



The learning conference

Ib Ravn

*Learning Lab Denmark, The Danish University of Education,
Copenhagen, Denmark*

212

Received July 2006
Revised December 2006
Accepted January 2007

Abstract

Purpose – The purpose of this paper is to call attention to the fact that conferences for professionals rely on massive one-way communication and hence produce little learning for delegates – and to introduce an alternative, the “learning conference”, that involves delegates in fun and productive learning processes.

Design/methodology/approach – A typical full-day conference is analyzed. It has six hours of podium talk and twenty-five minutes for delegates to become involved. What model of learning can possibly lie behind this? The transfer model, which assumes learners to be empty vessels. An alternative view is that conference delegates are active professionals in search of inspiration, and they also want to share knowledge with their peers at the conference. A theory of the conference as a forum for mutual inspiration and human co-flourishing is proposed, as are four design principles for a learning conference: presentations must provide concise input; the conference host must introduce processes that help delegates; interpret the input in the light of their ongoing concerns; talk about their current projects; and share knowledge with the other delegates.

Findings – Six learning processes for use during conferences are described: individual reflection; the buzz dyad; “You have won two consultants, free of charge”; facilitated group work; the knowledge exchange; and lunch with gaffer tape.

Originality/value – This paper introduces learning theory and learning techniques into an educational context which has resisted innovation, the professional conference. It offers alternatives to wall-to-wall lecturing: some simple processes for involving delegates so as to help them derive inspiration from the material presented and from each other.

Keywords Conferences, Knowledge sharing, Learning, Learning methods

Paper type Conceptual paper

Why do we pay to get lectured at?

Every so often, business managers, administrators, knowledge workers and professionals convene for events that are dedicated to learning and knowledge sharing but which actually produce very little learning. The “professional conference”, as we shall call it, is the one- or two-day event called by government agencies, professional associations or independent conference organizers for the purpose of sharing information or knowledge about some topic of current interest to a community of professionals, be it business opportunities in South-East Asia, a narrative approach to corporate communications, the annual water industry conference or best practices in the food and beverage supply chain.

Variouly labeled summit, roundtable or forum, the professional conference is generally packed with PowerPoint presentations, with little time assigned for discussion, reflection or other audience participation. A common experience is that delegates listen patiently in the morning, but as the day wears on they seem increasingly bored, some sneak out prematurely and many leave the conference frustrated with having been kept passive for hours on end. Although educators



generally agree that the presentation or lecture is a poor vehicle for learning, it is the mainstay of professional conferences everywhere.

At scholarly conferences, where most delegates present papers, often in parallel sessions, the presentation serves several purposes: it is showcase of recent research and thus an important element of scientific communication, it pays the delegate's way (no presentation, no funding from one's home institution), and it is entered into the presenter's curriculum vitae and qualifies him or her for promotions and grants. These rationales, however, are absent at the professional conference where, typically, presenters are invited experts or practitioners who benefit little professionally from having made their presentation and hence often receive monetary compensation.

In contradistinction to the recurrent sessions of management development programs, which often employ quite advanced instructional techniques beyond classroom teaching (coaching, peer one-on-ones, team work, reflective writing, experiential exercises, etc.), the one-shot professional conference is largely a relic of academic teaching practices in 19th century Germany: the all-powerful professor speaks to an auditorium of obedient students.

The time is ripe for alternative types of professional conference. In the knowledge society, the managers and professionals attending conferences are often as well educated and experienced as the experts on the podium. Delegates are generally busy people engaged in important projects of their own, and they have just barely been able to free themselves from their interesting work to attend the conference. Chances are that they want opportunities to present their ongoing concerns and meet other people with like interests.

This paper begins to address this need by introducing the idea of a "learning conference" that features many facilitated knowledge-sharing activities suitable for today's highly charged knowledge workers. The paper reports concepts and practical techniques developed as input to an explorative project titled "Future meeting concepts". The project was funded in part by the Danish Ministry of Economics and Business and in part by eight large conference venues in Denmark, most of whom derive a large part of their income from renting their facilities to conference organizers. The participating executives noted that since the introduction of the flip chart and the overhead projector in the 1970s, the meeting had seen no innovations. Hence, they formulated the need for a "learning meeting" that would involve meeting participants and not render them passive victims of PowerPoint overload.

Problem showcase: an HR directors' conference

Here is an example of a fairly standard professional conference, identified more or less at random by googling "conference". Organized by Economist Conferences (2007), the Seventh Human Resources Roundtable, "Global transformation and leadership" is a one-day event. The website lists some current challenges to the HR director and suggests there will be ample opportunity for interaction: "Discuss these and other key challenges with your peers from some of the world's most innovative and successful HR-driven organisations at our upcoming one-day roundtable in New York City."

The event runs from 8.45 a.m. to 4.00 p.m., seven hours and fifteen minutes. There is an introduction and four 75-minute slots for presentations by eleven speakers, for a total of five hours. The remaining two hours and fifteen minutes are allocated to a

break in the morning, luncheon and a break in the afternoon. Since each speaker has only about twenty-five minutes, there is unlikely to be much time for questions and discussion during the sessions. One hopes that the speakers make themselves available during the breaks, so as to enable the HR directors attending this conference to engage in the advertised discussion “with your peers from the world’s most innovative and successful HR-driven organisations”.

The conference boasts the term “roundtable” in its title, suggesting a lively debate between a dozen participants seated around the same table, but it is a gimmick. This, too, will be a conference of passive listening, and it will probably see its share of exhausted delegates sneaking out mid-afternoon, unable to stand any more lecturing.

Research on the professional conference

Searches in the scholarly literature have failed to turn up studies on the professional conference as a forum for learning. Knowledge sharing at special types of conference, like search conferences (Emery and Purser, 1996) and consensus conferences (Andersen and Jaeger, 1999), is indeed discussed, as are several types of smaller meeting labeled conferences: medical case conferences, family group conferences, press conferences, electronic conferences, etc. More generally, alternatives to the classroom lecture as a vehicle of learning have been proposed for many years (Illeris, 2004), and PowerPoint presentations have been critiqued as well (Tufte, 2003). However, the literature is curiously silent on the learning opportunities wasted when six or twelve presentations are bundled into a conference for managers or other professionals to attend.

Assumptions about knowledge and learning at conferences

When the organizers at Economist Conferences put their Seventh HR Roundtable together, what were their thoughts on learning and knowledge sharing? Well, part of the problem is that they probably didn’t give it much thought, “for this is simply how conferences are, you know”. However, the program is, of course, indicative of several assumptions:

- Knowledge is held by the invited experts. Delegates have virtually nothing to contribute.
- People attend to receive the experts’ knowledge or enjoy their wit.
- Experts best communicate their knowledge by speaking it and showing PowerPoint presentations.
- When people seated on chairs hear the words and see the slides, they receive this knowledge.
- Delegates will pick up the knowledge better if they are given just a little time for questions and discussion.

Presented as starkly as this, these assumptions are unlikely to find backing in any quarters, even amongst conference organizers (their typical counterargument is commercial, not based on learning theory: “Well, if we don’t have prominent speakers up there, people are not going to show up. Having many speakers means that potential delegates are more likely to find one they’ll want to hear”).

The learning theory implied by the traditional conference is the transfer model. Like the empiricist position, it assumes that people are blank slates on which the senses may write data about the world (Pinker, 2002). Minds are empty containers that are slowly filled during life, by parents, teachers etc. Traditional schooling presupposes that knowledge held by teachers may be successfully transferred to students if they simply tell the students what they know (Illich, 1971; Freire, 1972). The information theory of Shannon and Weaver (1949) reinforced these ideas by pointing out that information may be transferred from a sender to a receiver through a channel, and communication is effective when the message received is identical to the message sent.

However, when teachers or professors are frustrated in their attempts to squeeze their valuable knowledge into their student's minds it is obviously because these minds are already filled with a thousand conversations, biological, emotional and intellectual. Any one of us harbors worlds of prior understanding and prejudice that filter and interpret incoming information to suit the intentions, inclinations and projects that constantly fill our minds and lives (Gadamer, 1975; Maturana and Varela, 1987). By nature, people are not passive receptacles; they are actively engaged in shaping their lives and trying to realize their potentials (Aristotle, 1962; Maslow, 1968; Snyder and Lopez, 2002).

For teaching to be effective and learning to take place, educators must realize that students are always actively engaged in constructing their worlds (Piaget, 1926). Learners are geared to knowledge that produces practical results in their actions (Dewey, 1915). People learn in a holistic process that integrates their total sum of experience (Kolb, 1984), they learn best at the point where each individual is just about to go (Vygotsky, 1978), they learn from engaging socially with other people in real-life situations (Wenger, 1998) and so on and so forth. However diverse, textbooks on educational theory and practice will paint pictures of learning and knowledge creation that are pretty much the exact opposite of the professional conference.

A forum for human co-flourishing

Future scholars of the professional conference will argue about which learning theory better undergirds the successful conference, and there will be many kinds of conference based on different learning theories. A first step, however, is simply to expect conferences to be founded on any modern kind of learning theory at all, that is, anything postdating the medieval – and still widely held – belief in the lecture as the medium of choice for knowledge transmission. For such a first step, let us collect a few strands of a modern and development-oriented view of human minds, knowledge and learning.

What kind of people are the HR directors headed for the Roundtable presented above? Well, they are likely to be self-motivated and full of energy, and they probably have extensive life and work experience. They may be steeped in exciting projects and have lots of things they want to do. They are going to the conference looking for new and challenging input they can use in their work and they hope to connect with smart people with similar interests and share their concerns and thoughts with them. They want to be inspired, to talk and be listened to and to have fun with the other delegates.

This is an early 21st-century rendition of the Aristotelian notion of human flourishing, adapted to the manager or the professional in the knowledge economy. Life

is about finding one's *telos* (purpose) and unfolding the human potential, becoming what one is, as the Roman emperor-philosopher Marcus Aurelius put it.

What is learning in such a view? Well, it is not what we usually think it is: a quantitative increase in knowledge, the storing of information, the acquisition of facts or skills, the making of meaning, or the reinterpretation of the world (Ramsden, 1992, p. 26). In a humanistic view, learning becomes indistinguishable from knowledge creation (Stacey, 2001, 2003) and thus becomes a key element of human development (UNDP, 2003). In this wider view, to learn is to expand the domain of capabilities, thus ensuring the progressive unfolding of the human potential, the flourishing of humankind.

What is human flourishing in the very concrete context of the professional conference? Well, if I am going to a conference I want it to be relevant to my current concerns, I want it to help me use my resources and unleash my powers. I want to be inspired and empowered in such a way that I'll be more successful at doing what I already want to do within the area defined by the conference topic. Or, if I am sufficiently inspired by the conference, I will twist my current projects to accommodate the new aspects that so inspired me. In the rare case, I will even take up new projects or concerns that arise out of the social and intellectual interactions at the conference.

So the key is inspiration, the enlightening experience that what I've just heard or realized or discussed with other people is new and exciting and will help me do what I want to do. Such sparks of inspiration may fly several times for me during a good conference; an excellent conference has sparks igniting again and again and the sublime event is one prolonged fireworks of enthusiastic inspiration between all delegates – the sort of meeting one may experience once in a lifetime or read about in the literature. In the domain of learning, this ideal for human interaction may be termed co-flourishing: when human potentials unfold and blossom in interaction with each other; when people have so inspired each other for individual or joint reflection or action that they become more fully what they are.

Design principles for the learning conference

If we posit the sort of ideal sketched in the previous paragraphs as the basis of the learning conference, what design principles may be derived for use by conference organizers? We propose the following principles:

1. Expert input is fine, but it must be concise and provocative

Well-turned arguments, opinions, ideas, stories or cases are welcome sources of inspiration. Listening to experienced, sharp or wise persons is always a joy. But their input must be concise, lively and thought-provoking. PowerPoint presentations with 40 verbose or complicated slides are clearly overload. Three or four half-hour presentations per day may be enough – interspersed with activities that bear out the following three principles.

2. Input must be made relevant to each delegate's concerns and projects

Anything said is naturally filtered and interpreted by listeners, but at a conference this process must be augmented by activities designed to heighten the subjective relevance of the presentations to each delegate. The short period traditionally allocated to questions and discussion after a presentation is meant to encourage this digestion.

Often, however, questions have hidden agendas: “Hey, I found a big hole in your thesis”, “I need to market my service, so listen up”, or “It’s about time I made my presence felt in this room”. Further, chances are that one questioner’s concern will be irrelevant to most of the other delegates, who are nevertheless forced to listen to the presenter’s often very detailed answer. What is called for, instead, is an opportunity for each delegate to reflect on, summarize and present to some listener just those points in the presentation that are relevant to his or her ongoing projects or interests. Below, we shall see how this may be done.

3. Delegates must be active and talk about their projects

Once the invited experts’ input has been heard and digested, most delegates want to introduce some content of their own. After all, they came to the conference because they have projects or tasks in the domain represented by conference topic, so they need occasions to try out these concerns in the light of the new input. They must be given time to talk about their own worlds and to be listened to by people who have also just taken in the new input. In so far as delegates are successful at promoting, enriching or qualifying their projects, they will have been inspired in the sense discussed above; they will have learned and created new knowledge, and they will have enjoyed a measure of human flourishing. The traditional conference provides practically no opportunity for the legitimate telling of one’s story. Breaks are socially pleasant occasions, group work is rarely personal, lunch is a possibility, and the reception afterwards, too. How to do it? See below.

4. Delegates must meet and inspire each other

The opportunity for networking is a widely recognized motive for going to conferences, yet the only provision typically made for it is a concluding drinks reception and a few breaks. If lunch is sit-down, as it often is, you may meet a couple of strangers, but that’s as far you can reach at a dining table. Flourishing with other people obviously require that you meet them first and exchange some words with them. The learning conference must offer several opportunities for delegates to briefly meet many people and then select the attractive few that could be useful or fun to interact with at some length. People at conferences are typically strangers to each other, but they share an interest in the conference topic. It is therefore a small step to introduce them to each other and help them zoom in on the people they are most likely to inspire or be inspired by.

Learning techniques

These design principles may be brought to life in the learning conference through various process techniques.

Individual reflection

After a presentation, delegates keen on human flourishing will likely want to examine the relevance of the talk to their current concerns and projects. To help people to this, the conference host says to the audience: “I’d like you all to grab your pen and paper and put down the two or three points in the talk that were the most important to you. You have five minutes. Go ahead.” Everybody thinks and scribbles in silence. This is a

welcome opportunity to order one's thoughts and externalize them verbally. Other tasks for reflection may be given by the conference host:

- "Write down the one point made by the presenter that was most relevant to something you are currently trying to accomplish in your work";
- "Recall two situations in your own organization that illustrate – or challenge – the points made by the presenter"; or
- "Extract a lesson to be learnt from the presenter's case-story: the lesson that *you* need to learn so as to avoid the ordeal related by the presenter."

The buzz dyad

Another opportunity for interpretation and digestion is a brief conversation with one's neighbor. After a presentation, or even mid-way during a long presentation, the host tells the audience: "Now, please turn to your neighbor and talk about what you've just heard. Move a few seats to find a partner if you need to. Ten minutes. Go ahead." People will quickly find someone to talk to and a pleasant buzz will rise in the hall. Here are some other questions one may ask:

- "First tell your neighbor what light the presenter's recommendations throw on a current situation of yours, and then listen to your neighbor do the same. Finally, discuss what you two have in common."
- "Listen to your neighbor describe their marketing strategy very briefly, and then tell them what you think the presenter would suggest they should do instead. Then change roles."

The buzz dyad may stand on its own, or it may follow five minutes of individual reflection. In the latter case, people get to talk about the points they just put down on paper. (Individual reflection and the buzz dyad are simple techniques used by many facilitators.)

You have won two consultants, free of charge

The purpose of this technique is to let delegates talk about and give feedback to each other's professional projects, within the topic area covered by the conference. The host divides the audience into groups of three: "A" is a person who has volunteered to talk about a challenging project he is currently engaged in, and "B" and "C" are assigned to be his "consultants".

The host explains the process: "You now have thirty minutes, three periods of ten minutes each. In the first period A tells B and C about his challenge. Then he keeps quiet and listens to B and C. They use the second period to talk to each other about A's challenge. They briefly acknowledge its importance and highlight aspects of it that they find exciting. Then they advise A on how to tackle his challenge, but they direct the advice to each other. They must completely ignore A and only talk about him in the third person: 'You know, I think he should do X and then try Y. . . .' etc. Feel free to give all kinds of clever, creative or crazy advice, because A will not hold you responsible for any of it. A just listens intently and jots down the few things he can use and discards the rest."

“In the third period, A speaks up again and identifies the few pieces of relevant advice he heard. He does not mention the rest; it is simply ignored. This period is A’s chance to go deeper into the few things he found useful, and B and C make themselves available for any use to which A can put them, such as helping him clarify his thoughts on what would happen if he used this piece of advice or that.”

If this activity is introduced right after a presentation that may be presumed to be relevant to many of the projects that the A’s are likely to bring up, the host may ask the B’s and C’s to think of the presenter’s recommendations when they share their advice in the second period.

Typically, this activity produces gratitude in the A’s, while the B’s and C’s are pleased that they have been useful. People tend to enjoy the fact that useless advice can be safely ignored; there’s no need for defensive routines: “Oh, I already tried that, and that other idea is completely unrealistic . . .” etc. Everyone has met a few strangers and shared bits of their experience, and they have used their energies constructively, to help a peer tackle a difficult project better. (This activity is an adaptation of “the reflecting team” introduced in family therapy and supervision by Andersen (1991).)

Facilitated group work

Group work is fine, but a general problem is that groups are too big (6-12 people), there is no discussion leader, and the task is diffuse (“Discuss X” – well, why?).

Groups must be small, 3-5 people in each, to give more people a chance to speak. They don’t need fancy meeting rooms, just a few chairs pulled together in the lobby. Professionals are usually egalitarian-minded, so no one will assume the role of group leader, and the discussion tends to lose focus. To avoid this, the conference host must ask every group to select a facilitator who will guide the conversation towards its goal. Instructions for the facilitators may be given on a sheet of paper, like this:

- Open by explaining your role as facilitator: To keep the conversation on track and moving forward.
- Handle introductions and state the time frame.
- Get agreement on the purpose of your group work (e.g., “Identify the three most important ideas for organization X’s future work”).
- Open the discussion by hearing ideas from everyone.
- Help the group develop the ideas.
- Help the group make whatever decisions are required.
- Summarize and write down the conclusions.

Thus facilitated, group members are likely to feel they have been involved, shared ideas and learned from each other, while contributing to the larger purpose implied by the group task. (On facilitation, see, e.g. Hogan (2003a, 2003b)).

The knowledge exchange

Professionals attending a conference want to meet people with concerns or projects similar to their own. Outgoing Americans know how to work a room, but timid Europeans need a little help.

Divide the conference into groups of thirty people. Each group gets a room and a facilitator. Chairs are in a big circle, and people write their names on tags and A-frames. Everyone gets one minute to introduce themselves and talk about two things they believe are relevant to this audience. One is a professional challenge they are currently facing, which they hope someone else in the room can help them with. The other is a resource – a contact, a trick, a shortcut, something operational or concretely useful – that they hope other people in the room may find handy.

After a little practice, the round starts. People are instructed to jot down the names of four to six people whose challenge they can help them with or whose resource they can use. When everyone has spoken, the facilitator tells them to find a person on their list to talk to and exchange business cards with, if so desired. Five minutes later the facilitator claps her hands and calls out “Change partners!”, thus urging people to find the next person on their list. This repeats itself about five times, or until people are done.

This friendly networking activity lets everybody state one of their motivations for going to the conference and helps them find likeminded people. Meeting a stranger who can help you with your project, or whom you can help by offering five minutes of tips and contacts, may just deliver the sort of mutual inspiration called for in our learning theory of human co-flourishing. (This activity is inspired by the resource exchange networks of Sarason (1979)).

Lunch with gaffer tape

The conference lunch is conventionally a rich and static sit-down function where you get to talk to two or three people, tops. Why not change this format to give people a chance to meet new and interesting folks?

After a whole morning of sitting, have a stand-up buffet with small plates and food that can be eaten with a fork only. Use gaffer tape to divide an area away from the buffet table into squares two and a half meter to the side. Divide people randomly into the squares, eight in each. Tell them to meet each of the seven other people in the square. Eating from small plates means they have to break up conversations often to get more food, and when they come back they’ll have to find another person to meet. They may be given a task: “Find out what the others thought were the best point made during the morning, and select one of them for presentation after lunch.”

What is often unproductive time during a conference may thus be used for both socializing and reflection. (This activity is original.)

All told, these six techniques illustrate the four design principles for the learning conference. Individual reflection and the buzz dyad are methods that help filter and bring out the relevance of presentations for each delegate (design principle 2). The buzz dyad, the two consultants and the knowledge exchange let delegates introduce into the conference the issues or projects they are currently excited about (design principle 3). The facilitated group work, the knowledge exchange and the gaffer tape lunch help delegates meet each other and network (design principle 4). (No techniques for concise presentations were introduced; how to do this is well known).

Potentials for change and research

It remains a challenge for a concerted research-and-development effort to ascertain exactly which concepts, designs and techniques produce desirable outcomes. Consultants, change agents and activists have always experimented informally with ways of meeting, interacting and knowledge sharing in groups, but the professional conference as an institution has remained surprisingly resilient – maybe because PowerPoint technology gave it a new lease on life ten years ago. It seems that every seasoned conference delegate is quite familiar with its shortcomings, yet the pattern is repeated every year.

Those who wish to create conferences that help delegates learn can draw on the many extant techniques, activities and learning tools that are used by process consultants, mediators, family therapists, network agents and training and development specialists. There is a world of intelligent process facilitation waiting to be applied in the professional conference, if only more conference organizers and meeting planners would (dare) join the current revolution in learning and knowledge processes that is taking hold in business as well as academia these years.

References

- Andersen, I.-E. and Jaeger, B. (1999), "Scenario workshops and consensus conferences: towards more democratic decision-making", *Science and Public Policy*, Vol. 26, pp. 331-40.
- Andersen, T. (Ed.) (1991), *The Reflecting Team*, W.W. Norton, New York, NY.
- Aristotle (1962), *Nicomachean Ethics* (Trans. Martin Oswald), Prentice-Hall, Englewood Cliffs, NJ.
- Dewey, J. (1915), *The School and Society*, 2nd ed., University of Chicago Press, Chicago, IL.
- Economist Conferences (2007), "Global transformation and leadership", *Seventh Human Resources Roundtable*, New York City, Thursday March 8th 2007, available at: www.economistconferences.com/roundtable/public/con_common.asp?rtid=982&rtRegion=1&area=1 (accessed December 29, 2006).
- Emery, M. and Purser, R.E. (1996), *The Search Conference*, Jossey-Bass, San Francisco, CA.
- Freire, P. (1972), *Pedagogy of the Oppressed*, Penguin, Harmondsworth.
- Gadamer, H.-G. (1975), *Truth and Method*, Seabury Press, London.
- Hogan, C. (2003a), *Practical Facilitation*, Kogan Page, London.
- Hogan, C. (2003b), *Understanding Facilitation*, Kogan Page, London.
- Illeris, K. (2004), *Three Dimensions of Learning*, Krieger, Melbourne, FL.
- Illich, I. (1971), *Deschooling Society*, Harper and Row, New York, NY.
- Kolb, D. (1984), *Experiential Learning*, Prentice-Hall, Englewood Cliffs, NJ.
- Maslow, A. (1968), *Toward a Psychology of Being*, 2nd ed., Van Nostrand, New York, NY.
- Maturana, H. and Varela, F. (1987), *The Tree of Knowledge*, Shambhala, Boston, MA.
- Piaget, J. (1926), *The Child's Conception of the World*, Routledge and Kegan Paul, London.
- Pinker, S. (2002), *The Blank Slate*, Viking, New York, NY.
- Ramsden, P. (1992), *Learning to Teach in Higher Education*, Routledge, London.
- Sarason, S.B. (1979), *The Challenge of the Resource Exchange Network*, Jossey-Bass, San Francisco, CA.

- Shannon, C.E. and Weaver, W. (1949), *The Mathematical Theory of Communication*, University of Illinois Press, Urbana, IL.
- Snyder, C.R. and Lopez, S.J. (Eds) (2002), *Handbook of Positive Psychology*, Oxford University Press, New York, NY.
- Stacey, R. (2001), *Complex Responsive Processes in Organizations*, Routledge, London.
- Stacey, R. (2003), "Learning as an activity of interdependent people", *The Learning Organization*, Vol. 10, pp. 325-31.
- Tufte, E.R. (2003), *The Cognitive Style of PowerPoint*, Graphics Press, Cheshire, CN.
- Vygotsky, L.S. (1978), *Mind in Society*, Harvard University Press, Boston, MA.
- United Nations Development Programme (2003), *Human Development Report 2003*, Oxford University Press, New York, NY.
- Wenger, E. (1998), *Communities of Practice*, Cambridge University Press, New York, NY.

Further reading

Schwarz, R. (2002), *The Skilled Facilitator*, 2nd ed., Jossey-Bass, San Francisco, CA.

About the author

Ib Ravn is an Associate Professor at Learning Lab Denmark of the Danish University of Education. He heads the research group Facilitating Knowledge Processes that designs, facilitates and tests processes for learning and knowledge sharing at meetings, conferences, networks and in organizations generally. His PhD is in social systems sciences from the Wharton School of Business at the University of Pennsylvania. He worked for thirteen years as a process consultant, research administrator and commissioning editor in the private sector in his native Copenhagen, Denmark. He has written or co-written four books in Danish on science and society. He can be contacted at: ravn.ild@dpu.dk