

Critical aspects in educational development through a cultural approach

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Abstract

Change in microcultures follows when the what-, who-, or how-aspect changes. Change can start in one of the three aspects but eventually they may all change. Members are likely to engage in restoration of order when a disruption is noticed. Through a process of complex contagion, however, they can change. These processes are slow and they are characterised by repeated interaction between parties that trust each other. This is one way of conceiving cultural change in higher education organisations.

For educational developers the above may present an entry point for a discussion on what the mechanism behind cultural change is. Especially the idea put forward by Vollmer, that the what-, the how-, and the who-aspect potentially reveal an opening, since various strategies can be deployed in different contexts targeting one or more of the three aspects. It is likely that even if the change may start in one of these aspects, sustainable change in culture will become visible through a change in all of them.

It is also an aspiration built into this text, to inspire educational developers to deepen their understanding, through the use of research in related fields, of how development of organisational cultures can be reached through educational development interventions. The text thereby, potentially, contributes to what Sutherland has invited us to do: to think more broadly about the academic development project.

Contents

1	Introduction	24
2	Large-scale change in higher education	25
3	Disruptions in social systems	26
4	Significant networks	28
5	A wider perspective	29
6	Back to significance	31
	References	32
	Authors	35

1 Introduction

In some countries, educational developers¹ have been active for decades (Gibbs, 2013; Mårtensson & Roxå, 2018; Sorcinelli, Austin, Eddy, & Beach, 2006). In other countries it is a fairly new business. Furthermore, educational developers are not a homogenous group (Green and Little, 2016), neither do they believe in the same things (Land, 2001). To make things even more complicated this group is often called upon to align themselves with institutional policies (Stensaker, van der Vaart, Dyrdal Solbrekke, & Wittek, 2017), that is, to support the institution in matters concerning top-down initiated educational change. This, for some, is problematic since they have a more critical approach towards institutional policies and can look back at times when educational development had a more political edge (Lee, Manathunga, & Kandlbinder, 2010). But despite these differences, educational development is an expanding practice. For example, more and more countries are being represented at the global, biennial conference organised by ICED, the International Consortium for Educational Development and in its journal IJAD, the International Journal for Academic Development.

Despite differences in orientation and ideology, educational developers do indeed engage in multifaceted conversations (Chng, Mighty, Roxå, Sorcinelli, & DiPietro, 2019). What often unites this somewhat disparate group of professionals is an urge for development of education, teaching, and student learning. Or, as defined by Leibowitz (2014, p. 359): 'academic development is about the creation of conditions supportive of teaching and learning'. This general interest in support, development and change creates a swarm of activities aimed at influencing individuals, practices, structures, and traditions in higher education organisations: most commonly pedagogical courses and workshops for teachers, but also reward systems for good teaching, curriculum development, quality assurance practices, consultation for individuals, groups and managers, collaborations with students, introduction of students as partners, and research into various aspects of higher education; just to mention a few. Educational developers as a collective engage in many activities.

This multitude of activities can be seen as a strength as it illustrates the width of competence the profession hosts. It can also be seen as an effect of others enlisting educational development in various positions for purposes which are not always entirely clear or unanimous. Reorganisation is a frequent phenomenon in the world of educational development. Groups of educational developers are often moved into various parts of an organisation. Under such conditions the profession has to develop a chameleon-like capacity to engage in productive activities wherever it finds itself.

Another feature of educational development is that members often arrive into the profession from many other places (Green & Little, 2016). They have various academic backgrounds before engaging in educational development. They also often carry with them an academic identity not necessarily linked to educational develop-

1 The term educational developer is used as a synonym to academic developer, faculty developer or staff developer.

ment. Because of this, many professionals in educational development do research on other things, pursuing research interests and research methods established before entering into this profession. And even though this pattern might be changing, the profession, it can be argued, suffers from a dispersed rather than a coherent research tradition. Besides a rather broad focus on improved student learning, the variation in how this is to be achieved reveals that there is no educational development paradigm.

To illustrate this lack of a research paradigm, one can look at theories of change. In a large and global business dealing with change and development as a core business, it would be fair to ask any educational developer about their specific view on how change is encouraged in higher education. However, after more than 30 years in educational development we would conclude that there is a lack of an advanced discussion about how change in higher education institutions unfolds.

There has been a long and scholarly discussion about impact from educational development interventions, especially from formal pedagogical courses offered to academic teachers (Stes, 2010; Chalmers & Gardiner, 2015; Saroyan & Trigwell, 2015). This debate has for some time been focused on establishing a link between what educational developers do and improved student learning. Even though this has been hard to establish, today there exist good and productive examples that such a link exists (see for example Condon, Iverson, Manduca, Rutz, & Willet, 2016).

But despite some attempts to highlight the importance of a theory of change (Amundsen & D'Amico, 2019; Bamber, Trowler, Saunders, & Knight, 2009; Hart, Diercks-O'Brien, & Powell, 2009), change as a phenomenon has not been featured a lot in the scholarly debate among educational developers, not large scale change; not a debate aiming at tackling the question: how does one change a university in relation to teaching and learning? Here, in this gap in the educational development literature, this text aims at making a contribution.

2 Large-scale change in higher education

Kezar (2014) briefly presents six schools of thought on change in organisations. These are *scientific management*, *evolutionary*, *political*, *social cognition*, *cultural*, and *institutional and neo-institutional*. Kezar's purpose is not to fully present this vast area in the organisational change literature. Instead she invites the reader to contemplate a collection of cases illustrating that these schools of thought are relevant while contemplating large scale change in higher education, relevant for stakeholders like institutional managers, educational developers, and others.

The space available for this text does not allow us to do Kezar justice. Those interested in her account simply have to read for themselves. Instead the six schools of thought are mentioned here as a backdrop for a perspective introduced below where parts of what can be labelled a cultural approach to change in higher education are discussed. Within this perspective the text is placed in one of the six schools of

thought. Furthermore, it is not a theory in itself. Instead it offers a few building blocks that together with other blocks added later can become a theory for how to pursue cultural change in higher education.

As an illustration of what a cultural shift could be, the following scenario can be contemplated: Assume you work in an institution or a part of an institution where teaching is rarely being talked about. Teaching is not valued and there are no monetary or career-related incentives for being an excellent teacher. Instead, research is the practice that is talked about, linked to careers and to monetary incentives. Now, contemplate a shift. Due to many things, among which educational development interventions is one, things change. After some time, teachers do talk about teaching, even in a scholarly way, and they publish observations of student learning within the courses they teach. Furthermore, there are monetary and career-related incentives for developing as an excellent teacher.

This would constitute a cultural shift that would be seen as an improvement by most educational developers. So, what we are going to do is to discuss some aspects of cultural change so that our understanding of this potential change increases. Ultimately these aspects can be used to support similar changes in other institutions.

3 Disruptions in social systems

Social systems, like an existing culture, may change as a result of them being disrupted. Vollmer (2013) introduces a perspective on social disruption as a range from small ones, hardly noticed by those involved, to large disruptions, threatening to dissolve the social context and make it disappear into the background of wider social contexts. To him any social setting displays an aspect of stability. The members of a group expect some kind of regularity so that they can focus on other things than the maintenance of the group itself. Alvesson (2002) has described organisational culture as something that makes various groups visible in relation to each other. "This is how we do things here, over there they do things differently", are illustrative comments revealing that there are differences between various groups. In our perspective these differences are viewed as cultural differences.

Returning to disruptions, these are things happening that require some kind of action from the group members to restore order. Mostly these actions are performed without members thinking about them or even identifying them as ways to restore or to maintain order. Nodding, smiling, offering familiar anecdotes, all serve the purpose of signalling stability among the group members. Often a comment is enough to restore the order, to show the others that things are as they are expected to be. More severe disruptions require some kind of explicit coordination among the members. They have to mobilise new information or new interpretations, they may also have to change the way they interact, or even reorganise the internal hierarchy to restore the order they aspire to. After such processes members often can describe

times past as periods of change. Things used to be different. Such descriptions can be accounts of cultural change, slow and incremental, but still cultural change.

Central for educational development generally is that, for example a group of teachers over time changes its practices or even does new things, in order to improve student learning. But central seen through a cultural lens is the meaning the group attaches to the things members do. Whether change in practice occurs before a change in the meaning a group attaches to it or whether a new interpretation of meaning precedes new actions, is still unclear. It is similar to the debate on whether individuals change their behaviour as a result of new ways of thinking or whether new ways of doing things causes new ways of thinking to emerge (Ajzen & Fishbein, 2005).

What Vollmer points at are features of a group process that can be described as crucial in relation to how the group handles disruptions that in turn may or may not lead to lasting change. That is, which meaning they attach to the disruption at hand and how this meaning may or may not change as events unfold.

While members deal with a changing world or with confusing experiences, they may have to deal with new things in new ways, and as they do, existing hierarchies in the group may have to be renegotiated. Disruptions, therefore, Vollmer argues, can be studied as destabilisation in *what* is being talked about, *who* is doing most of the talking, and *how* these things are being talked about (Table 1). Following Vollmer, cultural change can start in any of these three aspects, and lasting change will most likely have had effect on all of them.

Table 1.: useful to study while studying effects from disruptions on social settings, e. g. culture change in teaching

What	Teaching and student learning are being talked about in contrast to previously when it was not. Such conversations are being encouraged through more or less tangible incentives.
How	Teaching and learning are being talked about in new ways. For example, conversations feature some kind of systematic observations, they use examples from somewhere else and even material from educational research.
Who	New individuals emerge as having authority, often because they are good at teaching and good at talking about teaching in ways that shape the new order.

It becomes clear that, through this perspective, the interactions taking place within the organisations are crucial for understanding culture and cultural change. It is through interactions that culture is maintained and restored. During daily interactions the lifeworld of the academics is confirmed and stabilised (Alvesson & Sveningsson, 2016). It is also through interactions that members restore disruptions no matter if these disruptions are barely noticeable or if they are severe and require explicit coordination.

Therefore, studying daily interactions among academic teachers in relation to teaching becomes key if we seek to understand cultural change as well as cultural stability.

4 Significant networks

Research has shown that academic teachers do talk to other academic teachers about what they experience in teaching. They share observations, vent emotional episodes, talk about new ideas, and discuss teaching problems on a regular basis (Roxå & Mårtensson, 2009a; Pataria, Falconer, Margaryan, Littlejohn, & Fincher, 2014; Thomson & Trigwell, 2016). But they do this with specially selected and trusted others, and they do this backstage (Goffmann, 2000; Roxå & Mårtensson, 2009b), in private, hidden from the public. These conversational partners have been described as an academic teacher's *significant network* (Roxå & Mårtensson, 2009a). Subsequent research shows that significant networks vary qualitatively among teachers who can be described as excellent teachers and those who can be described as average teachers (Van Waes, Moolenaar, Daly, Heldens, Donche, & Van den Bossche, 2016), and that teachers have a tendency to choose significant conversational partners based on similarity (Poole, Iqbal, & Verwoerd, 2018). It appears as if the formation of significant networks is influenced by social homophily, birds of a feather (McPherson, Smith-Lovin, & Cook, 2001).

It can be argued that sustainable change in higher education organisations must engage the significant networks. It can also be argued that change itself is constituted as a change in what is being talked about within the networks, who is included in the conversations, and the character of these conversations.

The question for an educational developer is: how do we influence these conversations since they are hidden from the public view? It is often hard to identify the networks, let alone to influence them. Furthermore, we deal with networks that often have similar characteristics as friendship. It is likely that whatever happens, it is negotiated among significant others, and the outcome of these conversations will no doubt result in what those involved consider the truth or at least the best interpretations of the truth.

Many are the managers of higher education institutions that have formulated a policy, released the same policy and then failed to perceive any effect from it. The saying goes that culture eats policy for breakfast. Perceived through the perspective of significant networks, any policy is negotiated among those being significant to each other and these conversations determine whether the policies should be acknowledged or acted upon or discarded, and how the attitude towards the policy should be when it is being talked about. It is unlikely that change will be sustainable if the interactions within the significant networks are not affected.

One strategy to achieve change is to reorganise and thereby increase the likelihood that the members of the organisations meet new people. In a way this is to target the who-aspect of cultural change. It is also likely that meeting new people will result in new things being talked about (the what-aspect). Other strategies include demands to report on practices through certain ways. Web-based forms to fill out as part of quality assurance regimes can be implemented in order to emphasise new aspects of the teaching and learning reality coming into view (targeting the what- and

how-aspects). One can also elevate new people; academic teachers that have a record of placing emphasis on teaching and assign them power to influence colleagues (targeting the who-aspect).

A problem with these strategies in relation to significant networks is that these operate backstage and disregard organisational boundaries. It is likely that some of them are influenced through the interventions described above, but it is unlikely that the entire organisation will be affected. If there are changes in the larger web of significant networks, these changes may be experienced as disruptions by other parts of the larger network and trigger strategies aiming for restoration of a previous stability. One force creating a counterforce. Individual change-agents can experience this as resistance to change but for the members of the organisations they are often variations of recurrent disruptions triggering more or less explicit strategies for restoration of order. Many of those being labelled as resistant to change might not even be aware of the change, they through more or less unconscious actions “resisted”.

5 A wider perspective

Significant interactions take place between individuals who trust each other. These interactions are also experienced as more meaningful and more important than other interactions, hence significant. When we widen the perspective from significant networks to more general network research, featuring clusters internally characterised by strong ties, and externally linked to other clusters through weak ties, we shall bear in mind that what we do is an approximation. If significant networks are a reality, they also become increasingly complex as we apply them to institutions inhabited by hundreds or even thousands of individuals. It is not only that the significant relations form a complex web of interactions; it is also that significant networks do not confine themselves to organisational entities. They stretch across departments, faculty, and institutional boundaries. This is the reason for why we opt for an approximation, to avoid an overwhelming complexity in our conceptualisation.

From network research we know that people tend to, over time, form clusters consisting of people with whom they interact on a frequent basis. These interactions are mostly not only frequent; they are also often emotional and have effects on perceptions of self and professional identity (Barabási, 2003; Granovetter, 1973; Hemphälä, 2008; Watts, 2003). The formation of clusters often follows a principle of social homophily (McPherson, Smith-Lovin, & Cook, 2001). People tend to like spending time with others who are similar to themselves. In turn social homophily contributes to a perceived stability. It becomes easier to foresee how people will react if they share background and experiences. This in turn has positive effects on trust (Luhmann, 2005) and thereby a release of cognitive energy for other things than the maintenance of the group. What we thus suggest is that these clusters can work as an approximation for significant networks as we scale up the perspective.

Clusters, as introduced above, have also been described as *microcultures*. Over time clusters develop cultural features that make them possible to describe as microcultures, groups of academics interacting on a regular basis and thus together create habits, traditions, tacit knowledge, and other cultural features that in turn influence their members' future behaviour (Roxå, 2014; Roxå & Mårtensson 2014; 2015). Disciplinary communities, departments, sub departments, or workgroups operating over some time are all examples of what can be described as microcultures. They all develop more or less stable traditions for talking about teaching and learning while negotiating the pedagogical reality they refer to.

As we do this approximation, we are aware that there is not a perfect match. Not all members of a cluster are significant to each other. But we maintain the approximation for practical purposes. We need this because it provides a possibility to maintain the perspective constructed above. The real mismatch between the approximation and what is real remains to be discussed.

Clusters are bound together through weak ties. These ties are less frequent and do not carry emotions as much as strong ties. They have less effect on identity. What they do is to carry information across cluster-boundaries. In his seminal article, *The strength of weak ties*, Granovetter (1973) argues that weak ties are what brings a social setting together, like an organisation. Without weak ties the organisation would become partitioned and thereby become almost impossible to coordinate. Various parts of the organisation would become insignificant to each other. The clusters (or microcultures) would act on their own accord without listening to insights made in other parts of the organisation. The result is a number of microcultural silos with little communication in between. In an organisation dealing with highly specialised things, where activities require a specialist's knowledge and skills, developed over time, the risk of becoming partitioned would be even greater.

A partitioned organisation would not only be hard to coordinate, it would also be vulnerable. External stakeholders with other basic values could easily invade such an organisation piecemeal. Microcultures in one corner of the organisation would not be aware of any threat operating on other microcultures until it appeared on their own doorstep.

It is a known fact that organisations often become loosely coupled (Meyer & Rowan, 1977), something that can be described as an advantage (Weick, 1976). Loosely coupled means that what the organisation says externally does not fully match what is being done internally. Policies used to present the organisation to the outer world are not entirely applied by members and workgroups. The negative aspect of this is that any organisation can be accused of not walking the talk, to be somewhat hypocritical. It says something to the outer world while internally it accepts deviations from the described order. On the other hand, a policy for a large organisation, hosting specialised members doing very different things can impossibly be suited for all occasions. Thus, members have to deviate to some degree from what the organisation says about them. The fact that the organisation is loosely coupled does not in itself imply a bad thing. But being partitioned is worse.

Hence and historically, weak ties have been seen as crucial while linking together various parts of an organisation. It is the weak ties that bridge boundaries and make the organisation less partitioned. This perspective has been discussed in relation to the development of teaching cultures in higher education (Mårtensson, 2014; Roxå, Mårtensson, & Alveteg, 2011). The simple idea coming out of this is that if you want to develop a higher education organisation in relation to teaching, pay attention to the weak ties. They have the potential to carry new information across boundaries, in new ways, and to create new significant relations as well. Below we will see that reality is a bit more complicated than the model.

6 Back to significance

However, Centola (2018) points out that the model presented by Granovetter (1973) and described above is not constructed out of patterns of behaviour. Instead, the foundation for Granovetter's and others' network research are studies of epidemics. Researchers studied how cholera spread, or how a virus travels from one individual to another as it forms a pandemic. In these cases, one single contact may be enough for the virus to spread. Centola's point is instead that if you want people to change their behaviour one cannot extrapolate from what he calls simple contagion, i.e. when one contact may be enough. Instead, he conducts studies on how behaviour spread in a social system. He coins the term *complex contagion* to better match the complexity in how behaviours spread.

Centola (2018) even shows that overreliance on weak ties in change-work can in fact slow down change, or even inhibit change altogether. If people, such as educational developers, are brought into an organisation and invited to stimulate change through inspirational lectures, it can lead to deeper trenches and increased distance between the clusters. The reason for this can be that if a microculture does not believe in what an inspirer claims, the members of the microculture will share their experience of how wrong this person is and through this develop further arguments for why their old ways are more trustworthy. Since these defensive interactions are more significant than interacting with the guest, they are also likely to contribute to an identity including opposing elements.

The spread of behaviour instead follows a pattern of complex contagion. It takes several interactions where an alternative behaviour is presented, illustrated, or argued for before it becomes plausible as an alternative for members of a microculture. For this to happen complex contagion interactions have to take place on several occasions and the interaction has to include elements of trust: *complex contagion requires multiple contacts and thrives from trust-relationships*.

The question then is: how does this type of complex contagion happen across microcultural boundaries? Weak ties are not strong enough to carry complex contagion. Strong ties, on the other hand, happen inside microcultures, where members are more significant to each other. Furthermore, significant relationships are known

to follow principles of social homophily (Poole et al., 2018). People who share a culture often also share beliefs and identities. Academic teachers who share a microculture tend to believe in similar ways to teach.

Here, Centola (2018) points to the fact that boundaries between clusters are almost never discrete. They are never distinct to a degree where people never interact. Instead boundaries are porous. Some members belong to more than one microculture and may therefore be trusted members of several microcultures. They meet members from several microcultures frequently and are therefore suited to carry information between microcultures. They can fulfil the task of mediating complex contagion, that is, influencing members towards new behaviour across microcultural boundaries. They may pick up a new behaviour through complex contagion in one microculture and then present this as an alternative to yet another microculture and thereby mediate complex contagion between microcultures.

This process will take time; since it is built on repeated interaction. New ways to teach or to talk about teaching can be forecasted to spread from one microculture to another and as they do the methods or perspective talked about will change in the process, like in the children's game where one child whispers something into the ear of another child and this child then passes on what he or she has heard, and so on. The meaning is transformed as it travels from one end of an organisation to another, as it crosses microcultural boundaries.

References

Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracín, B. Johnson, & P. Zanna (Eds.), *The handbook of attitudes* (pp. 173–221). Mahwah N.J.: Erlbaum.

Alvesson, M. (2002). *Understanding Organizational Culture*. London: Sage Publications.

Alvesson, M., & Svenningsson, S. (2016). *Changing Organizational Culture. Cultural change work in progress. (2nd ed.)*. London: Routledge.

Amundsen, C., & D'Amico, L. (2019). Using Theory of Change to evaluate socially-situated, inquiry-based academic professional development. *Studies in Educational Evaluation*, 61, 196–208. doi:<https://doi.org/10.1016/j.stueduc.2019.04.002>

Bamber, V., Trowler, P., Saunders, M., & Knight, P. (2009). *Enhancing Learning, Teaching, Assessment and Curriculum in Higher education*. Maidenhead: The Society for Research into Higher Education & The open University Press.

Barabási, A.-L. (2003). *Linked. How Everything Is Connected to Everything Else and What It Means for Business, Science, and Everyday Life*. New York: Plume.

Centola, D. (2018). *How Behaviour Spread. The Science of Complex Contagions*. Princeton: Princeton University Press.

Chalmers, D., & Gardiner, D. (2015). An evaluation framework for identifying the effectiveness and impact of academic teacher development programmes. *Studies in Educational Evaluation*, 46, 81–91. doi:<http://dx.doi.org/10.1016/j.stueduc.2015.02.002>

Chng, H. H., Mighty, J., Roxå, T., Sorcinelli, M. D., & DiPietro, M. (2019). 'The danger of a single story:' a reflection on institutional change, voices, identities, power, and outcomes. *International Journal for Academic Development*, 24(2), 97–108. doi:<https://doi.org/10.1080/1360144X.2019.1594239>

Condon, W., Iverson, E., Manduca, C., Rutz, C., & Willet, G. (2016). *Faculty Development and Student Learning: Assessing the Connections*. Bloomington Indiana University Press.

Gibbs, G. (2013). Reflections on the changing nature of educational development. *International Journal for Academic Development*, 18(1), 1–14. doi:[10.1080/1360144X.2013.751691](https://doi.org/10.1080/1360144X.2013.751691)

Goffman, E. (2000 [1959]). *Jaget och maskerna. En studie i vardagslivets dramatik. (The Presentation of Self in Everyday Life)* (S. Bergström, Trans.). Stockholm: Prisma.

Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360–1380.

Green, D., & Little, D. (2016). Family portrait: a profile of educational developers around the world. *International Journal for Academic Development*, 21(2), 135–150. doi:doi.org/10.1080/1360144X.2015.1046875

Hart, D., Diercks-O'Brien, G., & Powell, A. (2009). Exploring Stakeholder Engagement in Impact Evaluation Planning in Educational Development Work. *Evaluation*, 15(3), 285–306. doi:[DOI: 10.1177/1356389009105882](https://doi.org/10.1177/1356389009105882)

Hemphälä, J. (2008). *The Instrumentality of Talk – On the Creation of Sustainable Organizations Through Social Interactions*. (Doctoral Thesis), Royal Institute of Technology, Stockholm.

Kezar, A. (2014). *How Colleges Change. Understanding, Leading, and Enacting Change*. New York: Routledge

Land, R. (2001). Agency, contexts and change in academic development. *International Journal of Academic Development*, 6(1), 4–20.

Lee, A., Manathunga, c., & Kandlbinder, P. (2010). Shaping a culture: oral histories of academic development in Australian universities. *Higher Education Research & Development*, 29(3), 307–318.

Leibowitz, B. (2014). Reflections on academic development: What is in a name? *International Journal for Academic Development*, 19(4), 357–360.

Luhmann, N. (2005). *Förtroende – en mekanism för reduktion av social komplexitet 'Vertrauen. Ein Mechanismus der Reduktion sozialer Komplexität'*. Riga: Daidalos AB.

McPherson, M., Smith-Lovin, L., & Cook, J. (2001). Birds of a feather: Homophily in Social Networks. *Annual Review of Sociology*, 2001(27), 415–444.

Meyer, J., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83(2), 340–363.

Mårtensson, K. (2014). *Influencing teaching and learning microcultures. Academic development in a research-intensive university*. PhD-thesis. Lund University Press, Lund, Sweden.

Mårtensson, K., & Roxå, T. (2018). Development of academic developers – supporting a scholarly community. In A. Scholkmann, S. Brendel, T. Brinker, & R. Kortdts-Freudinger (Eds.), *Zwischen Qualifizierung und Weiterbildung* (pp. 250–270). Magdeburg: Deutsche Gesellschaft für Hochschuldidaktik.

Pataraina, N., Falconer, I., Margaryan, A., Littlejohn, A., & Fincher, S. (2014). 'Who do you talk to about your teaching': networking activities among university teachers. *Front-line Learning Research*, 2(2). doi:<http://dx.doi.org/10.14786/flr.v2i2.89>

Pool, G., Iqbal, I., & Verwoerd, R. (2018). Small significant networks as birds of a feather. *International Journal for Academic Development, published online*. doi:<https://doi.org/10.1080/1360144X.2018.1492924>

Roxå, T. (2014). *Microcultures in the meso level on higher education organisations – the Commons, the Club, the Market and the Square*. Lund University, Lund.

Roxå, T., & Mårtensson, K. (2009a). Significant conversations and significant networks – exploring the backstage of the teaching arena. *Studies in Higher Education*, 34(5), 547–559.

Roxå, T., & Mårtensson, K. (2009b). Teaching and Learning Regimes from within. Significant Networks as a locus for the social construction of teaching and learning. In C. Kreber (Ed.), *The University and its Disciplines. Teaching and Learning Within and Beyond Disciplinary Boundaries*. London: Routledge.

Roxå, T., & Mårtensson, K. (2014). Higher education commons – a framework for comparison of midlevel units in higher education organizations. *European Journal of Higher Education*(online 11 June 2014 <http://dx.doi.org/10.1080/21568235.2014.924861>). doi:10.1080/21568235.2014.924861

Roxå, T., & Mårtensson, K. (2015). Microcultures and informal learning: a heuristic guiding analysis of conditions for informal learning in local higher education workplaces. *International Journal for Academic Development*, 20(2), 193–205. doi:doi.org/10.1080/1360144X.2015.1029929

Roxå, T., Mårtensson, K., & Alveteg, M. (2011). Understanding and influencing teaching and learning cultures at university: a network approach. *Higher Education*, 62(1), 99–111.

Saroyan, A., & Trigwell, K. (2015). Higher education teachers' professional learning: Process and outcome. *Studies in Educational Evaluation*, 46, 92–101. doi:<http://dx.doi.org/10.1016/j.stueduc.2015.03.008>

Sorcinelli, M., Austin, A., Eddy, P., & Beach, A. (2006). *Creating the Future of Faculty Development. Learning from the Past, Understanding the Present*. Bolton Anker Publishing Comapny.

Stensaker, B., van der Vaart, R., Dyrdal Solbrekke, T., & Wittek, L. (2017). The Expansion of Academic Development: The Challanges of Organizational Coordination and Collaboration. In B. Stensaker, G. Bilow, L. Breslow, & R. van der Vaart (Eds.), *Strengthening Teaching and Learning in Research Universities. Stratgies and Initiatives for Institutional Change*. (pp. 19–41). London: Palgrave Macmillan

Stes, A., Min-Leliveld, M., Gijbels, D., & van Petegem, P. (2010). The impact of instructional development in higher education: The state-of-the-art of the research. *Educational Research Review*, 5, 25–49. doi:doi:10.1016/j.edurev.2009.07.001

Sutherland, K. (2018). Holistic academic development: Is it time to think more broadly about the academic development project? *International Journal for Academic Development*, 23(4), 261–273.

Thomson, K., & Trigwell, K. (2016). The role of informal conversations in developing university teaching? *Studies in Higher Education, published electronically*. doi:<http://dx.doi.org/10.1080/03075079.2016.1265498>

Van Waes, S., Moolenaar, N., Daly, A., Heldens, H., Vincent, D., Petegem, P., & Van den Bossche, P. (2016). The networked instructor: The quality of networks in different stages of professional development. *Teaching and Teacher Education*, 59, 295–308.

Vollmer, H. (2013). *The Sociology of Disruption, Disaster and Social Change. Punctuated Cooperation*. Cambridge: Cambridge University Press.

Watts, D. (2003). *Small Worlds – The Dynamics of Networks between Order and Randomness*. New Jersey: Princeton University Press.

Weick, K. (1976). Educational Organizations as Loosely Coupled Systems. *Administrative Science Quarterly*, 21(March), 1–19.

Table of Tables

Tab. 1. useful to study while studying effects from disruptions on social settings, e.g. culture change in teaching 27

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