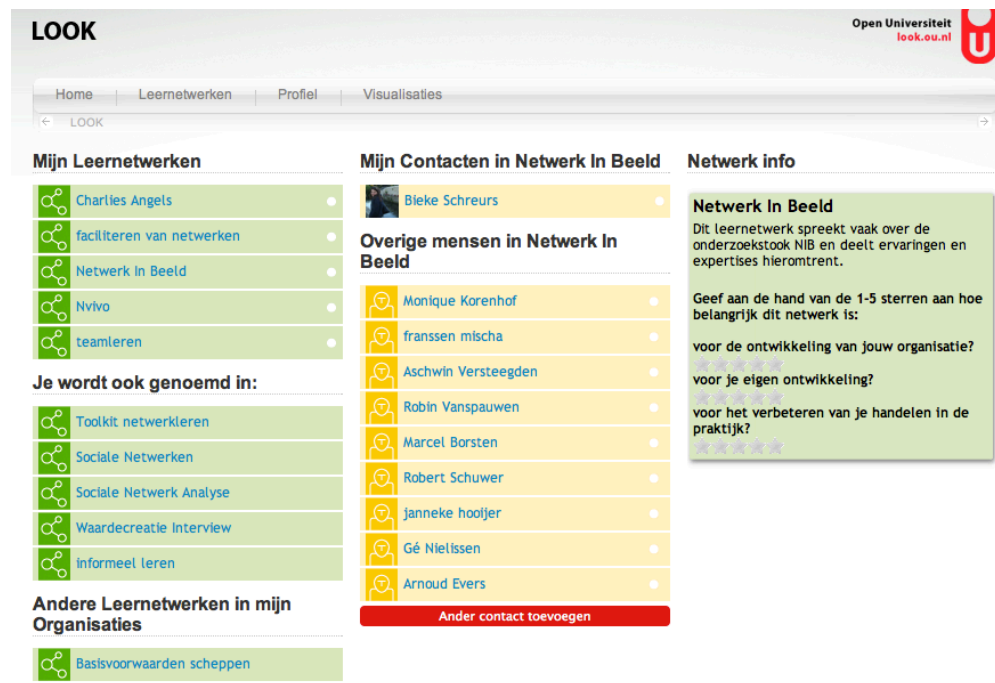
- Participant demographics
- Learning topics (based on work-related problems)
- Ego networks around those topics
- Quality of the Ego network:
 - Relevance to practice, personal development & organizational learning
- Strength these ties: frequency, quality
- Dynamics over time

Building a tool to facilitate this research



Network Awareness Tool

Manually user populated tool to gather real time networked data based on learning topics that can be updated by the participants when needed

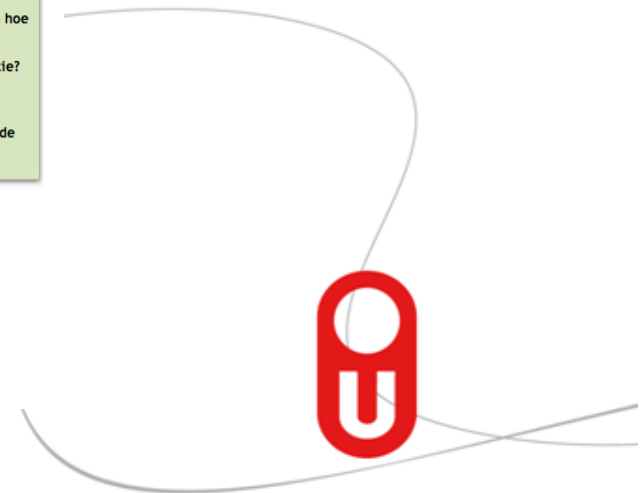


The screenshot displays the LOOK Network Awareness Tool interface. At the top, the 'LOOK' logo is on the left, and 'Open Universiteit look.ou.nl' with a red 'U' logo is on the right. Below the header is a navigation bar with 'Home', 'Leernetwerken', 'Profiel', and 'Visualisaties'. The main content area is divided into three columns:

- Mijn Leernetwerken:** A list of green buttons with network icons: 'Charles Angels', 'faciliteren van netwerken', 'Netwerk In Beeld', 'Nvlvo', and 'teamleren'.
- Je wordt ook genoemd in:** A list of green buttons: 'Toolkit netwerklernen', 'Sociale Netwerken', 'Sociale Netwerk Analyse', 'Waardecreatie Interview', and 'Informeel leren'.
- Andere Leernetwerken in mijn Organisaties:** A single green button: 'Basisvoorwaarden scheppen'.

The middle column, **Mijn Contacten in Netwerk In Beeld**, features a yellow header with a profile picture and name 'Bieke Schreurs'. Below it, a section titled 'Overige mensen in Netwerk In Beeld' lists names in yellow boxes: 'Monique Korenhof', 'franssen mischa', 'Aschwin Versteegden', 'Robin Vanspauwen', 'Marcel Borsten', 'Robert Schuwer', 'Janneke hooijer', 'Gé Nielissen', and 'Arnoud Evers'. A red button at the bottom of this list says 'Ander contact toevoegen'.

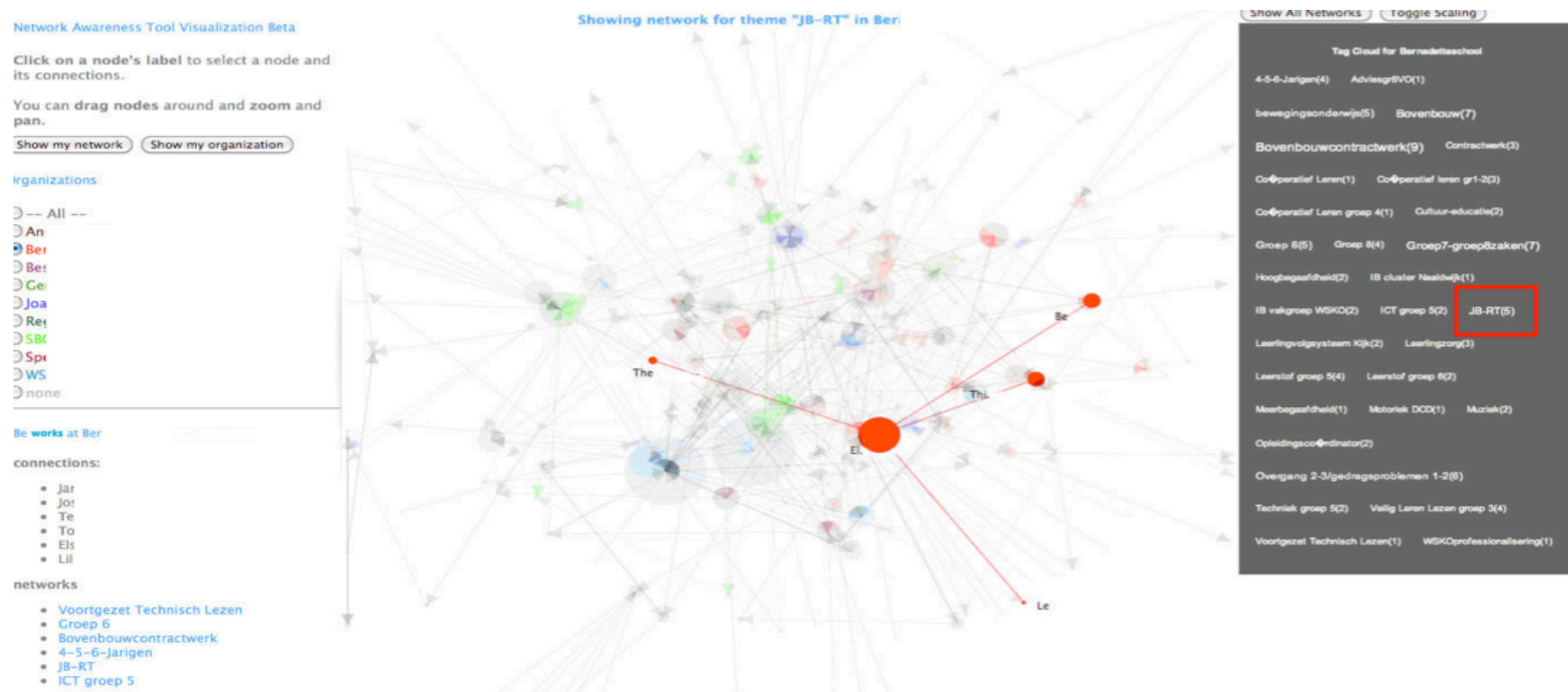
The right column, **Netwerk info**, has a green header 'Netwerk In Beeld'. The text below describes the network's focus on the 'onderzoekstool NIB' and mentions 'expertises hieromtrent'. It includes a rating section: 'Geef aan de hand van de 1-5 sterren aan hoe belangrijk dit netwerk is:' followed by three questions, each with a 5-star rating system: 'voor de ontwikkeling van jouw organisatie?', 'voor je eigen ontwikkeling?', and 'voor het verbeteren van je handelen in de praktijk?'.



Network Awareness Tool

Automatically generated visualisations based on manually entered ties

Filters by Topic, Organization & Individuals



SocialLearn

Social Learning Analytics

- Specific focus on role of Learning Analytics in online social platforms – interest in **processes** of learning, not just quality of **products** (focus of most LA work)
- E.g. SNA, Discourse Analytics, Collaborative Knowledge Building (Buckingham Shum & Ferguson 2012)

SocialLearn & NAT

- Broader goal to develop SLA dashboard in SL
- Could NAT be a plug-in to automatically visualize meaningful learning ties from the SocialLearn database?



The Big Questions

1. What makes a tie a learning tie?
2. What is the content of the tie?
3. What is the impact of NAT visualizations on the development of networked learning?

Exploring SocialLearn & NAT

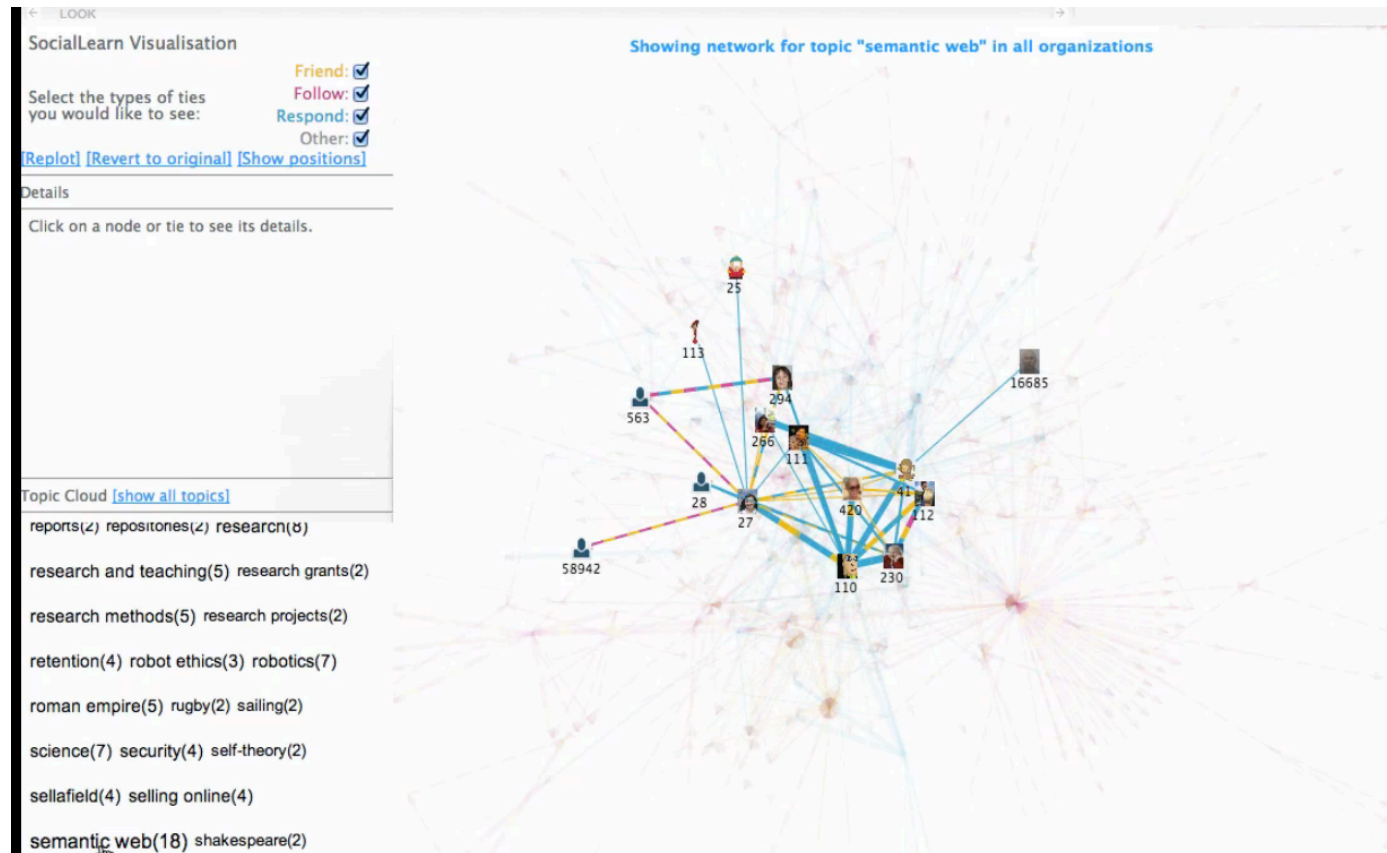
- Develop visualizations based on rules that describe learning ties around topics

Ties around SocialLearn TOPICS exist IF:

- 1) A user "friends" another user
- 2) A user "follows" another user
- 3) A user replies or comments on a resource contributed by another user.



NAT in SocialLearn



Visualising social learning using Nat



Problemshift

Visualising Social Learning in the SocialLearn Environment:

The Technology

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Resources

- NAT demo database

http://problemshift.com/nib_export/example4anon.html

- NAT paper LAK 2012

mail: maarten.delaat@ou.nl



Some next moves

SocialLearn

- Gather empirical data on the use of NAT in SocialLearn
- Build connections between LA dashboard tools
- Use LA tools to evaluate quality of learning, teaching and learning design

NAT

- Time slider – tap in organizational social history by finding contacts around topics in the past
- Semantic analysis & use associations to build richer tag clouds



A photograph of a classroom setting. In the foreground, a hand is raised high, palm facing forward. Behind it, several other hands are also raised, though they are out of focus. The background is a solid green chalkboard. The text "Questions?" is overlaid in the center-left area of the image.

Questions?