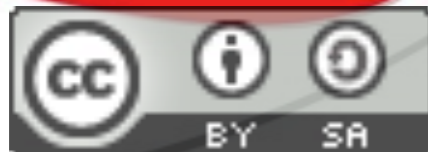


Networked Learning for Continuous Professional Development (CPD)

Earli 2013, August 28, München

Peter Sloep



Centre for Learning Sciences and Technologies
celstec.org



Cases

- teacher seeking opportunities to upgrade and expand her subject knowledge
- lawyer working with a pharmaceutical company who needs to acquire a working knowledge of molecular biology
- chemist wanting to specialise in environmental chemistry



Instruction dilemma for networked CPD

- formal learning, institution-based, teacher-led, designed - proves not (always) effective
- informal learning, networked, student-led
- but: what is role of instruction, you can't just leave professionals to their own devices



- Sloep, P. B. (in press). Networked professional learning. In A. Littlejohn & A. Margaryan (Eds.), *Technology-enhanced Professional Learning: Processes, Practices and Tools* (p. xx–yy). London: Routledge.
- Sloep, P. B. (2012) *About formal and informal (non-formal) learning*. Stories to TEL, blog post. Retrieved from <http://pbsloep.blogspot.nl/2012/08/about-formal-and-informal-non-formal.html>

Solution

- rely on self-regulation (research by CGA)
- rely on support from carefully selected peer learners (my own group at OUNL)
- ?



Peer Support

- network is a large resource, turn non-existent and weak links into strong ones
- create small communities of helpful peers (in so-called ad-hoc transient communities, AHTGCs)
- (I come back to kinds of support)

- Jones, C. (2008). Networked learning: weak links and boundaries. *Journal of Computer Assisted Learning*, 24(2), 87–89.
- Sloep, P. B. (2009). Fostering Sociability in Learning Networks through Ad-Hoc Transient Communities. In M. Purvis & B.T. R. Savarimuthu (Eds.), *Computer-Mediated Social Networking, ICCMSN 2008, LNAI 5322* (pp. 62–75). Berlin, Heidelberg: Springer. Retrieved from <http://hdl.handle.net/1820/1198>



Finding peers

- not all peers are equally suited to offer help
- use technology to match needs to peer
- use peer profile as user model
 - deliberately: portfolio
 - accidentally: traces left online, online learner identity



• Berlanga, A. J., & Sloep, P. B. (2011). Towards a Digital Learner Identity. In F. Abel, V. Dimitrova, E. Herder, & G.-J. Houben (Eds.), Augmenting User Models with Real World Experiences Workshop (AUM). In conjunction with UMAP 2011. July, 15, 2011, Girona, Spain. Girona, Spain. Retrieved from <http://www.wis.ewi.tudelft.nl/aum2011/aum-proceedings.pdf>

Technology: Recommender Systems

- algorithm matching profile of target learner to profile of peer (classical recommender)
- algorithm that looks for peers in the entire network that are strongly linked to others that are similar to me, but not yet to me (collaborative filtering)



• Fazeli, S., Brouns, F., Drachsler, H., & Sloep, P. B. (2012). Exploring social recommenders for teacher networks to address challenges of starting teachers. In V. Hodgson, C. Jones, M. de Laat, D. McConnell, T. Ryberg, & P. Sloep (Eds.), Proceedings of the Eighth International Conference on Networked Learning 2012 (pp. 74–80). Retrieved from <http://dspace.ou.nl/handle/1820/4129>

Technology: Latent Semantic Analysis

- statistical analysis technique that matches target learner's question to portfolios of all peers
- and ranks peers in order of suitability
- create dialogue in small group (AHTG)



• Van Rosmalen, P., Sloep, P. B., Brouns, F., Kester, L., Berlanga, A. J., Bitter-Rijkema, M. E., & Koper, R. (2008). A model for online learner support based on selecting appropriate peer tutors. *Journal of Computer Assisted Learning*, 24(6), 483–493.

Technology: Game Theory

- use the assumptions of the theory rational choice behaviour as implemented in game theory
- use them to recommend peers, for example for knowledge creation and innovation (co-authorship)



• Sie, R. L. L., Drachsler, H., Bitter-Rijkema, M. E., & Sloep, P. B. (2012). To whom and why should I connect? Co-author recommendation based on powerful and similar peers. *Int. J. Technology Enhanced Learning*, 4(1/2), 121–137.
Retrieved from <http://dspace.ou.nl/handle/1820/4371>

Technology: Analysis of Tags and Tag Sets

- match for dissimilarity to provoke breakdowns in conversations, forcing you to reassess cherished beliefs
- by comparing user created comments, as in content curation sites (Scoop.IT)



No Technology: Trust as an Enabler

- peer collaboration presupposes the willingness to collaborate
- trust 'at first sight' proves to be a significant predictor of willingness
- a carefully crafted portfolio is instrumental in establishing trust 'at first sight'.



Thank you!

Thanks to my PhD students and colleagues!
Slides at [Slideshare.net](https://www.slideshare.net/pbsloep), username: pbsloep

