From 'a meeting' to 'a learning community'

Community of Practice theory-informed facilitation of an inter-organizational community of practice: the case of the e-collaboration learning community

Acknowledgements

The authors would like to thank the following people who have contributed to our thinking by commenting on earlier drafts: Alice MacGillivray; Bill Williams; Christina Merl; John Smith; Marco Bettoni; Mirjam Schaap; Naava Frank; Paul Kersten; Russell Kerkhoven; Sandra Walden Pearson; Steve Eskow

Authors biographies

Joitske Hulsebosch holds an Msc in irrigation, soil and water conservation and thereafter worked for 10 years in Mali, Ethiopia and Ghana as a trainer in participatory methods and later organisational development advisor. She developed a strong interest in communities of practice when she experienced the power thereof as participant of a corporate community of practice. She is currently working as a consultant in the field of organisational learning and online interaction (www.joitskehulsebosch.nl). She has an English blog at http://joitskehulsebosch.blogspot.com. E-mail: joitske@gmail.com

Drs. Sibrenne Wagenaar is interested in questions in which collaborative learning and learning from own experience are key. From the thought that people learn by working together with others. Central themes in her work are: designing interactive learning processes, workplace learning, facilitation of change processes, competency-based learning, communities of practice, knowledge productivity, and learning organisation. Besides working as a consultant, facilitator, designer and researcher, she is one of the editors of a journal called Learning in Organisations. She is working for her own company called Link2Learn. Email: Wagenaar@link2learn.eu

From 'a meeting' to 'a learning community'

Community of Practice theory-informed facilitation of an inter-organizational community of practice: the case of the e-collaboration learning community

Abstract

In the fall of 2005, an event was organized for individuals from development organisations in the Netherlands to learn about new tools for collaboration at a distance, which grew into an inter-organizational, hybrid learning community about e-collaboration. The two authors used a community of practice-theory informed way of facilitating this community as facilitator-practitioners. The community grew from 20 to over 100 members. Its public community space expanded from an online discussion forum to include face-to-face meetings, research activities and a weblog. The private spaces were an equally important part of the collaborative learning landscape and consisted of joint projects, members of the community participating in the same trainings, as well as have informal meetings both on- and offline. The authors point out some principles for facilitators of learning communities who want to work from CoP-theory and provide ideas for stage-specific interventions. They conclude with a discussion and ideas for further research.

Keywords:

Community of Practice, Facilitation, Inter-organizational Communities of Practice, Group facilitation, online and face to face learning, Facilitator Interventions

From 'a meeting' to 'a learning community'

Community of Practice theory-informed facilitation of an inter-organizational community of practice: the case of the e-collaboration learning community

Scope and methodology

It started in the fall of 2005. Two people from a Dutch organization working on International Development wanted to share their experiences with e-coaching and contacted two other development organizations. They decided to organize a one-day event on 'e-collaboration'. The day started with practical sessions to learn new online tools like chatting with MSN, and had space for experience sharing too.

> Box 1: Definition of E-collaboration
> E-collaboration is operationally defined here as collaboration using electronic technologies among different individuals to accomplish a common task (Kock, 2005).

The event was a great success. It attracted a group of about 25 participants of large and small development organizations, training and consulting institutes and independent consultants. The practical part of the event was highly appreciated. An email-based online discussion forum (Dgroups; http://www.dgroups.org) was created and all participants were made member. Though this space was created for experimenting with the discussion forum without a defined purpose, discussions continued spontaneously online. Over the last two years, this event evolved into a constantly growing learning community, with 100 registered members (November 2007), people with different backgrounds who met online and through face-to-face meetings. We use the term learning community (in Dutch: 'leernetwerk') to indicate that we talk about a network of practitioners with a learning objective. We could have used the term learning network or circle as well, but with the term 'community' we already express what we are hoping for when thinking of the kind of process we would like to stimulate in this group.

Scope

This article aims at describing our experiences with CoP-theory based facilitation of the e-collaboration learning community to arrive at a better understanding of facilitator principles and powerful interventions. The e-collaboration community is an inter-organisational community situated in the international development sector in the Netherlands. This learning community is hybrid and uses both face-to-face and online interactions. We want to explore how the growth of this community over the past two years might be attributed to the facilitation from a Community of Practice (CoP) theory perspective. During the two-years we have documented our experiences with the facilitation process meticulously. In this article we summarize our reflections, and formulate principles for facilitators who want to facilitate from a CoP-theory perspective as well as stage-specific facilitator interventions. The described case of the e-collaboration community is further illustrated by theoretical insights from the Community of Practice (CoP) theory (McDermott et al. 2002).

We have chosen the name learning community for the group, however, we do not have the intention to discuss the various categories of communities and networks and to classify our case community. Whatever category anyone would place the e-collaboration group, we have used the CoP theory to inform our facilitation interventions. It is hoped that this article contributes to making the art of CoP-theory informed facilitation in networks more visible, and that it will provide valuable lessons for other facilitators working from a CoP perspective. More particularly we try to address three questions:

- How can a learning community benefit from CoP-theory informed facilitation?
- What particular facilitator principles stimulate the learning process? How can a facilitator intervene in a learning community at each stage of development for effective learning and innovation? How to recognize the development stage?

- What makes facilitation of learning informed by CoP theory different from other ways of facilitation of trainings, workshops and formal learning trajectories?

Methodology

The article is a reflective case study and we adopted a participants-observation methodology. During a two-year's period we facilitated the learning community and we have observed meticulously what happened in the community. Our impressions, process observations and questions were written down in a jointly co-created online document, a wiki[1], for documentation purposes. Both of us facilitators wrote down our observations at regular interval, not on a weekly basis, but whenever we observed something interested. We documented after every major event too. What we documented were our observations, interventions and their effects, decisions made, results and lessons learned. In the wiki, we also noted down 'anecdotal evidence' of the impact of the community of practice. The wiki of 17 pages has become the basis for this article. Besides our participants-observations, we have used an assessment half-way the process. An external assessor, expert in communities of practice, used small group conversations with community members to gain insights in the growth, value and directions of the learning community and provide feedback. Finally, with members interested in the growth process of the community, we worked on a learning history line and collaborative learning landscape to visualize important interventions, moments of change, and public and private spaces in the community. And we asked a few members as peer reviewers of this article, to validate and complement the content.

The origin and value of communities of practice theory

Our facilitation role is informed by the CoP theory. So what is this concept about and what are important elements? According to Wenger (1998) and McDermott et al (2002), a CoP is a group of people interacting regularly to share knowledge and experiences about the domain in which they are engaged. By interacting, they deepen their knowledge and expertise in this area. Members of CoPs get answers to questions but they also get much more; they get support, reassurance, insights, and exposure to different value systems and beliefs. CoPs frequently form around topics members have invested many years in developing; topics they are often passionately interested in. But CoPs are not just celebrations of common interest. They focus on practical aspects of a practice, everyday problems, new tools, developments in the field, things that work and don't. Communities are held together by their members' passionate interest in improving their practice. An effective CoP can lead in knowledge creation and innovation in its domain.

Box 2: Topics shared by members at the start of the e-collaboration community

- I am looking for a creative way for members of an online group to get to know each other. Who knows something?
- What tool is most suitable for working together on one document?
- We started an online group. How can we stimulate members to participate more actively?
- How can we develop our own competencies for e-coaching?

Communities of practice can be small or large, homogeneous or heterogeneous, and spontaneous or intentional. They can be corporate (within an organization) or inter-organizational. Nevertheless, all CoPs share three basic elements:

- The *domain* creates common ground and a sense of common identity. The domain inspires members to contribute and participate, guides their learning, and gives meaning to their actions.
- The *community* creates the social fabric of learning. It encourages a willingness to share ideas, expose one's ignorance, ask difficult questions, and listen carefully.
- The *practice* is a set of frameworks, ideas, tools, information, styles, languages, stories and documents that community members share.

1 A wiki is according to http://en.wikipedia.org "a software engine that allows users to create, edit, and link web pages easily. Wikis are often used to create collaborative websites and to power community websites".

Inter-organizational and corporate communities

An inter-organizational CoP has start-up and ongoing needs that are different from corporate communities. For instance, you may have to overcome the natural mistrust of people who may be competitors, you may not have support within the employing organization, and the choice of technologies is more complex because of organisational differences. On the other hand, working with practitioners from different organizations allows you to freely discuss issues that would not be discussable in a corporate setting (CPsquare, 2005, unpublished). It might create a sort of 'free space' in which you can explore issues from different perspectives, as well as experiences from other organisations. Kurtz and Snowden (2006) state that inter-organizational networks provide the opportunity for employees to discover the paradox that organizational stories are unique, but that stories may be widely similar among organizations. By offering this learning experience, inter-organizational communities are unique in influencing the member's identities in relation to their own organization. They also point out that members of inter-organizational networks are exposed to conflicts and instability, which can increase productive conflict in their own organizations. Hence, they may be a source of new knowledge but also a potential contribution to the ability of the organization to reinvent itself from within. Not much is know about these processes and when they are productive or counter-productive. There is evidence from one case in the educational sector that inter-organizational communities may reduce practitioner isolation, but other effects like shifting frames of reference are more subtle and harder to measure (NCSL, 2002).

Levels of participation

An important characteristic of communities of practice is the fact that there are varying levels of participation by members. The most active members constitute a so-called core group. Active, interested individuals inhabit the active space. Individuals, who are interested in the domain, but may not necessarily be active practitioners, occupy peripheral space. Burgess (2007) studied the process whereby people move from the periphery to the core group, whereby members become leaders within the CoP. He found that the process of participation and meaning for the participant is a mutually constitutive process: participation provides meaning to the participant and the meaning participants make of their experiences influences the nature of their continued participation. In other word, if people find value in the CoP, they are more likely to move into the core group. And this 'moving around' in the community looks like an ongoing process in which members choose their roles depending on the dynamics at stake.

> Box 3: In the e-collaboration community we had 5 or 6 'leaders', a core group of 15 to 20 very active practitioners and a group of about 20 members 'moving around'. As facilitators, we found out that we could influence people's involvement by inviting them for specific contributions, 'seducing' them to share experiences, or ask them to take a specific role in an activity in the community.

Value

The existence of CoPs is not a recent invention, but the idea that organisations can 'manage' knowledge by leveraging CoPs is new. CoPs have been with us since the beginning of humankind, long before we even had organisations. They have been playing a key role in sustaining the knowledge of our organisations long before we started to focus on them. As knowledge increases in importance, they will continue to play this critical role whether we pay attention to them or not. However, paying attention to CoPs and nurturing them, can improve knowledge management within and across organisations. There is a growing awareness that tacit knowledge makes of a substantial proportion of vital knowledge for organizations, perhaps as much as 80% (Callahan, 2006). CoPs are seen as an ideal vehicle for leveraging tacit knowledge because they enable person-to-person interaction and engage a whole group in advancing their field of practice. "Communities of practice are in the best position to codify knowledge, because they can combine its tacit and explicit aspects" (Wenger, McDermott, Snyder, 2002). An increasing number of multinational corporations choose virtual communities of practice as their knowledge management tool of choice, including well-known industry leaders as Hewlett Packard, British Petroleum, Chevron, Ford, Xeros Raytheon, IBM and Shell (Ardichvili, 2002). Schein (1996) introduces three sub-cultures in each organization: the operator culture, the executive culture and the engineering culture. These cultures are often out of alignment with each other, which causes organisational learning disabilities.

He mentions occupational communities as one of the possible solutions to this problem of organizational learning.

A romantic relationship

Each learning community is unique and Wenger (2005) compares the forming of a CoP with the development of a romantic relationship, which requires as much care and is equally unpredictable. Like the growth of a marital relationship, the development of a community is a delicate process involving interpersonal dynamics, trust and mutual commitment which results in a new social entity. Communities thrive on trust. One of the main dynamics of a community is that members ask for and offer help solving problems. Regularly helping each other makes it easier for members to show their weak spots and learn together in the 'public space' of the community. Having regular frank and supportive discussions of real problems builds a greater sense of connection and trust between members. As they share ideas and experiences, members often develop a shared way of doing things, a set of common practices, and a greater sense of common purpose. Furthermore, participation in a community of practice shapes people's identity. Identity, practice and community impact each other multi-directionally, eg. participation in a community can enable a sense of belonging to that community which may again change a person's identity (for instance, a person's view of him/herself as more/less expert in the field). Participation does not only shape what participants do, but also how they perceive themselves and how they understand what they are doing (Lueg, 2005). While a community of practice is the carrier of the evolution of practices and the absorption of newcomers, it is thought to be the carrier of the development and transformation of identities of its members too.

Reification and Participation

According to Wenger, learning takes place through engagement in actions and interactions, by which it reproduces and transforms the social structure in which it is situated. Two dimensions of both practice and identity, which exist in learning in a dynamic interplay, are participation and reification (Wenger, 1998, p. 87). See box 3 for a definition of those concepts. Participation by participants in a community of practice is not only talking or acting, but is also participation by mutual recognition. People who only read messages in an online community are also participating because they influence the community by reading (contributors may write differently when they know 100 people are receiving a message). Participation is also broader than engagement in practice as it involves other aspects of your life too. Reification is central to any practice; every community of practice produces abstractions, tools, symbols or stories. "By producing objects that congeal experience into 'thingness' we create points of focus around which the negotiation of meaning becomes organized." (Wenger, 1998, p.58). In their interplay, participation and reification are complementary. The process of reification is essential for people to participate and participation is crucial to reification. A newspaper reifies the news of the world, but people may discuss the news in the paper and doing so enrich and negotiate the meaning of the news.

Box 4: The definition of Participation and Reification

Participation refers to a process of taking part and also to the relations with others. It suggests both action and connection (...) [It] is the complex process that combines doing, talking, thinking, feeling, and belonging. It involves our whole person, including our bodies, minds, emotions, and social relations. (Wenger, 1998, pp. 55-56)

Reification is the process of giving form to our experience by producing objects that congeal this experience into "thingness" (Wenger, 1998, p. 58). Wenger argues that reification can refer to both process and product, that it can take different forms, that it occupies a great deal of our collective energy, and that it shapes our experience (Wenger, 1998).

Box 5: Working with participation and reification

How as facilitators we try to balance reification and participation can be illustrated by our mindmapping-experiment. Prior to a face-to-face meeting, we experimented with tools for making online mindmaps. Four different software programmes were selected. Several members of the community joined the experiment, starting by reading the instructions (reified knowledge). To get a feeling of the possibilities of the programme, we all made a mindmap, and reflected on our experience as a preparation of the meeting (reifying individual knowledge). We shared our insights in the meeting, elaborating on each others experiences, combining ideas and suggestions (participation). A summary of the

discussion was written as a collective reflection for the blog (reified collective knowledge).

Value creation

Wenger (2002) distinguishes between short- and long-term value, and tangible and intangible results. In the near time, members get help with immediate problems, devise better solutions and make better decisions by including peer perspectives. On the long term, members develop professionally, and keep abreast of new developments in their fields. Tangible results might be manuals, improved skills, or reduced costs. But the greatest value appears to lay in the intangible outcomes: relationships people build among each other, a sense of belonging, the spirit of inquiry, or professional confidence and identity. And it is exactly those results that are difficult to measure and make explicit. Wenger (2002) states that effective CoPs create value at the level of individual members and at the level of the host organisations. Lesser and Storck (2001) base their conclusions on a study of seven organizations where CoPs are acknowledged to create value. They articulate communities of practice as an engine for the development of social capital. The CoPs impacted organizational performance in the following manners:

- Decrease of the learning curve of new employees;
- More rapid responses to customer needs;
- Reduced 'reinventing the wheel';
- Spawned new ideas for products and services.

The case of the e-collaboration learning community

As said before, we developed the idea of facilitating the start-up of a learning community when we met a group of people passionate about e-collaboration. At this point, we saw an embryonic CoP. We met and wanted to co-facilitate the process of fostering a learning community with the aim of stimulating faster learning about e-collaboration within the sector, and catalyze innovation. Previously, we had both read and learned a lot the communities of practice theory. Hence, we wanted to try and facilitate this learning network with this theory in mind. As we wanted to learn from this process, we decided to document the process to help our reflections.

After getting the commitment from our respective employing organisations to invest in fostering a learning community, we called participants in person, asking questions about their interest and their practice questions. However, we did not explicitly mention the idea of a CoP at that point; the concept felt inappropriate for our informal group at the time. The phone round was crucial to stimulate connections. We recognised issues and commonalities from our own experience and common questions amongst members. We were impressed by the level of experimenting with e-collaboration, far more than had surfaced in the online forum. We tried to get online discussions going by asking questions and stimulating people to post by private communications, but response was low. We thought that it would be time-effective to use online communication. For some members, however, the quality threshold was quite high and they felt that they did not meet the (invisible) quality criteria to post a message. We noticed the difference between web-savier people and people with less e-experience, and between people with an e-collaboration related task in their organisation and the more volunteer pioneers.

Box 6: Practice questions

Various practice questions emerged during the phone round: What triggers people to keep talking online after a training program? How to communicate with people 'in the field'? What are user-friendly interfaces for low-bandwidth users in the south? What are methods to get learning going between people in Africa, Latin America and Asia (so-called 'south-south' learning)? How to organise translations online? How to facilitate a Dgroup email group, or an online group? How to guide people in the use of e-environments? What are the new e-tools?

Because of the low response online, we tried two other methods to elicit experiences. We organized an e-coaching experiment, to create a common experience. The experiment attracted new people too and a few people became members of the CoP. Furthermore, we recruited an intern to elicit the knowledge gained through experiments within

organizations to enhance e-collaboration within organisations and with partners in Africa, Asia and Latin America. The interviews were documented in a printed booklet, as well as in a blog (http://www.icollaborate.blogspot.com), and shared with the group in a face-to-face meeting. This research was very valuable in that it stimulated people to reflect on their own practice and experiences. Participants started to see small initiatives as worthwhile to mention, and they noticed the initiatives of others around them.

Two initiators of the first meeting felt a great deal of ownership, and showed their interest in thinking along with us about the learning processes within the learning community. From that moment, we began working quite closely as a group of four, under the name 'design group'. The design group informally discussed progress.

We started to stimulate online exchange via an email-based forum, but added face-to-face meetings to the CoP repertoire to stimulate more dialogue in the group, create connections between people, and catalyze more in-depth discussion of the practical applications of e-tools. We proposed rotating the hosting of the meetings to stimulate ownership and share the logistical burden. Each meeting was prepared by the 'design team' in collaboration with the hosting member of the CoP meeting. Till date, five quarterly meetings were organized, with an attendance ranging from about 14 to 25 participants (the first meeting had the lowest number of attendents). In every meeting, roughly half of the participants were previous participants, and half were new entrants. The online repertoire was expanded by a public online resource: the weblog (http://www.icollaborate.blogspot.com). A smaller bloggers team took it upon themselves to blog and/or interview people. After a one-and-a-half year, we started investigating a possible move to a multiple-thread forum, moodle (www.moodle.org).

After a year as facilitators, we were eager to have some external feedback about our progress towards of fostering an effective learning community. We had questions about the rate of expansion of the group, the learning process, our own role as facilitators and the functioning of the online forum. In October 2006, an external CoP specialist was asked to review the first year of growth and define some development paths for the future. The exercise was extremely useful to highlight some of the dynamics of this particular community so far. Though we were initially hesitant to bother members with meta-level reflections about the growth of the community, a small core group met to discuss the outcomes. The exercise made them more conscious about their own role in the community. For us as facilitators, the review gave more insights in some dynamics in the community and focus for the future. New initiatives arose from the exercise and the domain of the community was reformulated from a focus on tools towards the way e-tools can be introduced and used in organisations.

Box 7: Example of message by a facilitator to articulate scope of working and learning:
We discussed during our meeting what makes this group special. The focus on e-collaboration is specific and translates in a drive to experiment practically with tools (eg Writely, wikis, riddles). Our main questions we are dealing with for now:

1. What are new tools available for e-collaboration?
2. How to make an informed choice for an appropriate tool for e-collaboration, in our organization, with partner organisations, or between partner organizations?
3. How to facilitate e-collaboration? How to stimulate use of technology?

In September 2007 we stopped our facilitation efforts because of change of jobs. We called out to members who were interested in investing in the community. All sponsor organizations wanted to continue and two more organizations joined the team. This allowed for a new definition of leadership roles, marking a new phase and possible transformation. Figure 1 summarizes the e-collaboration learning community growth in a timeline. The focus chosen is topics discussed and major events.

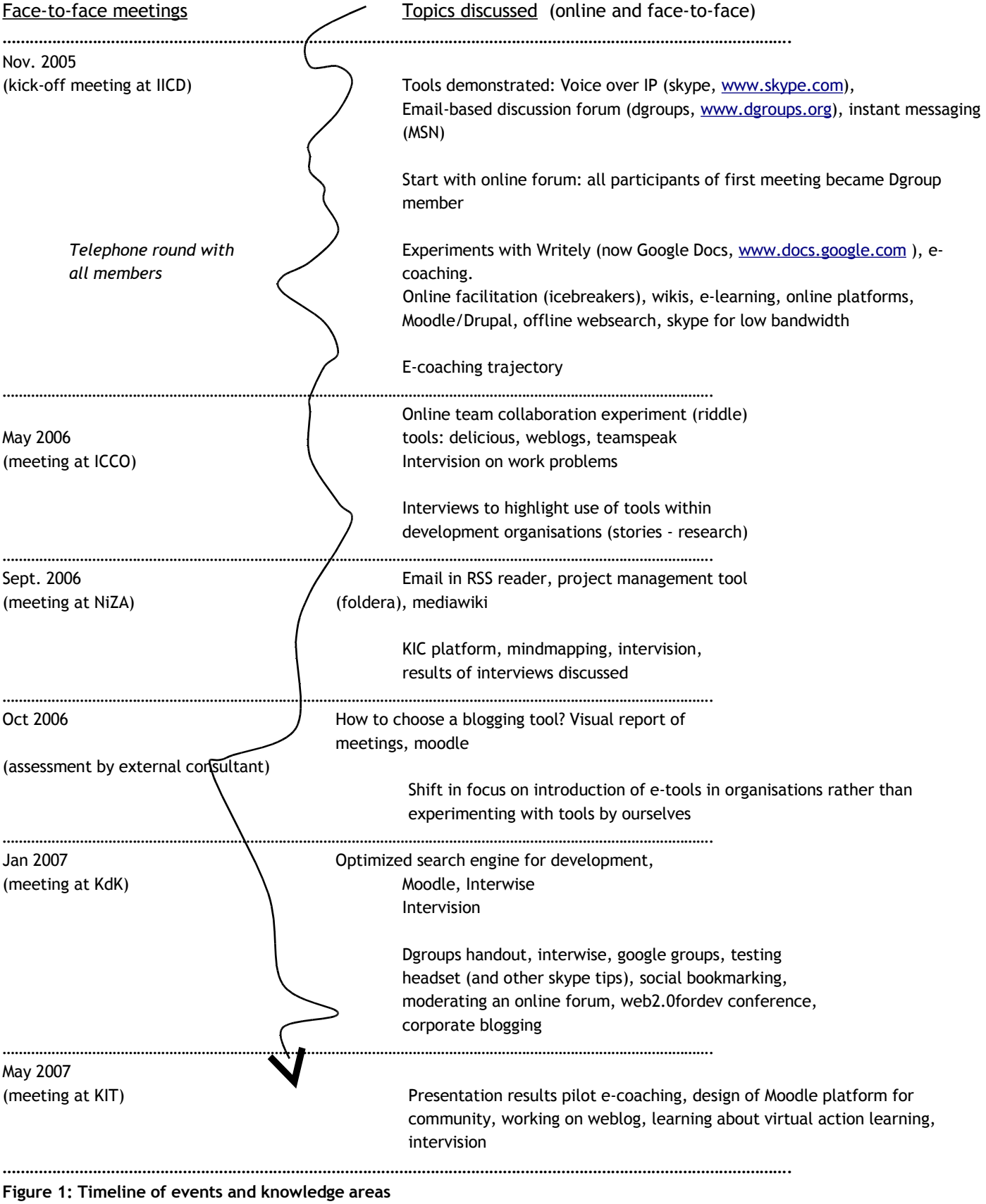

Figure 1: Timeline of events and knowledge areas

Public and private learning spaces

The story described above shows different interventions we undertook as facilitators, activities that were initiated in the community. The growth of the community also had its impact on the different learning spaces that arose. Figure 2 depicts this collaborative learning landscape, by displaying the various public (white) and private (grey) learning spaces. Public spaces are visible to all and are the community spaces like the online forum or open meetings. Private spaces are one on one or small group meetings. In the e-collaboration CoP there were many private spaces, members met each other online through their weblogs, and others initiated private small projects or met in trainings or workshops on e-collaboration related issues. The private conversations constituted an invisible, but nevertheless important part of the learning processes within the community. The spaces that overlap with the learning community boundary are the spaces that cross the boundary and have the potential to foster learning across the community with outsiders and to attract new members. Some circles are more in the centre then others, this doesn't have a specific meaning.

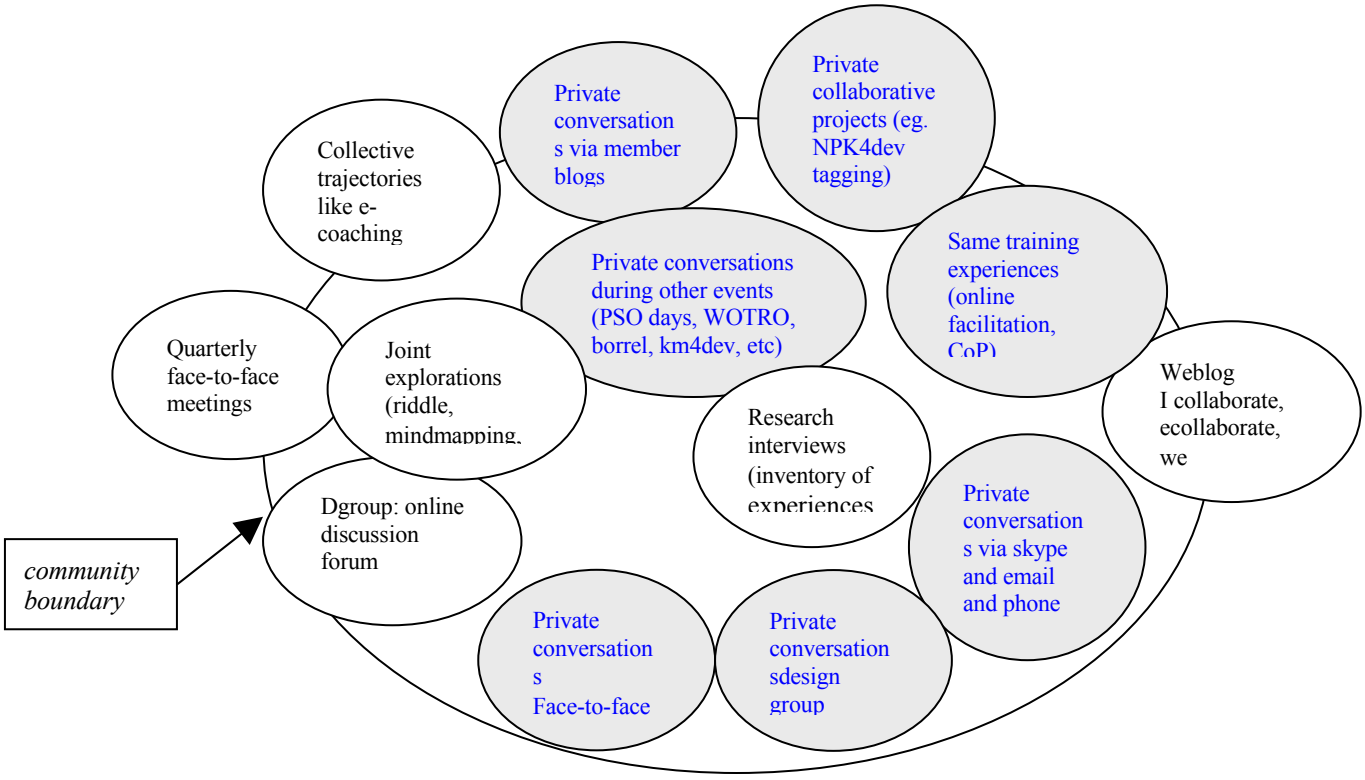

Figure 2. The collaborative learning landscape of the e-collaboration CoP
(grey shaded circles are private spaces, black outlined circles represent collective spaces)

Private conversations did not only take place between members of the community, but also within the design group and between the design group and the members. Behind the scenes we talked with members, asked them for their e-collaboration experiences, supported them in sharing those practices with others in the community, or invited people to take the lead in one of the experiments. Both public and private spaces are important for learning within a CoP, but the private spaces may be even more important in the beginning. One of our roles was to try and bring private discussions into the public space, something to which people often resisted. We explicitly address the two different learning spaces because we think the less visible space, the private, is of a lot of value for the group. In these spaces a lot of informal learning and exchange of experiences and ideas take place.

Box 8: Managing the interface with other communities
Every two months people working in knowledge management in the development sector gather informally in the Hague to have drinks after work from 17 o'clock onwards. This initiative has been going on for some time. We joined forces with this initiative, co-organised one of the drinks and invite all in the e-collaboration group to these borrels. At every borrel there are at least a few members of the e-collaboration group, and some even travel from other towns to the Hague to attend the borrel.

The value created by the e-collaboration community

It is clear that there is a growing learning community (see table 1 for an overview of stages and observations in the growth process), but what is the value created by the e-collaboration community? Is it a place where you find other people with the same kinds of interest, a place to learn from others, share experiences? What does it bring us? And what is the value to our organisations? Thinking about the value, another question arises about members participating in the community from a personal perspective or from an organisational perspective.

Table 1: Stages in the growth process of the learning community
(Partly based on Wenger, 2005 and McDermott, Snyder and Wenger, 2002).

Stage name	Potential	Coalescing	Maturing	Stewarding	Transforming
Description	**Falling in Love** The birth depends on a few people who see its potential. The attraction leads to a mixture of excitement and apprehension.	**Dating** Communities grow on social energy and learning opportunities. They need time to discover the value of being a community.	**Getting Married** Communities in this stage design themselves and establish a rhythm of togetherness and assign roles. It has to make sure all the relevant people participate.	**Living as a couple** Mature communities seek challenges that go beyond the early focus and expect to have a voice or make a difference.	**Growing old, growing young** Healthy communities live by reinventing themselves by exploring what they are about and seeking to deliver value.
Observations from the E-collaboration community	The initiators saw the potential of an event to learn about e-collaboration. The facilitators saw the potential for a more continuous learning process by fostering a CoP, based on the shared enthusiasm as well as their own eager to gain practical experience with facilitating a CoP.	Members had individual experiments but did not share those experiences, not feeling their worth to share. Members individually started to participate in various training programs related to the domain of e-collaboration (online facilitation, moderation, CoPs). Online a few experiences were shared, but more is shared through one-on-one interviews.	The design group forms and the rhythm of quarterly face-to-face meeting hosted by a member was created. A relatively spontaneous structure for the meetings was formed too; an online experiment beforehand, tools sessions and intervision to discuss work issues as well as the ways of organizing the meetings. The online space is used as a space to present events and tools.	The domain is redefined from learning about e-tools to learning how to introduce e-tools effectively into development organizations. A blog is added to the repertoire, making the community known publicly. Intensive collaboration of some members with the knowledge management for development community.	One member of the design group withdraws. Plans are made to change to a new online environment from Dgroups to a Moodle environment. Online teleconferences are added to the repertoire too. New ways of organizing the meeting are introduced.

The e-collaboration community produced various tangible products, however, the intangible products are more important and harder to measure. A tangible product is for instance the weblog (http://icollaborate.blogspot.com), the Dgroups archive with almost 500 messages and its resource section, the printed booklet and e-coaching materials. We used different methods to get a grip on the more intangible results. First, while we did not investigate the value systematically, we collected some anecdotes that articulate the value of the community in the facilitator's wiki. Secondly, we collected feedback through the external assessment after one year. Lastly, we asked members in a face to face meeting in May 2007 to write down one example of how the group supported them.

Box 9: A community review process

John Smith (http://www.learningalliances.net), an expert on CoPs, helped us with the review on the community. He observed a shift in focus from tools towards the introduction of new technologies for collaboration in our organisation. John Smith: 'the e-collaboration community should think of itself as a laboratory for developing its own practice: if a tool and appropriate social practices works for the community, it's worth recommending to organizations in the development sector and to the larger community of partners and clients. Learning from each others' successes and failures (to use a tool or technology and to adopt it) should be the focus of the community and the community should use a mix of these same technologies to learn from each other's experience. This implies a significant domain shift: from simply understanding how a tool works to understanding the social and organizational benefits as well as the obstacles to implementation and adoption.'

Most members defined the value first in terms of personal benefits, support and inspiration. They joined the community from a personal interest and passion for e-collaboration. They often felt isolated in their work on e-collaboration in their respective organisations. "E-collaboration is a significant area of learning and skill development, and there is the sense that as a group, these members have a significant contribution to make." (Smith, 2006)

Box 10: Example of individual learning trajectories

Two people were interested in e-collaboration but quite new. They decided to enrol in an online course about e-collaboration. After the course they shared some things they did and were asked to lead an exercise. The exercise was a big success and their effort was very much appreciated. Their identification with the topic of e-collaboration grew and this has reinforced their commitment to the community. Both have become very active members.

They were looking for support in finding ways to motivate colleagues in their own organizations for e-collaboration. One member said 'I appreciate the openness and will to experiment with technologies the members have. People involved have proven to be very interesting discussion partners with great stories and ideas that link to my work'. A new member about her first experiences: 'For me, this meeting was the first time to participate. At the same time, I can already foresee how it will help me to establish contacts and how it will stimulate me to make better use of ICT possibilities in cooperation with colleagues and partner organisations.'

Box 11: Some non-systematic anecdotal evidence of value created by the learning community

- An email is sent from a member thanking for sharing a resource, saying he appreciated it, and forwarded it to his colleagues.
- During a Skype call, we heard that a member used another member as sparring partner about content management systems (Plone and Drupal).
- During a phone call we heard that someone has introduced Skype into her organization and that people are now using it regularly.
- In one organisation a person started with tagging and group tagging. It really makes her work much easier when she had to compile resources for a training.
- A member shared their internal blog experiences and this is just in time for another organisation that is at the verge of introducing this too in their organisation.

Some members indicated that their participation in the community affected the practices in their organisation: 'I mostly appreciate the inspiration it gives me to try new things, although I haven't actually used much within my own

organisation. I do use Google Doc's with colleagues when I co-write an article, and I plan to make a Del.icio.us (account).' (http://del.icio.us – a collaborative tagging and bookmarking service). A few had a story in which the community had an important impact on their own work or the organisation they are working with. An example: 'In 2006, I participated in the e-coaching learning trajectory. By that time I wasn't a member of the community. I got very enthusiastic about the possibilities of e-coaching and enrolled in the community as well as in a coaching course. This course has totally changed the focus of my work! It is too early to assess what this will all lead to', 'For me the community means new contacts, and even new work. Together with another member I was asked to develop and facilitate an e-collaboration introduction course for a Dutch NGO', and 'Two years ago, e-collaboration was new for my organisation. And this week we have a whole afternoon experimenting with e-tools with all employees!' Another example is shown in box 12.

Box 12: A member's account of the value of the e-collaboration community:
"I have a very challenging job in my organisation to design and develop an online learning environment for our volunteers, working all over the world. How do we connect volunteers? How do we capture knowledge and make it available to others? And how to stimulate knowledge sharing and learning between volunteers? Those are the kind of questions I am working on. In my organisation, my sparring partners are mostly IT-specialists and e-learning experts. For other types of questions I use the e-collaboration community, which is a very valuable group for me! At the same time I was looking for an online learning platform to work with, some other people in the community had the same question. It was very helpful to share thoughts and experiences on this topic, and even experiment together with a Moodle environment. I met people with worthwhile experiences and same interests. This 'social learning' definitely helps me in my work, and makes me more confident about certain choices and directions to go to."

We observed that once people gained more knowledge, and interacted with other practitioners, their self-awareness and identities changed. The person who enrolled in the e-coaching course decided to continue with a coaching course which changed his identity both within his organisation as within the e-collaboration group. In this case of an inter-organisational learning community, we observed that people brought their organizational culture and way of working into the community. The e-collaboration community hence created a space where new ways of working and new identities are formed.

Box 13: The assessment's effect on identity of a participant
One participant remarked that the assessment exercise had worked for her to realize that there was a community of practice formed and that she played a role in it. Until then she had not really looked at the exchanges as a community of practice. She thinks this is one of the strengths of the facilitation during the first year. The facilitation was invisible enough not to be 'annoying'.

When the e-collaboration community grew and became more known and self-conscious, we made connections with other communities and the community became more publicly known. A member wrote about this: 'This community and its members became of much more value when links were made with the Knowledge Management for Development[2] (KM4Dev) community.' KM4Dev's annual gathering in the Netherlands in 2007 had several e-collaboration topics and some members of the group co-organised the meeting. The learning community became more publicly known through the weblog and its members. It was mentioned in a recent article about knowledge management in the development sectors as one of the known knowledge sharing networks (Vice Versa, 2007). We played a coordinator role, but members also actively promoted the community.

2 KM for Development (KM4Dev) is a community of international development practitioners who are interested in knowledge management and knowledge sharing issues and approaches. See http://www.km4dev.org

11 principles to guide facilitation of a learning community informed by CoP- theory

In this chapter, we will present 11 principles that were important to us as facilitators of a learning community based on the CoP theory. The principles are derived from our experiences with the e-collaboration community over a period of two years. We hope this will contribute to an improved understanding of the facilitator role, and help you in developing your role in practice. We don't want to introduce these principles as *the* principles, but as a pallet of possible choices you ca make as a facilitator.

Tarmizi, de Vreede and Zigurs, (2006) state that the facilitator role in communities is still under-researched. As a result, very little is known about successful facilitator interventions leading to effective CoPs. Some research is undertaken into leadership, but focuses on the management team and the sponsor rather than the individual actions of the leader (Bourhis et al, 2005). Stuckey and Smith (2006) looked at the role of leaders to sustain a community of practice. They outline three themes for leaders aiming to sustain a CoP, but without going to the level of concrete facilitator interventions: (1) sustain the community's being together inside the community, (2) maintain boundaries around the community that are clear, permeable and meaningful, and (3) carefully draw nourishment from the environment and respond to environmental challenges creatively. Hall (2003) describes a process that a facilitator can use to maximize the quality of a given community of practice. In a Dutch book by Coenders and Bood (2004) some interventions are explained as a way of illustration. Kranendonk and Kersten (2007) describe how three master roles can stimulate the learning process and improve the functioning of a CoP, assigning a Master of process, a Master of innovation and a Master of learning and development. Krebs and Holley (2002-2006), specify how a facilitator of a network can 'knit their network' by using network mapping. And a research undertaken by Tarmizi et al (2006), highlights that organizations could help facilitators in more systematic ways, facilitators could allocate their attention in a more effective ways, and there could be more purposeful training programs. The most difficult tasks identified were: (1) encouraging new members to participate in the communities activities, (2) promoting ownership and encouraging responsibility, and (3) creating and maintaining an open, positive and participative environment,

Two valuable remarks about the way the facilitator's role is paying attention to in literature. First, in CoP literature that is available on the facilitator's role in a learning community, there are different ways of describing this role. Terms often used are: convener, designer, weaver, coordinators or leaders. (see Callahan and Milner, 2004; Stuckey and Smith, 2006; McDermott, Snyder and Wenger, 2002). Each term represents a way of looking at the role, or a certain emphasis on one aspect of the role. We have chosen to use the term facilitator because we'd like to emphasize the fact that the person should guide the development process of the learning community. This involves paying attention to participation, (re)-defining the domain and domain questions, and keeping the conversations centred on practice. And second valuabel remark is that most research is done in either face-to-face communities or online or 'virtual' communities (see for instance Preece et al, 2004, Hardon 2005) and few examples are described of hybrid communities. Facilitator's interventions might be quite different in pure virtual communities compared with face-to-face or hybrid communities. Some studies on virtual communities report that the support of face-to-face meetings stimulate the evolution of the community (Ardichvili et al, 2002; Hildreth et al, 2000, Smith and Trayner, 2005, Stuckey and Smith, 2006, Qureshi and de Leeuw, 2006; Influence of face-to-face meetings, 2007). According to Hardon (2005), familiarity with the phenomenon of online communities plays an important role in the success of a community. Kimble and Hildreth (2004) are cautious about pure online communities of practice. They warn that the difficulty of building and maintaining strong social ties needed to build a sense of community in a virtual environment should not be underestimated. On the other hand, membership in a tight-knit, face-to-face group makes virtual participation redundant (Ardichvili et al, 2002).

Seven principles outlined by McDermott et al (2002) for nurturing communities of practice, are very helpful in our understanding of facilitation. We used those principes as the basis to our approach: (1) design for evolution, (2) open a dialogue between inside and outside perspectives, (3) invite different levels of participation, (4) develop both public and private community spaces, (5) focus on value, (6) combine familiarity and excitement, and (7) create a rhythm for the community. Derived from those principles and our experience with the e-collaboration community, we see 11

principles for facilitating a learning community based on the CoP theory:

Box 14: Eleven principles for facilitating a learning community

1. Act as a learning facilitator-practitioner
2. Co-facilitate to reduce blind spots
3. Embed learning in actual practice
4. Simulate self-organisation
5. Facilitate conversations in public *and* private spaces
6. Use the variety in the community
7. Balance the focus on tangible and intangible products
8. Guide meta-level reflections
9. Distinguish between two layers of practice
10. Manage sponsor relationships
11. Manage the boundaries

Though we derive the principles from our case of facilitating a hybrid, inter-organizational learning community with its own characteristics and challenges, some of the principles may apply to facilitators in a corporate setting too. Below we explain each principle in more detail, together with some concrete examples from our practice.

1. Act as a learning facilitator-practitioner

An important starting point is that we see ourselves as facilitator-practitioners instead of neutral facilitators. A neutral facilitator who is not a practitioner in the domain of the CoP may have a distant view so that he/she can more easily see whether conversations are moving forward, and innovation is taking place. The danger is that the facilitator cannot fully understand the complexity of the practice. For a facilitator-practitioner it is easier to get people talking, and to make connections. The weaving of relationships comes quite naturally as practitioner-facilitators meet people interested in the topic through their daily – normal- tasks. Preece (2003) states 'If the facilitators are themselves part of the community this will be easier than if they are not. Facilitators who are not participants in the community will have to try especially hard to involve the community.' A risk for a facilitator-practitioner is to dominate the topics and directions a CoP takes. This view of facilitation is different from the common view of a workshop facilitator who mainly acts as a process facilitator. Stuckey and Smith (2006) interviewed leaders and member of six sustained CoPs and found that all leaders participated in the life of their communities (and we assume that they participated as practitioners).

> Π An example of the way we facilitated as practitioners is the fact that we put our own practice questions forward in the online forum. We also used our daily life contacts and interactions to grow the CoP. Every time we met new people with a passion for e-collaboration we invited them to join the group.

As a facilitator-practitioner you learn about the domain of the learning community, as well as the process. Every learning community is unique; there is no blueprint guide to facilitate a learning community. A facilitator hence needs to adopt a learning approach, find out what works for this community and act as a reflective practitioner. This is easier when a team of two or more people are engaged as facilitators of a group. A facilitator also learns about the domain of the learning community. In box 15 we describe some learning questions or dilemmas we were facing during facilitation.

> Π The example of our case: We created space for ourselves to learn by reading literature, talking about the process and our observations. We documented and reflected on what we see happen by documenting short episodes in the facilitators' wiki. As a team, we complemented each other's blind spots. The external consultant was useful to provide us with feedback and suggestions. We are seen by others as experts because we are invited to give presentations or advice. Our identity has changed from a person interested in e-collaboration to a person being asked for and valued for expertise. This identity even shapes our role in the organization.

Box 15: Examples of dilemmas of the e-collaboration learning community facilitators

- How do we make sure that we are permeable enough so that new people can join, while keeping the space interesting enough for old people. How to balance a need for trust to go deeper, with openness to newcomers so that it is an accessible space for people to come and learn?
- How can we stimulate more online discussion? In the Dgroup, a lot of people never react, and we wonder if that is due to the fact that they are comfortable lurkers, that they are not skilled online communicators, or because they feel their email inbox is putting a general burden on them.
- Do we open up this group for southern partners? Since the beginning this has been a topic up for discussion within the group. Currently, learning is taking place north-north, but could we include southern partners? What processes do we need to put into place to make sure they can participate on an equal basis, without having the possibility to participate in the gatherings in the Netherlands?
- How important is it to make our purpose more explicit and to talk on a meta-level about the community of practice? When we have one afternoon gathering should we devote some time to making our ways of being together discussable?
- With what kind of results are we satisfied? How do me measure progress? At times, we feel proud of the apparent attraction the group has for newcomers, which is shown in a growing number of participants online and face-to-face. At time, we can become cynical about how the CoP supports work of individual members. Scarce time is more easily devoted to growth interventions rather than measuring success. We started noting down anecdotal evidence in a wiki, but how to collect more systematic feedback?
- Related to the previous point is the observation that, despite the multitude of relationships, the sheer invisibility of those relationships at times make you feel nothing is happening and no substantial learning is taking place (eg when there is no face-to-face meeting, no message in the Dgroup, and no new blogpost). But sometimes new connections can surprise you as a facilitator. At times, you try to connect two people because you know they are both struggling with the same dilemma and nothing much evolves. At other times, you overhear that people have contacted each other and have gotten useful information. Though we try to document anecdotal evidence in the wiki too, what more should we do to pay more attention for result measurement?
- What is the role of the initiators and the facilitators? What is difference between the formal facilitators who have the mandate of their organisation and the informal initiators who are deeply engaged?

2. Co-facilitate to reduce blind spots

Facilitating a learning community from a CoP-theory perspective is very demanding and a 24-hours job. This only calls for co-facilitation by two or more facilitator as the best modalities. But there are also other reasons to opt for co-facilitation. The facilitator needs to balance between initiating and letting go, needs to be abreast with developments in the domain. Having more than one facilitator is practical (when one facilitator is on leave, the other takes over) but furthermore helps to complement the blindspots a single facilitator may have in terms of fully understanding the domain and seeing what is happening with the community and making sense of it in terms of community effectiveness

> Π In our case, we opted for co-facilitation because we thought we could learn from each other's way of understanding the theory and the translation in practice. Besides informal discussions we had a common online documentation of our experiences. One facilitator took more the lead in starting new initiatives, the other facilitator was more focused on following up on ideas from community members.

3. Embed learning in actual practices

We strongly believe in learning by doing, in learning embedded in actual individual practices as the basis of CoPs. We have adopted Kolb's learning cycle with the four stages: Concrete Experience, Reflection, Abstract Conceptualisation, Active Experimentation. The cycle may happen in a flash, or over days, weeks or months, depending on the topic, and there may be a "wheels within wheels" process at the same time (Atherton, 2005). If learning within the CoP is not embedded in the actual individual practices, the learning community risks to become too theoretical and this will not lead to innovative practices.

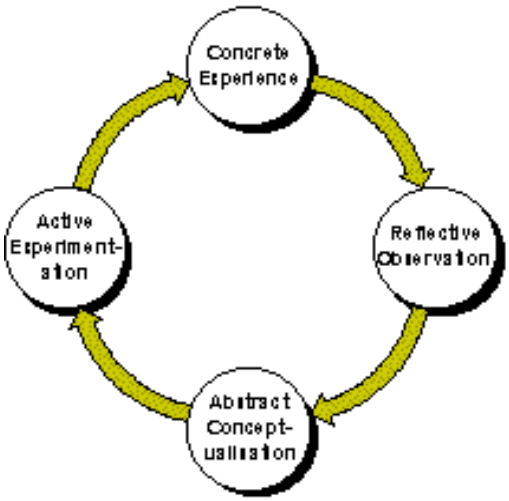

figure 2: The Kolb learning cycle (Atherton, 2005)

Π Some of our interventions based on this conviction were: stimulating practical experiments with e-tools, doing research in organisations to elicit concrete stories of e-collaboration initiatives, and create space in face-to-face meetings for peer assists. A space where members can share specific cases with each other, getting new ideas and insights to be translated to their practice. But also inviting people to share recent work or dilemmas from practice with the group.
We believe an important competency of a CoP facilitator is being able to listen to members, connect to it from your own experience and help formulate practice (sub-)questions. Learning starts by asking questions. Being able to really hear what the person means and to add to his/her understanding is important, hence the importance of being a facilitator-practitioner. When we talk to a person with similar experience, the conversation will continue to different levels as when the person explains the same thing to a relative outsider. A facilitator leads by taking initiatives too. As long as people initiatives appeal to people, it will stimulate their engagement in the community. This demands a certain ability to think analytically and to be at the cutting-edge of practice.

Π Example of an intervention is: at the start-up phase, we talked to all members. In hindsight, this was probably one of our most powerful interventions, as we were able to connect to people by recognizing their questions. We used this information to propose events, like the e-coaching and podcasting training.

4. Stimulate self-organisation

We see it as an important role of a CoP facilitator to move between roles of initiator, stimulator and supporter in order to stimulate self-organisation**.** Perhaps the most important consideration for a facilitator is knowing when to lead and when to see what initiatives and conversations emerge. A facilitator should be flexible and facilitate as much as possible a process of self-organisation and an organic growth process without forcing; he/she balances between taking the lead and letting go while creating ownership for new ideas. Organic growth is important for building a solid social fabric. In a strong community people participate by motivation and intrinsic rewards and that motivation to learn together leads to co-creation of new insights and knowledge. On the other hand, you have to initiate, not all processes can be self-inflating. And you may need a helicopter view and see when external views or links may be fruitful.

One consequence of stimulating self-organisation is that the facilitator may have less control over the process and at times has to wait to see what unfolds (or not). Create free space so that others can develop initiatives. Or observe when people express ideas and take initiatives and support this, rather than organising it for them. This requires patience and confidence in the unfolding process. It also requires being ready to interact and support at all times. Once people take up leadership roles, the role for the facilitators changes into supporting these leaderships role. Compared to a workshop facilitator this means that you can plan less and need to develop an opportunistic approach. To allow for an organic growth of the CoP, the facilitators have to watch out for domination by their own preoccupations. Probably a certain bias is hard to avoid, but being aware of this bias is important.

Π An example of our case is that we invited members to lead parts of our meetings. At times, we felt the chosen methods were not the best for the learning process, but the engagement of members was a more important objective than the quality of facilitation. We also asked members by rotation to host the meetings, which also stimulated self-organisation. We stimulated members to be actively involved in the community, asked them to be the initiator of an experiment, the facilitator of a part of the face-to-face programme, the

host of an event, the owner of a question in an online dialogue. We explicitly invited people to take such a role, our role was more and more a 'behind the scenes and screens contribution'.

5. Facilitate conversations in public and private spaces

A learning community is about relationships, connecting, dialogue, and negotiating meaning; sense-making. Social constructivism places personal interpretation of information and situations at the centre of learning. This interpretation of information takes place in a social setting through interactions with peers. Learning happens through conversations, and the more intimate conversations may take place in private spaces, one on one or in small groups. Especially in the beginning, the private spaces may be more important than the public spaces. Here is a major difference with the usual facilitator role, focusing mainly on what happens in the group in public. Facilitating by creating private spaces is more difficult and more invisible.

Π Examples of our experience: At times we received questions from members, one-on-one. We stimulated members who seemed 'comfortable' enough to pose the question to the whole group in the public space. But in the beginning, we could simply respond, or connect the person with another person with similar questions. Another activity to stimulating conversations in private spaces was the organization of informal drinks after each face-to-face meeting.

6. Use the variety in the community

In a community, diversity is a valuable asset. Diversity can stimulate innovation and creative thinking. De Bono (1992) describes the need for lateral thinking to move sideways out of your normal patterns of thinking to come up with new perceptions, different concepts, and different points of entry to get to creative solutions or ideas. Leveraging diversity means capitalizing on individual differences. How can we make use of the variety in the community**?** Too wide a range of variety will impede the process practices connecting, but too small a range of variety will hamper the innovative edge of the community. It is a task of the facilitator to create the right balance. For instance: During our individual contact with each member, we discovered there was great variety in the group: private sector partners as well as non-governmental organisations, students as well as IT persons. Rather than opting to set specific membership criteria, we have stimulated this diversity and have cultivated relationships with people who were seemingly less 'part' of the mainstream, for instance a person with private sector background. We also stimulated variety in terms of means of communication. Besides online interactions via a discussion forum, we stimulated the face-to-face gatherings, and later we stimulated a public group blog. Members had different backgrounds, learning styles, ages and interests. We tried to make use of this diversity in stead of seeing it as an obstacle, by working in small groups, having meetings with a lot of free space, informal moments.

Another important element of variety is the different level of participation (core group, active group en legitimate peripheral participation). The last group, in the online community literature sometimes referred to as 'lurkers', is in non-CoP theory often problematic because of the low level of participation. CoP theory says that it's important that they are able to participate and that there may be inbound trajectories from this group into the active or core group. As a facilitator, you can make use of online facilities to allow for light participation. It is possible to scan the headers of the messages for topics that are of interest and for the rest not participate in face-to-face meetings or other activities. This allows participants to stay in touch with what's happening in the domain of this particular CoP. In case the CoP working fully online, you can create a similar way of participation by creating a community thread with the main topics. In our case, you could say that the online forum acts as a place for easy 'legitimate peripheral participation', we often asked people whether they want to sign up to be a participant for the online forum as the lightest way of participation. The total number of participants in this group is 100. In the face-to-face meetings between 20-25 people participate. Then there is a core group of roughly 10 people who are very active, some have been part of the group since the beginning, others joined later and have become active. Some people who were in the first meeting are member of the Dgroups, but have never posted any message. We did not invest in trying to get their participation because we thought that they would connect again when their individual practices coincide with the

practices of the other members of the group.

7. Balance the focus on tangible and intangible products

The balance between participation and reification, tangible and intangible products needs to be right for effective knowledge creation. Learning in a community often seems intangible; members share experiences, get new insights and ideas, make new connections with others, etc. It is also important to generate more tangible knowledge products now and then. Making knowledge explicit is a very valuable learning and reflection process. Beside this, concrete products help to show some of the results, make it possible to share the knowledge created with others, like non-members and organisations in the South.

> Π Examples from practice: We gave significant attention to documenting e-collaboration experiences in a booklet and blog, creating an archive for the group. At recent meetings, short videos were made and posted on the blog, as a way of enlarging participation into the face-to-face conversations as well as to reach out to the wider public, not part of this learning community. Monthly teleconferences to discuss the cases would be a way of stimulating participation around reified knowledge.

8. Guide meta-level reflections

We believe that meta-level reflections can move the community development process. You think of effective ways of working, rules to be used in the community, the progress the community is making, the way sponsors and other actors are involved. Meta reflection also leads to a better articulation of the changing domain definition as a community evolves. But a facilitator should recognise that practice conversations may be more energizing and binding for the members. Their passion is to share stories and experiences on their practice. Hence, it may be best to start with meta-level reflection with the core group, and at a later stage of community development you might broaden your scope to the whole membership.

> Π An example: The first year, we had the main meta-level reflections within the design group. After one year, we invited an external advisor to assess the community and this helped to increase the awareness of members of their role and the value of the community. Later we tried to devote time to this during each meeting. It could be useful to devote more time to meta-reflection than we did. Exercises at a more regular interval could lead to reflections about people's role within the learning community.

9. Distinguish between two layers of practice in the learning community

As a facilitator it is important to distinguish between two levels of practice in a CoP and to work at both levels.

(1) The level of Individual practices; the process of improving your practice in relation to the domain. In our case learning how to introduce e-tools to improve communication for development. A CoP will forge a certain level of common practice, converging individual practices.
(2) The level of collaborative practices; the process of ways of working/learning together.

Both processes simultaneously develop over time. In relation to the CoP's domain, the more invisible layer of practice is the individual practice layer. Through conversations, domain practices of individual members will start to emerge and possibly converge; shared practices will evolve. An example of collaborative practices is a certain routine way of preparing meetings, the type of questions you ask (or not), but also how vulnerable you can be. This is the most visible layer of practice. The more a collaborative practice has developed, the more new people will have to learn and adapt to these practices. The shared individual practices are an indication of cohesion in the learning community.

> Π An example of a collaborative practice we developed is the way we prepared meetings via Skype (a web based telephony tool) conferences. Over time, the design team had grown comfortable with this way of working, and we knew someone would start the teleconferences spontaneously. In two cases, relatively new members had a hard time connecting to this practice. One member felt like speaking 'another language'. Another member could not manage to be in the conference at all, and missed the link to who would open the conference. In this instance, you realize how much of a common collaborative practice has grown and how it

was hard for newcomers to learn these practices.

10. Manage sponsor relationships

Although communities are fundamentally informal and self-organising, they benefit from cultivation. As Wenger (1999) says: 'like gardens, they respond to attention that respects their nature.' To get communities going and sustain them over time, there is a role for managers or sponsors in providing the infrastructure that will support a community and enables it to apply their expertise effectively. Communities are often vulnerable because of the lack of legitimacy. As in corporate communities of practice, inter-organisational communities also have to deal with a management paradox. Managers should not leave a community alone, but should attempt to engage with them without attempting to control them (Wenger, 2005). Hence, it is a task for facilitators to manage positive sponsor relationships. It may help to articulate not only the value for individual members, but also the value in terms of contribution to the business strategy of the sponsoring organisations.

Π In our example of the e-collaboration community, an inter-organisational learning community, we had asked our two organisations to be sponsors for the learning community. We negotiated our facilitation time and a budget upfront, and defined the scope of the community beforehand. All this was specified and formalised within a Memorandum of Understanding between the two organisations. In our case, though the managers did have some ideas about the content of the community (focus on southern learning rather than north-north), they created sufficient room for the scope to emerge within the learning community. And despite the fact that both organisations were interested in the tangible results (publications) this did not put any pressure on the community to produce, because an intern was recruited to help make an inventory. An interesting aspect is that the online space gave an easy opportunity for the sponsors to lurk and get a sense of the progress. The managers of both sponsoring organisations were member of the online forum, the Dgroup, which allowed for a direct experience of the online conversations of the community. After two years, when we wanted to resign as facilitators, we asked for new sponsoring organisations. Two new organisations and a volunteer expressed their interest and the sponsorship was widened and roles of sponsors redefined.

11. Manage the boundaries

Boundary management refers to managing the 'permeability' of the community, stimulating brokerage and facilitating overlap with other communities. Managing permeability means making sure the community is open to welcoming new people. In terms of boundary management, it is important to observe which constellations of CoPs exist and where they overlap. Having an eye and ear for multi-membership of members, allow the facilitators to leverage the power of working across the borders of the learning communities and create synergy in working with other learning communities.

Π As an example, we had our antenna's out for members who were active in other communities, and we specifically asked them that question in the beginning. Whenever people we active, we tried to encourage that they play a broker role. For instance, two members went to an international conference in Rome. We asked them to share their new insights with the e-collaboration members. In the beginning, we had the impression quite some consultants wanted to join the e-collaboration community. We tried to get an idea whether they were seriously interested in learning openly, or whether their interest was in networking. We managed the membership and acted as gatekeepers by doing so. They grew constantly. We paid a lot of attention to the introduction of new members by sending an introduction email, and inviting them to the face-to-face meetings.

Those principles have been of importance in our work as a facilitator. Based on these principles we did specific interventions, illustrated above by concrete examples. Table 2 contains an overview of main interventions we did based on the stage of the community at that moment in the growth process.

Table 2: Stage-specific facilitator interventions

Stage name	Potential	Coalescing	Maturing	Stewarding	Transforming
Stage- specific facilitator interventions	• Identify a group of people who are passionately interested in the domain • Talk to individuals, identify thought leaders • Create an (online) place where people can meet • Connect community members one on one or in small groups, to cultivate private exchanges • Start an experiment you are interested in yourself and invite people to join • Negotiate support with sponsors • interviews and others forms of eliciting knowledge can help members to articulate what they know and to validate their expertise,	• Individual contacts with members to identify practice issues • Stimulating consulting habits; encourage people to share questions and experiences with the group- but focus on light value tips and current problems • Publish interviews with members to make experiences public • Identifying similar practice issues and proposing exchanges about these issues (either private or public) • Define strategic intent of the potential community of practice • Discover what methods and topics energize • Build the core group • Identify multi-membership and the constellation of CoPs that overlap • Engage managers and clarify link to business strategy of the organizations	• Special attention for newcomers, welcoming them, identifying entry points ('so-called inbound trajectories') • Be at ease with 'loosing' people who are not identifying with the community • Stimulate distributed leadership; Invite people for specific 'tasks' in the community (eg. facilitate parts of the f2f program, a leading role in an experiment) and signal initiatives and help members by offering moral and logistical support for initiatives • Start reflecting on the community process with members interested in such a reflection (probably the core group) • Try to move from tips to knowledge stewarding, by starting project/investing more time • Redefine boundaries and purpose • Be more intentional about involving relevant experts and organizations	• Keep focus lively and practice on cutting edge by scanning the field • Monitor 'group think' and other potential disorders • invite 'experts' from outside the community to share experiences and new ideas • Forge new alliances with other communities of practice • Change the rhythm or medium to stimulate creativity eg. by introducing teleconferences, a weblog, etc. • Find new core members and leaders • Collect and share results of the community with a broader audience • Guide (meta-level) reflections about community collaboration and learning • Define role for CoP vis-à-vis organizations • Enlarge variation in the community, like inviting experts from outside, stimulating new leadership in the core group or changing the rhythm of the community by adding new media of conversations	• Make conscious decisions about ending or rejuvenation by facilitating meta-level exchanges about the community • Help reformulate domain and focus

Discussion: insights, facilitator dilemmas and some questions

We started this article with three questions: How can a learning community benefit from CoP-theory informed facilitation? What are principles for a facilitator and how can he/she intervene in a learning community at each stage of development? And what makes facilitation of learning informed by CoP theory different from other ways of facilitation of trainings, workshops and formal learning trajectories? In this paragraph we will reflect on these questions followed by the definition of some questions for further research. Our particular case deals with an inter-organisational learning community in a relatively new domain (e-collaboration). This should be kept in mind while extrapolating the lessons to other communities, for instance a corporate community in an existing domain.

How can a learning community benefit from CoP-theory informed facilitation?
We believe that CoP-theory informed facilitation can help to establish effective inter-organisational learning networks. The facilitator role is a crucial one that can make a difference between an informal community of practice that occasionally helps someone with some tips or tricks and a community that effectively stewards a domain and creates a new body of knowledge. There seems to be a paradox between the 'self-emergent nature' of 'self-organising spontaneous' communities and the task of facilitation within these communities. Especially in the case of inter-organisational communities, we believe it is hard for professionals to connect and steward a knowledge field in a completely self-organising manner. Our case study shows that facilitation has helped to turn a single event into a community where people can connect to and that has catalyzed learning about e-collaboration within the sector. Without our facilitation the event would probably have had an informal network spin-off, but for newcomers there would not have been a place to connect to. By facilitating in embryonic CoP, connections become more systematically, allowing for stewardship and innovation of a knowledge domain. UNDP's experiences are similar: their experience demonstrates that a key ingredient for well-functioning CoPs is to have moderated or facilitated communities (Henderson, 2005). Other literature also stresses the importance of facilitation to stimulate a certain level of interaction (Bucheli and Romo, 2005).

The e-collaboration case shows that adopting a community of practice perspective can improve learning community facilitator(s) practices. A facilitator with a theoretical basis of communities of practice will observe certain aspects more closely and intervene differently. If the facilitator(s) lack this knowledge base, it would be an option to team up with external persons who do have this knowledge. We believe facilitating with a CoP theory in mind, contributes to a more organic and creative growth of the network, its members and its focus and by doing so, value is created for the practitioners. In the end, innovation takes place in the domain of the learning community.

Organisations should not underestimate the role of a facilitator even though part of it is invisible. It encompasses being an information source, guide and inspirator to the community, and a PR manager and investigator to the outside world, negotiating with sponsors. We have learned that it takes a lot of time to facilitate and influence the emergence of a learning community. It is almost a 24 hours job. You cannot plan it, but you have to be responsive and take every opportunity to interact with people. Three researchers (Dube et al, 2004; Bourhis et all, 2005) undertook research into the impact of management practices on the success of virtual CoPs. In the most successful CoPs, the leader was assigned full time to the task, and the coach played an important role in guiding the leader. In less successful CoPs the leaders devotes little time to the CoP and seems to be inexperienced. CoP theory is not very strong in linking its theoretical base to theories of group dynamics. It might be a useful combination for a learning community facilitator to know more about group dynamics. At every event, meeting, teleconference or online event group dynamics are at play. Also, within the core group it helps to know about group dynamics.

What are principles for a facilitator and how can he/she intervene in a learning community at each stage of development for effective learning and innovation processes?
The key to success is to start with a group of people who are passionate and enthusiastic about the topic and already engaged in an individual learning process. Hence, having a group of people who have a personal connection with the domain of the CoP may be a precondition. In this article we have listed 11 principles and various interventions at each

stage of development based on our experiences.

Box 16: Examples of some interventions to elicit knowledge and stimulate reflection

- Teleconferences, facilitated by an external CoP expert, in which members are invited to experiences with the community;
- Members interviewed by other members to elicit a story on e-collaboration for the community blog;
- Making a history line of the communities growth process;
- Peer assist on e-collaboration questions from daily practice.

What makes facilitation of learning informed by CoP theory different from other ways of facilitation of trainings, workshops and formal learning trajectories?

Facilitation is largely known from formal training activities, workshops and courses. An interesting question is in what way facilitating a CoP is different from facilitating a workshop. And when you are used to facilitating those more formal learning activities, what does it mean for your style or competence to be able to facilitate a CoP?

Most courses and workshops consist of a specific amount of meetings, you learn with a fixed group of people, and specific learning goals are the red line. Of course, this all depends of the learning approach you use, the way the learning activity is designed. But just to sketch an overall idea. In most courses knowledge acquisition as well as personal development (what beliefs do you have, how do you handle a certain situation, what are your competences) are key. Some organisations use a kind of 'obligatory' character for participation, or would like to have all team members to follow a course. For the facilitator this all means that you facilitate the individual learning process of participants as well as the group process. Mostly in a relatively structured way using learning goals, personal development plans, beforehand identified changes, which need to be achieved in the organisation. Facilitation is about linking learning to daily practice, keeping participants motivated, using active working methods to stimulate exchange of experiences, etcetera. A CoP is more characterised by a long time continuous learning process in which learning is closely interweaven with daily practice of the members. People participate based on their passion for the subject. Involvement depends on personal choice and probably the value found with the learning community. CoPs build social capital over time, which allows for a process of meaning making and exchange of tacit knowledge that goes beyond the opportunities provided by most regular training programs. And for a facilitator this all means that he or she is intervening in a more complex, invisible situation over a longer period of time. Less structured by defined end results, but based on the questions that are at stake at the moment, supporting a learning process based on the exchange of experiences from practice and stimulating participants to have a dialogue with each other, starting small experiments in their own work, and feed back new insights to the group. A facilitator needs to be engaged almost 24 hours per day (especially when we talk about an online CoP), act as a practitioner and facilitator at the same time. A facilitator working from a CoP perspective needs to be able to have a helicopter view of the domain, stay in touch with new developments. And you need to be able to facilitate in both public and private spaces, which requires networking, relationship building, keeping in touch with the members in between meetings, initiate activities, and stimulate participants to take an active role towards the group now and then. And you might even have the ultimate goal as a facilitator to make yourself superfluous!

Questions for further research

As we believe that 'learning starts by asking questions', we collected questions for further research during our writing process. Here are some examples:

- *How much does the culture in a CoP gets shaped by its leadership and/or by the domain of the CoP?* It seems CoP cultures do get shaped by their leaders or initiators (like organisational culture gets shaped by its leadership). How consistently is this true? What are the pitfalls to watch out for? What are the consequences for leadership changes? How to make transitions when leaders withdraw?
- *How can we measure the impact of the community of practice?* We tried to collect anecdotal evidence when we

heard of interesting ways that the CoP helps its members learn about e-collaboration or the spread of new practices. But how can we measure this more systematically, especially since it is hard to measure subtle changes in ways of thinking?

- *Do leaders of a community of practice become experts, or do experts become leaders of communities of practice?* A positive and pleasant experience has been that we are slowly seen as experts in the area of e-collaboration. Being in touch with so many different practitioners supports a rapid learning curve. The question is whether we have more expertise than people in the community or whether the leaderships role contributes to being credited as a domain expert. Leaders seem to get seen as expert-practitioners. In a way, they develop their expertise by being at the centre of the CoP. How much do leaders have to be experts? Or self-conscious about the limits of their own expertise? Are people who are most passionate about the CoP's domain more likely to take up leaderships roles or does that depend on a lot of other factors (like personality, previous leadership experience, etc)?
- *Are online lurkers, lurking because they enjoy reading the exchange between other practitioners or lurkers because they are not technologically confident, or don't feel sufficiently at ease in the group?* Online CoPs contain a new breed of CoP member: the lurker, or passive member. The question naturally emerges as to whether the lurker is a result of insufficient technological confidence, or a member who would not typically take part in a face to face CoP? Along the same lines, it would be interesting to observe how many non-participant or passive members in the face-to-face activities are online. From our observations, people may thrive in one media or the other, but there are also people who are as comfortable in an online discussion as face-to-face.
- *As facilitators, how can we influence the learning processes in a CoP without jeopardising natural alliances and conversations?* It is important to be patient and not to push processes. At the same time, people may need to be exposed to different ways of thinking in order to learn (double-loop learning). People may feel more comfortable following their own interests though. What is the role of a CoP facilitator? Should he/she intervene so that people get conversations they may not look for actively?
- *How can a facilitator intervene at the level of identity formation?* Does the level expertise determine whether someone moves into full participation or are there other factors which are more important
- *What is the impact of inter-organizational CoP on the organization?* How can an organization best leverage its employees participation in inter-organizational CoPs? Is the impact higher when various employees are participating in the same CoPs?
- *How to leverage the strategic advantages of online and face*-to-face communication in a hybrid community of practice?

References

- Allen, S., Ure, D. & Evans, S. (2003). *Virtual Communities of Practice as Learning Networks*. Brigham Young University, Instructional Psychology and Technology.
- Ardichvili, A., Page, V. &Wentling, T. (2002). *Motivation and Barriers to Participation in Virtual Knowledge-Sharing Communities of Practice*. Paper presented at the OKLC 2002 Conference, Athens, Greece.
- Atherton, J. S. (2005). *Learning and Teaching: Experiential Learning* [On-line] UK: Available: http://www.learningandteaching.info/learning/experience.htm Accessed: 24 December 2007.
- Ballantyne, P., Cummings, S., & Ferguson, J. (2007). Nederland Kennisland. *Vice Versa, 2007*. [Online] available : http://www.viceversaonline.nl/index.php?articleId=11603&viceversaSection=DeOpinie
- De Bono, E.(1992). *Serious creativity using the power of lateral thinking to create new ideas*. New York: HarperCollins.
- Bourhis, A., Dube, L. and Jacob, R. (2005). The success of Virtual Communities of Practice: The Leadership Factor. *The Electronic Journal of Knowledge Management Volume 3 Issue 1*, 23-34. [online] available: www.ejkm.com.

- Burgess, A.P. (2007). *From the periphery to the core: Understanding the process whereby members of a distributed community of practice become leaders of the community (and what they experience means to them)*. Phd Research, unpublished.
- Buceli, B. & Romo, G. (2005). *Communities of practice, lessons from Latin America*. INTRAC PraxisNote 16.
- Callahan, S.D. (2006). *Want to manage tacit knowledge? Communities of practice offer a versatile solution*. White Paper Anecdote. [online] available: *http://www.anecdote.com.au/papers/Want_to_manage_tacit_knowledge.pdf*.
- Callahan, S.D. & P. Milner (2004). ActKM: Variety in a Community of Practice from a Complexity Perspective. In: K. Morgan, J. Sanchez, C. A. Brebbia and A. Voiskounsky (Eds.), *Human Perspectives in the Internet Society: Culture, Psychology and Gender*. WIT Press.
- Coenders, M. & Bood, R. (2004). *Communities of Practice, Bronnen van inspiratie*. Uitgeverij Lemma, Utrecht.
- CPsquare. (2005). *The Cross-Organizational Community: Challenges and Opportunities*. Unpublished.
- Dube, L. Bourhis, A. & Jacob, R. (2004). *Structuring Spontaneity: the impact of management practices on the success of intentionally formed virtual communities of practice*. Cahier du GReSI no. 04-20, December 2004.
- Hall, B.P. (2003). *The values advantage: Communities of Practice Inside Out*. HP seminar, April 2003. [Online] available: http://hthall.com/sub/ValuesAdvantage.pdf.
- Hardon, A. (2005). Virtual knowledge communities: lessons learned in making them work. *KM4D Journal 1 (1),* 71-78. [Online] available: www.km4dev.org/journal.
- Henderson, K. (2005). The knowledge sharing approach of the United Nations Development Programme. *KM4D Journal 1(2), 19-30*. [Online] available: www.km4dev.org/journal.
- *Influence of face-to-face meetings on virtual community activity: the case of learning network for learning design*. [Online] available: http://dspace.ou.nl/bitstream/1820/472/1/Influence+of+face-to-face+meetings+on+virtual+community+activity_The+case+of+Learning+Network+for+Learning+Design.pdf. Accessed : Dec 23, 2007.
- Kimble, C. & Hildreth, P. (2004) *Communities of Practice: Going One Step Too Far?* [Online] available: http://www.aim2004.int-evry.fr/pdf/Aim04_Kimble_Hildreth.pdf.
- Kranendonk, R.P. & Kersten, P.H. (2007) Mid-life CoPs: experiences and alignment. *American Behavioral Scientist, Vol. 50, No.* 7. 946-957.
- Krebs, V. & Holley (2002-2006). *Building Smart Communities through Network Weaving*. [Online] available : http:// www.orgnet.com/BuildingNetworks.pdf.
- Kock, N.(2005). What is E-collaboration? *International Journal of E-collaboration, Volume 1, No.1*. Editorial Essay.
- Kurtz, C.F. & Snowden, D.J. (2006). *Bramble Bushes in a Thicket, Narrative and the intangibles of learning networks*. [Online] available: http://www.cognitive-edge.com/ceresources/articles/52_Bramble_Bushes_in_a_Thicket.pdf.
- Lesser, E.L. & Storck, J. (2001). Communities of practice and organizational performance. *IBM systems Journal vol 40, No 4*.
- Lueg, C. (2005). *Where is the Action in Virtual Communities of Practice*? [Online] available : http://www-staff.it.uts.edu.au/~lueg/papers/commdcscw00.pdf on 22/12/2007.
- NCSL (2002). *An Evaluation Report on NCSL's online communities including Talking Heads and Virtual Heads*. [Online] available: http://www.ncsl.org.uk/media/F7B/B0/t2l-summary-onlinecomms-report.pdf.
- Preece, J. (2003). *Tacit knowledge and social capital: Supporting sociability in online Communities of Practice*. Proceedings of I-KNOW'03, 3rd International Conference on Knowledge Management. Graz, Austria, July 2-4. In K. Tochtermann and H. Maurer, 72-78.

- Preece, J., Nonnecke, B. & Andrews, D. (2004). The top 5 reasons for lurking: Improving community experiences for everyone. *Computers in Human Behavior, 2,1.*
- Qureshi, S. & de Leeuw, A. (2006). *Mobilizing Intelectual Bandwidth in a Distributed Virtual Organization: The Missing Links*. Proceedings of the 39th Hawaii International Conference on System Science.
- Tarmizi, de Vreede & Zigurs. (2006). *Identifying Challenges for Facilitation in Communities of Practice,* proceedings of the 39th Hawaii International Conference on System Sciences.
- Tarmizi, de Vreede & Zigurs. (2007). *A Facilitators' Perspective on Successful Virtual Communities of Practice*. Proceedings of the Thirteenth Americas Conference on Information Systems, Keystone, Colorado, August 09th – 12th 2007.
- McDermott, R., Snyder, W., Wenger, E. (2002). *Cultivating communities of practice, a guide to managing knowledge*. New York: Harvard Business School Press.
- Schein, E.H. (1996). *Three Cultures of Management: The Key to Organizational Learning in the 21st Century*, MIT Sloan School of Management. [Online] available : http://www.solonline.org/res/wp/three.html
- Smith, J.D. (2006). *The Dutch e-Collaboration Community of Practice Assessment Report*. Internal report IICD and PSO.
- Smith, J.D. & Trayner, B. (2005). *Weaving together online and face-to-face learning: a design from a communities of practice perspective*. Paper presented at AACE E-Learn 2005 – Vancouver, BC, Canada. [Online] available: http://www.cpsquare.org/News/archives/F2F_ONLINE_CYCLE.pdf
- Stuckey, B. & Smith J.D. (2006). *Sustaining communities of practice*. [Online] available : http://www.bronwyn.ws/publications/papers/sustaining.pdf. Accessed: 30th Nov, 2007.
- Wenger, E. (1998). *Communities of Practice: Learning, meaning, Identity*. New York: Cambridge University Press.
- Wenger, E. & Snyder, W. (2000). Communities of practice, the organizational frontier. *Harvard Business Review, Jan-Febr. 2000*. 139-145.
- Wenger, E. (2005). *Communities of practice in the 21st century*. Foreword to the CEFRIO guidebook. [Online] available: www.calstat.org/learningCenter/pdfs/05-01-11_CEFRIO_foreword_final.pdf