Messages for facilitators and lateral leaders
2M1.1 Network facilitator

A network facilitator is usually a formal network function or one of the roles of a network manager. In the framework of networks a facilitator is a person with specific competencies who is directed to develop trust to facilitate co-operation between organisations (in our case mainly SMEs) in a given regional or industrial context, despite and beyond their ongoing competition. This trust, if constituting a culture of co-operation, can also be called social capital. So, from a very general viewpoint, they may be called developers of social capital.

More specifically, network facilitators are those professionals involved in supporting and valorising aggregation processes of SMEs by promoting and making easier (i.e. facilitating) networking activities and animation of local expert communities, and within this framework, activities of inter-organisational non-formal and informal learning.

Consequently, typical facilitators are

- Consultants supporting groups of companies in co-operative projects
- Professionals/managers from sector/employers associations
- Professionals/managers from local development agencies
- Trainers from local VET systems

In this role as network facilitators they have four different sub-roles referring to both the action and the learning side of their role. These are

- Moderators with the task of shaping successful communication in the network in general as well as and in its events, meetings, workshops etc.
- Experts in process management not only for communication processes but also for projects and other joint network endeavours.

Cf. 2M2:
Moderation as a role

Cf. 2M11:
Basic concepts of project work
Trainers of facilitating methods and techniques, responsible for systematic reflection with all participants on common learning in such processes as a means of rendering them more effective and efficient and as a central mechanism of creating reflective co-operativity.

Coaches, since they pursue a specific way of shaping enhanced communication avoiding conflict while, at the same time, they are experts at settling conflicts if they arise in such processes.

Facilitating then means supporting and structuring the perception and communication of a number of people who have a common interest in order to lead a common process of analysis, design, planning, implementation and/or evaluation to become a success.

The problem with such definitions is that network facilitators are usually people who are full-time or part-time managers of networks with a formal responsibility for the overall success of the network. So network facilitating is just one of the roles they can play. At the same time, network facilitating can be a management style, a specific understanding of being a network manager, or a specific interpretation of leadership. In this case it is part of the management function. Therefore, Message 2M8 concentrates on network facilitating in this context.

Network facilitating as we have interpreted it in this book would usually influence how one acts as a manager since it includes a specific way of understanding the world in general, and the management function in particular. As we have explained in Message 2M4 on perception and communication, action learning as we conceive it is linked to a constructivist view of the world, which holds that people only have access to their own individual view of reality and that any attempt to share this view requires communication. Successful leading, both of and in organisations (which are defined as communities of performance – see Message 2M9), thus implies a conscious shaping of communication as a necessary prerogative of joint, purposeful action in and of organisations. For this it is necessary to understand organisations essentially as purposeful co-operation of people.

Building co-operation, striving for trust-based networking, creating social capital in communities of practice by the pursuit of continuous learning and improvement – this is the ongoing task of network facilitators, within and across organisations.
A moderator is a person who helps a group of people to solve a problem by supporting their communication, rendering it more effective and efficient. Any person with some basic competence in moderation methods and techniques can assume this role. The role requires impartiality and basically consists of securing agreed rules of communication and the visual safeguarding of the communication results.

2M2.1 The goal of moderation

The goal of moderation is to help a given group of people to achieve a defined purpose of communication e.g. solving a problem or planning a project, within a given setting of space and time, as well and quickly as possible.

2M2.2 The tasks of moderation

Good communication cannot be planned, it happens. But it is possible to create good conditions for communication, good framework conditions and good process conditions. Achieving this is the task of moderators.

Moderation is not always the best way to improve communication. Moderation is the best choice for workshops, i.e. for all those forms of communication where people with different expertise come together with the aim of solving a specific problem, planning a com-
Mon project, defining a strategy or a special new task, etc. Also for evaluation purposes and systematic exchange of experience, moderation can be a valid method. It is not good for telling stories. It is good for de-constructing personal and collective knowledge with the aim of re-constructing new collective knowledge. It is particularly good for changing unconscious competence into conscious competence (see Message 2M9).

Analytically, the role of moderating can be differentiated into four basic tasks: a moderator is a host, a co-ordinator, an animator and a referee. During a communication process, all these tasks are constantly on the agenda, and at any moment of this process a different task may assume priority.

For larger groups or for complicated communication processes it might be useful, recommendable or even necessary to split these tasks up into different roles for two moderators. In this case, clear role ascriptions are important. Metaplan (www.metaplan.com), the company that invented the concept of moderation in the 1970s, even recommends a pair of moderators as a standard, with one person animating the communication, the other one writing, pinning up notes, and visualising.

Host 2M2.3  Host

As a host, the moderator is responsible for adapting the setting for the specific purpose of the meeting or workshop (Tool 4C526), taking account of the space, i.e. the surroundings, the building, the room/s, and the time, i.e. during the day, in the evening, on a weekend, etc.

He or she also seeks to provide an atmosphere adapted to the topic, the participants, and the importance of the event; in any case an atmosphere which is pleasant for the participants and positive for the working and learning process.

Finally, providing light food and drinks and the necessary equipment required for working and learning is also the responsibility of the moderators.

Co-ordinator 2M2.4  Co-ordinator

As a co-ordinator, the moderator plans and prepares the workshop. He or she develops a schedule, also called dramaturgy, taking into consideration the aims of the working or learning process, the content,
the methods, instruments and materials used and needed, as well as the roles of individuals in the process (Tool 4A5). In addition to all this, the moderator must consider the time and space needed for each of the workshop’s phases.

The main structuring elements of the schedule or agenda should be visible to all participants, e.g. on a flip chart or a whiteboard. These can be agreed at the beginning of the workshop. Like all agreements, it can be modified or changed if relevant circumstances recommend such modifications. In this case, a new agreement has to be made. During the workshop, it is part of this task to adapt all these elements continuously to the real process, shifting, modifying, changing, skipping elements or introducing new elements in agreement with the participants.

Most phases might start with a brainstorming process (collection of ideas) leading to a mind map, a matrix, a process chart, or a simple list of items under separate headings. This first result might then be the object of further structuring, deeper reflection, or may be discussed in groups dealing with different aspects of a problem. Later, reporters from these groups provide feedback on their separate results to the whole group where these results are integrated into a common whole. As this may lead to the necessity of planning activities derived from these results, the planning of further steps or projects might follow.

The essential part of this task is securing and visualising the results, writing down the contributions of the participants, fixing them (normally pinning them to a moderation board), structuring them, and checking every once in while that the participants can follow and accept the way the moderator is structuring the contributions towards a common result. Visualisation (see Message 2M12) of the common working and learning process is at the heart of this activity. For all activities derived from this workshop a “to do” list is established fixing what, how, by when and by whom things are to be done. If something is to be done by a group, a responsible person has to be named.

It is also part of this task to make sure that at the end of the workshop sufficient time is left to step back and reflect on the process, on its results, conditions and procedures, as well as on the group atmosphere. As part of this reflection a formal satisfaction survey in which all participants can give their opinion (at least a scale of three to five smileys should be offered) is a must.

Finally, the posters and all other work results created during the workshop should be made available to the participants. There are several ways in which this can happen. The easiest way is to take photos with a digital camera and send them to each participant. Certain groups may want to take the posters with them to continue working with them. In this case, the cards must be glued to the moderation board paper, thus fixing the poster. Then the poster can be rolled and transported easily. At the workplace, it can be fixed to a wall and can serve as a planning or working document.
The animating function is strongly linked to both tasks outlined so far. Certain activities are clearly linked to the host function, such as welcoming the participants, making them comfortable, helping them to settle in, and giving them the feeling they are respected for their expertise and important for the problem-solving to be pursued. It is not always easy to structure the warming-up phase in such a way that it can serve as a bridge to the working phase. It depends greatly on the people, e.g., whether or not they know each other and how they know each other, on the topic and the results to be achieved, and also on the setting in which the workshop takes place (see Tool 4A8: Warming up or ice-breaking methods).

It is part of the co-ordinating function (as well as of the animating and the referee function) to make sure that all participants are actively involved in the work. There are always some people who are slower to relax than others or who are more inhibited to talk freely in groups or in public. If it becomes clear that such people need some encouragement, it may be helpful to let the participants speak in a certain order, making sure that everybody says something (see also the referee function below).

Linked to the co-ordinating function and absolutely crucial for the progress of the workshop is the moderator’s function of asking relevant questions that clarify, fuel and direct the process towards achieving the desired intermediate or final result. An important decision that must be taken several times throughout the whole process of such workshops is how to start a new topic or line of discussion. Should it be by an inductive or by a deductive procedure?

An inductive procedure would be to collect all ideas on a given subject existing in the heads of the participants, structuring them once they are written and pinned to the moderation board, e.g. ordering them according to certain categories, and linking them in a specific way appropriate to the topic.

A deductive procedure would ask first for the structure, i.e. the main titles or categories structuring the field or theme, and then collect aspects and elements to be listed or grouped under these headings.

The animating function includes logical thinking on what comes next, which is intimately linked to the co-ordination task (see above) since a subtle sense of conflict, moods, aggression or boredom might arise and need to be respected.

When such tension is in the air, sometimes a break may help. Breaks are as important for work as the work itself. People need time for relaxation. Frequently, breaks are times in which people continue their reflection off the record, and after the break they present fresh ideas or unusual solutions.
Of course, in a case of serious disagreement, obvious misunderstanding or real conflict a break will not help. In this case there is a general rule of moderation to be respected: give priority to conflict! Conflict is normal among people with different concepts of a certain problem, process or solution. If it remains unsolved or at least not clarified, conflict may ruin a workshop or group. Therefore conflicts have to be made visible and dealt with in an objective, non-personal way, and this must happen immediately. People must get the feeling that, if necessary, a conflict based on material grounds can be a relevant contribution to finding responsible solutions. It is evident that this part of the animating function is closely linked to the fourth and last task of a moderator.

2M2.6 Referee

Moderation processes are based on equal participation. Ensuring equal participation opportunities for all is one of the main duties of the moderator. The moderator himself is expected to be neutral and impartial in the working process. He is not a judge, only a referee, as in sports. His task is not to value the contributions but to safeguard the rules of the game. For example, a referee’s task in a football match is not to judge the quality of the football played by the teams but to ensure that the rules, which every player knows, are respected. The referee is the personification of the rules and is responsible for their enforcement.

In moderation these rules are either known, if people are experienced in such processes, or must be agreed upon. Agreement comes at the beginning of the workshop if they are general rules, or at the beginning of a specific phase, e.g. brainstorming, if special rules have to be followed in that sequence.

There are a few basic rules which are meant to guarantee this democratic feature of moderation.

- The time for interventions should be limited. Two or three minutes are commonly used limits, but during brainstorming this is reduced to no more than 30 s.
- Especially during the initial phase/s of collecting ideas (cf. Tool 4A10: Brainstorming) three basic rules are imperative:
  - one idea – one card
  - all ideas are good
  - no discussion; if questions are asked they are only for clarification
- General visualisation rules are:
  - don’t write, print
  - no more than 5–7 words per card
  - max. 3 lines
<table>
<thead>
<tr>
<th>#</th>
<th>Phase</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome, warming up</td>
<td>Welcome by moderator/s; poster about aims of the workshop; poster “Who we are”; short self-presentations incl. expectations; sensations and moods</td>
<td>Phase not yet related to contents, mainly for greeting people as they arrive and making them feel comfortable How this is done depends on whether or not people know each other</td>
</tr>
<tr>
<td>2</td>
<td>Approaching the problem, topic, agreement on the agenda</td>
<td>Develop agenda or scheduled activities; asking for ideas concerning the workshops beyond the already scheduled planning; agreement on visualised agenda If problem is not yet well known, collecting relevant questions and prioritising them; narrowing down to one issue questions (“How important is …?”, “How satisfied are you with …?” one dot per item)</td>
<td>Deal with the relevance of questions to be answered or specific problems to be solved. The aim is to make the questions or problem equally relevant to and understood and shared by all participants</td>
</tr>
<tr>
<td>3</td>
<td>Dealing with the problem</td>
<td>Work in plenary or in smaller or larger groups, e.g. depending on expertise needed, and returning to the plenary again Typical process: Collection of ideas, structuring, (if in groups: reporting) reflecting and integrating</td>
<td>In this phase it is useful to have several moderators in order to help smaller groups. With a few hints, most small groups organise themselves appropriately</td>
</tr>
<tr>
<td>4</td>
<td>Result orientation, action planning</td>
<td>Isolating results and projects, prioritising and establishing a to-do or action plan: “Who will do what how and till when?”</td>
<td>This is a critical phase as people have to make up their mind about what to do or to be responsible for. Often people are euphoric about having dealt satisfactorily with a problem, and project their present energy into the future (danger of overestimating own energy)</td>
</tr>
<tr>
<td>5</td>
<td>Closing and reflection (evaluation)</td>
<td>Satisfaction survey: “How satisfied are you with the results?” “How satisfied are you with the process?””, feedback and reflection on possible improvements</td>
<td>Reflecting on the day or workshop</td>
</tr>
<tr>
<td></td>
<td>Fixing results, minutes</td>
<td>Taking photos of final results, if necessary copying posters</td>
<td>Working results are visualised during the whole process; photos of intermediate results should be taken during breaks, final results and to-do minutes should be noted at the end or during the process on a separate moderation board</td>
</tr>
</tbody>
</table>

Such a workshop schedule is modular and can easily be remodelled. As a further typical example of such a workshop see the SME ACTor Curriculum and Tool 4A5: the planning of workshops.  

See also Tool 4A5: The planning of workshops
Visualisation means making spoken or written information visible by using a different set of symbols, i.e. pictures, structures, and graphics. Visualised information is usually provided to make understanding easier and more easily memorable.

This short definition above highlights the two main purposes of visualisation:

- it is not meant to replace the spoken or written word but to complement it
- the aim of visualisation is to make understanding easier and more efficient.

The definition implies that visualisation is able to render this service.

2M3.1 Why visualisation helps …

People perceive with all their senses but the frequency and scope of perception is different for everyone. In fact, 83% of our information intake happens via our eyes, only 11% via our ears, our nose is good for 3.5%, touch for 1.5 and taste for 1%.

Also, our capacity for retaining perceived information, i.e. our memory, strongly depends on how that information has been perceived. Combinations of ways of perception are clearly more effective than single sense perceptions. We can retain 20% of what we have heard, 30% of what we have seen, 50% of what we have heard and seen, 70% of what we have said ourselves, and 90% of what we have done ourselves.¹

¹Although these seemingly empirical data are widely quoted, we have not been able to identify an original source so we just accept them as plausible. Nevertheless, there seems to be empirical evidence for the following statement made in the German Wikipedia on “Sinn (Wahrnehmung)”, i.e. sense (perception): Senses have different
In order to confirm this, listen to your colleagues informally reporting about meetings they have been in. Unless they are experienced reporters, most of what they will tell you will be about what they have said themselves.

Visualisation will effectively help to reduce problems of communication and understanding and the problems resulting from them, as it combines at least two senses. An ordinary conversation is mainly based on voice to ear perception. A visualised conversation combines voice to ear perception with visual perception and personal action if people also write or visualise actively.

In general, what we call a meeting in an organisation is usually a session; people sitting at a table with a chairperson and a fixed agenda. Here, voice to ear communication is the main way of transmission and only a few people will be able and ready to participate actively in such a meeting. The average number of occasions per hour of people saying something and participating actively is from 30 to 100 times. Moreover, such meetings frequently do not have common minutes. People only take away what they have noted for themselves (cf. Tool 4A3: Chairing vs. moderating and Tool 4A1: To-do form).

Meetings supported by visualisation and moderation usually do not need tables; people are supposed to be able to stand up and move about easily, concentrating on the common visualisation centre and on relating to each other. If they note their own contributions to the common subject on cards and pin them to the wall, they even actively do something on their own. Here people move and meet. The meeting is a literal meeting: an encounter. People on average will have 300–600 occasions per hour of intervening actively in such a meeting.

After such a meeting people will still remember their own contributions better than those of others or the overall result. However, they have contributed actively to a common result which is handed over to everybody in order to make sure that everybody will act on the basis of the same result.

Needless to say, both types of meetings have their justification and their pros and cons; it is essential to know that both types are available and can be used according to the aims and purposes pursued in each case.

Visualisation in presentations supports the spoken word and makes things said more accessible to understanding as it translates linear sequences of words (sentences) into structures, pictures or graphics.

capacities of reception. Via our sense of sight we can receive about 10 million Shannon-Units (Sh) per second, via our sense of touch about 1 million sh, via hearing and smell about 100,000 Sh and via taste about 1,000 Sh.
Enacted by the presenter him or herself, the step of translating a spoken message into another set of symbols may improve his or her capacity of explaining and may also increase the connectivity of the information presented in the mindset of the receivers.

Visualisation in working and learning processes helps participants to understand better the development of the common process and deepens the understanding of and commitment to the common results, thus greatly facilitating their implementation.

Visualisation is an essential vehicle for facilitating communication for common action.

2M3.2 How visualisation helps ...

What is needed for workshops using moderation and visualisation has been presented in detail in Tools 4A6 and A4 and will not be repeated here. How it is done must be experienced and exercised in training or in practice. The following information can only provide basic hints about what is possible; the ways of using and deploying visualisation are manifold. Any combination of elements, forms and colours is feasible as long as it serves to pursue the central goal of visualisation: to make communication easier, more effective and more efficient.

The following three graphics hopefully speak for themselves, at least in the context of what has been experienced in training and workshops. Each of them is an example of applying visualisation to an abstract and spiky subject such as the method of visualisation.

This first picture informs about the function of writing. Although it seems to be a contradiction, visualisation in moderation creates pictures by reducing individual chunks of information that are spoken or written on cards to a structured picture representing the result of joint reflection.
Writing in visualisation

The handling of the Visu marker must be exercised. It is important to use the broad side of the tip.

**Mistakes**

- Learning to write in a legible way is often difficult for adults as their individual hand writing is seen as an expression of their character. Writing like this can no longer guarantee legibility.
- Whole sentences comfortably written need too much space and more time to be read.
  - If not you will run out of space
  - Than writing everything in capital letters
  - This is too thin to be well read as compared to the size of the letters
  - Using too long upper and lower extensions of letters, legibility is lower.

**Principle**

- Write keywords in blocks
- Always start from above
- Use capital and small letters
- Write densely but not thin
- Use short upper and lower extensions

**Reasons**

- Message can be captured more easily
- More space for additions
- Easier reading ...
- To save space
- To save space

**Main goal**

- Based on Druschel et al. 1991, 18

**to be read from 8 m distance**
Visualisation as optical language

Based on Druschel et al. 1991, 16
**Elements of Visualisation**

**2 sizes of writing**
- Capital and small letters
- Free space

- Max. 4 lines, normally 3 lines per card
- Keywords instead of sentence
- Brown or white screen paper as clear background
- Rough side front avoids reflection in photos

- Forming blocks
- Same form or colour = same category
- Pinning
- Fixing/gluing
- Hanging away

- Colours for accentuation

**Free space**

**Based on Druschel et al. 1991, 17**
Perception is the conscious reception, selection, processing and interpretation of information by our brain via all senses. Perception is also used to describe what is perceived.

Communication can be several things. Regarding the process, communication is the reception, exchange, and transmission of data, information and knowledge between two or more individuals. The communicated material is usually signs such as words, images, gestures, scents, tastes, textures and sounds. Regarding the purpose, communication means informing and/or sharing of meaning.

Our context of reflection about perception and communication is the shaping of collaboration and learning processes and conditions by facilitators. For this application context, it is vital to remember that we have to consider and organise two “spaces of perception” at the same time; the space occupied by individuals since they are the actual learners (all learning is individual), and the common space of individuals who learn together in a common space of co-operation.

Individuals are understood as independent systems and the actual place of learning is the individual brain. The brain - along with the senses it uses for perceiving - is a self-organising (autopoietic), self-related (self-referential), operationally closed system. Not only from a constructivist point of view but also from the perspective of modern brain research, learning is a way of perception and recursive processing of reality in the forms of data, information and knowledge. Recursive means having a strict relation to the context of already existing cognitive structures, including the experiences and emotions linked to them. We are not talking about a reflection of the outer world in the brain but about a (re-) constructive process of a system with itself (self-referential).

Already the sensory perception of the surrounding system, the environment, is regulated by individual selection criteria provided by
The brain’s already existing thinking structures and linkages (synapses). They check whether and how the new perceptions may fit into the existing knowledge, experience and beliefs. Potential new information and knowledge is checked against the existing information and knowledge in a process which in the constructivist terminology is called “representation”, as information or knowledge made present. For our context, we will add the notion of re-actualisation because in an action learning context, information and knowledge are not only recalled into presence for the sake of remembering, they are compared, aligned and adapted according to their present relevance for action.

A simple but absolutely mandatory consequence of this aspect of self-referentiality of our spontaneous thinking is that we can never be sure that other people know and understand what we know and understand. We have to reassure ourselves that they do by asking questions or by working together, checking whether the result is what we expected. Only then can we be relatively certain that all have the same understanding. Moreover, when we say something we should be very careful about assuming that it is valid for everybody. Statements starting with “I …” should prevail over general statements.

Two or more individuals working together cannot do so without communicating with each other about the aims and purposes, the contents, methods, instruments, materials and tasks or roles of each person participating in the co-operation process. The quality of co-operation is immediately dependent on the quality of communication. If they are to work together successfully over a longer time span, they must build a common body of knowledge concerning their common work. What was initially done very consciously will become unconscious competence, and only serious problems, significant changes or new challenges from outside will prompt them to examine what or how they could improve their co-operative performance. They would have to analyse what is wrong in what they are doing, unlearn certain things, and establish newly developed (learned) routines which in their turn become unconscious again.

In such a practical context of co-operation, not right or wrong, true or not true motivate a decision of changing something, i.e. of learning. Decisive for learning is

- The usefulness for what we are about to do;
- It is the perception of the new solution or method offered to me/us or the way it is offered to me/us,
- Whether it is new (not redundant),
- Relevant (important for me/us),
- Viable (practical and useful for me/us) and
- Connectable (fit for being integrated into my/our system).

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Cf. The ‘Four levels learning theory’ in Message 2M5: Basic concepts of learning and competence
In order to understand what seemed new, relevant, viable and connectable how to whom, we have to talk about it in some structured way to find a common understanding which will form the basis of the new consent on how to work together going forward.

We call this critical process of collective deconstruction and reconstruction “LEGO playing”. The old house is taken apart, a new plan is developed and a new house is built. Facilitators support such processes of joint deconstruction and reconstruction, or of joint construction of completely new projects.

Thus, facilitating means supporting and structuring the perception and communication of a number of people who have a common interest, in order to lead a common process of analysis, design, planning, implementation and/or evaluation to a successful conclusion.

### 2M4.1 Sharpening perception

In order to sharpen the perception of facilitators, we usually start facilitator training with some simple exercise. An example is the balloon joke in the margin above. It shows that correct information may not be at all useful and connectable to the situative context and hence may be completely useless.

Another similar example is to ask for the colour of clouds. Physically, clouds are white since they consist of tiny water bubbles that reflect light like snow crystals very diffusely, which makes them appear white. Clouds seen from an airplane are white; clouds seen from the ground often show all shades of grey to black; the blacker they are, the less light can penetrate them. To a pilot this means completely different things than to a farmer. Moreover, to a pilot on the ground it means different things than to a pilot up in the sky.

A third very simple example that is reproducible at all times as a spontaneous exercise in precise observation and perception is the “nine or six sign” card (see margin). Draw a thick sign that could be a nine or a six on a card, throw it on the ground between you and the participants and ask them: “What is it?” Usually, they will answer, “a six or a nine”. When you don’t confirm this immediately, some people might look a second time saying, “This is a white, oval piece of paper.” Of course, it is all of these, a white, oval piece of paper with a sign on it that could be a six or a nine. We will have to decide what it is “for us” in the given context. A similar puzzling experience can be provided using an 8 on its side, which could equally be a sign for infinity.

The same applies to listening. When you are the person who visualises what people say, for example by writing on cards or in a mind map,
it is absolutely necessary to capture all contributions; omissions will be noticed as disrespect. Also, summarizing people’s contributions in a few words written on a card often means interpreting what they have said. Therefore, it is necessary very frequently to ask,

- “Have I caught what you wanted to say?”
- “Could you please explain what you mean?”
- “I have understood what you said in the following way …. Is this correct?”

Active listening and asking reassuring questions is a must.

Participants will soon adopt this attitude of mutual respect. It says, “Instead of assuming that what I understood is what you said, I ask you whether what I understood is what you wanted to say.” People will transfer this attitude to their working environments. It will help to build mutual trust and understanding.

### 2M4.2 Four dimensions of personal communication

Facilitators - and through them the people they work with - will also learn to perceive unconscious messages as well as to control their own. When we say something, we transmit and receive four messages (cf. Schulz von Thun 1981). We talk with four tongues and listen with four ears concerning:

- The content, consisting of the actual statement
- The so-called I-statement telling something about myself, my opinion and my emotions regarding the content statement
- My relationship to the receiver of the message
- My appeal to the receiver expressing what I want him or her to do or to be done in general concerning my actual content statement

Additionally, all the information transmitted by my voice, eyes, attitude and gestures will underline the messages, and is linked to the way the statement is formulated.

Also, here one of the main conclusions is that we should avoid statements which directly or indirectly include assumptions about other
participants or which even attack them. Sentences expressing subjective perceptions and interpretations are usually a more precise way of formulation than generalisations.

Obviously there is an additional complication. The four messages emitted with one statement are not necessarily the same four messages heard and understood by the receiver. We do not know what is heard and how it is interpreted by the opposite party. We only can judge from the response or from the common action whether the meaning of something is shared.

Many problems in communication simply derive from the assumption that something must have been perceived by somebody else just because we ourselves have perceived it, said or not said it, done or not done it. Behind this assumption there is often a theory-of-use consisting of an extremely simplified, purely technical model of communication (Model 1). It assumes that whatever medium is used to transmit a message, exactly this message will arrive at the receiver side. But even purely technical models are usually more complicated (Model 2). They include context conditions and possible problems of transmission, and assume feedback to be complete.

Expanding (with Hall 1980) this basic model, we can see that even in technical communication (more so in direct human communication) problems may arise with encoding a message on the sender side and with decoding on the receiver side. Among other reasons, this may be due to different sets of signs (mindsets) on both sides. Moreover, both sides may not have the same context conditions. Transmission may be blurred or disturbed one or both ways.

Avoiding the problems of technical expertise which might arise by following this example further, we have suggested a similar model based on the typical supplier-customer situation as it is used in quality management, which is much more customised to our network clientele. Furthermore, our Tool 4D3: Customer and supplier needs analysis and planning provides a practical model for simultaneously creating a space of co-operation and communication. Like all our tools, it does not only serve as an analytical approach but also for designing, planning and shaping co-operation.

Cf. Tool 4D3: Customer and supplier needs analysis and planning
2M5.1 Learning

Learning is an active process of appropriation (making one’s own) of knowledge, abilities and skills in order to enhance the personal or collective control potential (competence) of shaping reality in a given context or situation.

2M5.2 Competence

Competence means being able to decide, act and learn adequately with respect to the functional and situative context.

These two definitions make transparent that we are not talking about education or teaching in any context. Learning in an organisational or cross-organisational context always means to improve the capacity of individuals and organisations to overcome specific situations, achieve previously defined objectives or simply to do more competently what they are expected to do. The primary result of such learning is not knowledge but competence; the capacity of taking adequate decisions, of planning and executing corresponding activities and checking (self-) critically what and how has been achieved in order to do it better next time.

Therefore, the learning cycle is basically identical with Deming’s quality improvement cycle where you plan something, execute it, check its correctness (or viability, as we would say) and improve it if necessary. A more complete learning cycle is Hacker’s model of accomplished action, which is widely used in German vocational training. It is a fully action-oriented learning model.
Four levels of learning (more details in Chap 3.2 on the Didactics of Action Learning)

We combine this with a practical theory of learning that is “fit for use” as well as fit for shaping learning. It consists of no more than the four levels and lines in the table. We have taken it from O’Connor and Seymour (1996) but the three exemplary explanations of it given here are completely ours. The first explanation is an individual one applied to certain stages in life; the second one refers to an individual in a company in the context of training needs analysis; the third and most extended one applies to a fictitious wind energy cluster.

Level 3 corresponds to what in other learning terminologies is called explicit knowledge; level 4 corresponds to implicit or tacit knowledge (e.g. Nonaka and Takeuchi 1997; Polanyi 1985). In this wording, one facet of facilitation is the task or role of leading people from level 4 of implicit knowledge and competence to level 3 of explicit competence or even level 2 of no competence (in a specific skill or aspect) but the consciousness and readiness of achieving conscious, explicit competence and eventually of leading them to his own, the facilitator’s level of making co-operation easy.

Example 1: Individual Life Stages
Driving a car may be a good example of how this theory works, analytically as well as for the shaping of learning processes:

1. Being a baby or an indigenous inhabitant of the Amazon jungle, I don’t know cars and, logically I don’t know that I don’t know how to drive a car.
2. Once I know that there are cars that I could use, but I have not learned to drive, I know that I don’t know how to drive a car.
3. Now I have had my driving lessons and passed the exam, I know how to drive a car, but I must concentrate on doing all the different things very carefully.
4. After years of driving I can do a lot of things at the same time without being conscious of how complex the situation and my activities are. These things include perceiving and understanding the traffic situation at the junction ahead, the changing traffic lights, setting the
indicator, steering, braking, using the clutch, changing gear, listening to the radio, talking with my mate, maybe smoking etc.

Practically every situation or context in life can be constructed and reconstructed in these four stages as a process of new learning, un-learning and re-learning. Let’s stick to the example of car driving. Driving a car in Great Britain for the first time might reduce all my abilities as a driver from the European continent from level 4 to level 3; an elderly person might even fall back to level 2.

(see Example 2)

<table>
<thead>
<tr>
<th>Competence</th>
<th>Incompetence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2: Conscious competence</td>
<td>Level 3: Conscious incompetence</td>
</tr>
<tr>
<td>• You perform the skill reliably at will.</td>
<td>• You become aware of the existence and relevance of the skill.</td>
</tr>
<tr>
<td>• You need to concentrate and think in order to perform the skill.</td>
<td>• Now you are also aware of your deficiency in this area.</td>
</tr>
<tr>
<td>• You can perform the skill without assistance.</td>
<td>• You have an idea of how much and in what aspects you have to improve.</td>
</tr>
<tr>
<td>• You are able to demonstrate the skill to another person, but probably you cannot teach it well.</td>
<td>• Ideally, you commit yourself to learning and practising the new skill and to moving to the “conscious competence” stage.</td>
</tr>
<tr>
<td>• Only repeated practice will allow you to move from stage 3 to 4.</td>
<td></td>
</tr>
<tr>
<td>Level 4: Unconscious competence</td>
<td>Level 1: Unconscious incompetence</td>
</tr>
<tr>
<td>• You do not consider the skill as a skill any more (see the car example); the skill has become largely instinctual.</td>
<td>• You are not aware of the existence or relevance of the skill area.</td>
</tr>
<tr>
<td>• You are able to do several things at the same time as performing the skill.</td>
<td>• You are not aware of having a particular deficiency in the area concerned.</td>
</tr>
<tr>
<td>• You might now be able to teach others the skill, although for teaching you will have difficulty in explaining exactly how you do things without consciously going back to level 3.</td>
<td>• You need practical evidence that the new skill will add to your personal capacity of doing something useful for yourself or the organisation you are in.</td>
</tr>
<tr>
<td></td>
<td>• Only then can the new skill be developed or learning begin.</td>
</tr>
</tbody>
</table>
Example 2: Individual in company context
The second example (see cross table) presents a more analytical way of using the four basic components of the theory resulting in the four levels.

Example 3: Wind energy cluster
The third example, finally, is much more complex than the individual approaches. Setting the scene: Our exemplary wind energy cluster produces energy-generating windmills. It is situated on the coast, and over the years more and more companies have established their production facilities here, forming a cluster. The cluster companies have been very successful as the market, originally an ecological niche market, has been growing rapidly. The early Danish example of offshore wind parks has become an interesting development model due to the strong pressure on other forms of CO₂-intensive energy production.

Level 1: Unconscious incompetence
The cluster is very busy satisfying a rapidly expanding market. Boosting production and sales is the top priority. Labour is still relatively cheap as redundancy rates are high. Workers can be recruited from other parts of the country, enticed by attractive wages. Little is done to train a qualified workforce, less for establishing relevant R&D and training co-operation with the few regional universities of applied sciences in the neighbouring towns and cities. The cluster is no more than an agglomeration; no serious co-operation to gain political influence towards improved infrastructure is organised. Only a few have a faint idea of what the future holds. The unions are predicting that the cluster is running into stormy weather. But most managers have “no time to deal with the soft factors”. For them, earning money is the only hard factor.

Level 2: Conscious incompetence
The growing difficulties of recruiting qualified labour, particularly specialised engineers, lead to serious bottlenecks in production. The soft factors have become really hard ones now. Many managers have come to understand that along with earning money their main task is strategic planning rather than operative troubleshooting. They start to understand that in order to have more time for strategic issues, for example, talking to politicians and professors and to their cluster companions, they have to reorganise their companies internally. “They must run without the boss”, they say now. They now know what they should have been doing earlier. They are becoming aware of the fact that being a cluster can be more than just being many of the same. A cluster association is formed. A tough young engineer from the unions seems to be a promising cluster manager.
Level 3: Conscious competence

Most company leaders know now what has to be done. And they do it, most of them. The cluster has gained consciousness of being a cluster. A few serious consultants help them to establish sound organisation development projects. Diversity management will help to create a multi-national workforce. This means giving more power to lower ranks. “These people know more than we thought they would. Some of them have real management talent”, they are heard saying in the pub that some of them regularly visit to meet other managers. The cluster association is becoming an effective marketing booster and image machine with a proudly presented booth at a number of interesting fairs in Moscow, Dubai and Shanghai. With energy prices soaring to record heights, the growing US market has become aware of the cluster. However, building up training capacities and trust relationships with the regional science is a slow business. Capacities are notoriously insufficient. Also politicians have been sound asleep for a long time. They are willing to move a lot of money to improve infrastructure and expand the scientific potential. But it takes time; others have been more active and earlier. “Each euro can only be spent once”, they are told. Supported by the cluster association they raise money from the companies to finance a new attractively endowed and equipped professorship; some of the top engineering experts from the south are applying for it.

Level 4: Unconscious competence

Things are running smoothly. The cluster managers, including a very committed young lady who has recently joined the team, are a hit. They are pushing many of the activities the cluster is running. Also the new professor is a success; the first promotion of the new wind energy engineering course is being trained; many of the students have passed their internships in cluster companies and their end of study theses deal with practical problems in cluster companies and institutions. More than 50% of the companies are now active in vocational training. Organisation development projects have become a normal thing; they have helped to mitigate the effects of the continuing scarcity of qualified labour. Most of the managers have spent several hard years travelling to open and develop the new markets. The home market is still a stronghold, but the companies are solidly implanted in the new markets.

But there are also new problems. More and more people do not like the ever larger windmills that have appeared everywhere in the landscape. Parliament has imposed serious restrictions. In Africa and the Arabian world, many unlicensed copies of the cluster’s products from China have turned up at much lower prices. At first, managers think about moving to other countries. In some of these issues, they are on level 2. Those who are thinking of moving away may well be
completely unaware (level 1) of the host of implications this decision would imply.

Learning in loops

2M5.3 Learning loops

Facilitators help to facilitate communication between people who do not know what they know. Their task is making the unknown knowledge available for conscious common analysis, planning and acting to create a common treasure of knowledge, projects and experience. Put another way, facilitators are supporters of organisational learning i.e. of individuals learning in common or within a common reference framework which can be organisational or cross-organisational.

Chris Argyris and Donald Schön (1974) have suggested a process model of learning in loops. The role of facilitators could also be described as helping people to learn in more than one loop. Argyris and Schön depart from the simple idea that everybody acts with more or less implicit theoretical considerations and hypotheses. Therefore they distinguish between theory-in-use, a more or less implicit theoretical framework of action, and espoused theory as the consciously developed framing of action. They assume that people normally become active in order to solve a certain problem that arises as a result of their own or someone else’s action. They develop an action strategy for solving the problem having a certain framework of governing variables in mind which remains implicit: general aims they want to reach, certain effects they definitively want to avoid, certain rules that should not be broken, and specific methods they want to employ because they are normal practice. If it is successful, the problem is settled, if not, the action strategy is improved, and so on. This corrective action would be single-loop learning (see graphic).

Double-loop learning then would not only consist of correcting the mistake but asking and reflecting on how it arose, if there is any connection to the framework of governing variables, if something in this organisational framework should be changed, and if the methods employed need to be refined or changed completely, etc.

“When the error detected and corrected permits the organisation to carry on its present policies or achieve its present objectives, then that
error-and-correction process is single-loop learning. Single-loop learning is like a thermostat that learns when it is too hot or too cold and turns the heat on or off. The thermostat can perform this task because it can receive information (the temperature of the room) and take corrective action. Double-loop learning occurs when the error is detected and corrected in ways that involve the modification of an organisation’s underlying norms, policies and objectives” (Smith 2001).

Facilitators are people who support double-loop learning by critical reflection on the conditions of learning and action, and who help to develop answers by questioning the framework of governing variables. Furthermore, facilitators help people to go through these loops of action and learning together, as a group, as a part of the organisation, as the organisation, and as a network of organisations.
Responsibility, in our context, is understood as the individual and organisational ability of responding actively to perceived questions and problems. Accepting responsibility is the aim of learning and working together. The desired outcome of organisational learning is that people, organisations, and networks will assume responsibility for their tasks, situations and perspectives. Individual and collective responsibility is at the very centre of all sustainability in organisational development.

Leading people to responsibility is the main objective of facilitating. People who are responsible or perceive themselves as sharers of a common responsibility, be it in an organisation or a network of organisations, will contribute more actively to asking the right questions and to searching for viable answers. Sharing responsibility defines the difference between communities of practice and communities of performance.

Appropriation, making personal what has been learned, is the aim of all action learning processes. Responsibility is the attitude resulting from such learning. Creating responsibility and making it grow in individuals and groups or whole organisations is the essential task of managers who want to act as leaders. Here is where facilitating and leading coincide.

Facilitators have only a methodical and procedural responsibility for the output of processes they have engaged in to achieve certain results and objectives. They have no power but the power of the rules accepted or established by the participants of such a process. But it is the participants who have to take over the responsibility of implementing and executing the tasks as they are defined and accepted.

Managers have a great responsibility including planning, execution of the plan, and achieving satisfactory results. But they need people, groups of people or individuals to take over tasks in the prosecution of
The concept of responsibility

In order to make these people do their job, managers have the choice of using power to make people do something, or to act as facilitators of common planning and working, i.e. to make people understand the common goal and motivate them to do things properly from their own impulse and will. It is absolutely necessary to be aware of this choice as it establishes something like a micro-climate of co-operation among the people you work with.

Being a manager, you can force people to work, but you cannot force them to work well, at least not in the long run. In order to work well, they must be able to do their jobs, willing to do them and allowed to do them.

- “Able” means they must have learned to perform the task, they must be competent to do it properly, and they need adequate tools and materials to perform the task properly.
- “Willing” means they must want to contribute to shared objectives by completing their task properly. But it also means they must feel a personal need to master a task according to certain levels of quality instead of being mastered by the task.
- “Allowed to do” means the organisation they work in must provide sufficient freedom to take appropriate decisions.

If this general assumption is true for managers, it applies even more to facilitators who by definition cannot order people to do anything. They must motivate them and win them over. There must be some perceived advantage for them to do it - completing a mission, making a valuable contribution to something relevant to them, if possible, something that also creates personal satisfaction. Facilitators have no other way to create responsibility.
Organisations are the distinctively structured and regulated form of purposeful interaction of individuals and groups. Put another way, organisations represent purposeful co-operation of (groups of) people based on shared structures, rules, interests and values. The first and foremost objective of organisations (as of all systems) is striving for survival by fulfilling their purpose. Economic organisations must fulfil a double purpose; they must produce the product or service they have been created for, and in doing so they must produce an economic yield that allows extended reproduction.

Co-operation means working together to achieve individual and common advantage. In more detail, co-operation is defined as joint or jointly directed, co-ordinated action of people for achieving individual and common aims, purposeful interaction.

2M7.1 Organisation

It seems self-evident that organisations are a structured and regulated form of people interacting with each other, and to facilitate co-operation it is essential to understand organisation this way. But there are many more theories – in economics, law, political science, etc. – stating that organisations are characterised by a distinct framework of structures and rules, and if people are mentioned at all, they are in such a framework. In this view, organisations are containers with people in them.

At the other extreme, there is a sociological theory of micro-politics (Bosetzky 1995; Burns 1961) that primarily conceives organisations as a number of individual people and groups of people with conflicting individual or group interests battling for power and influence, so that
the organisation as a whole, its basic purpose and raison d’être, seems to disappear in a haze of contradicting views, interests and orientations.

With our definition, we want to stress the fact that certainly hierarchical structures and rules make a difference, but it is just as certain that through all micro-political irritations it is people who govern the success or failure of organisations. Success or failure may depend on many factors, but of primary importance is the quality of work and the quality of the organisation in which this work is done. It is the quality of co-operation which really makes the difference.

We are looking at organisations with the eyes of facilitators, experts of communication who have the task of leading groups to successful co-operation. It is a view from a perspective of responsibility. Hence, our definition of organisation has a simple question behind it: What understanding of organisation helps to make the organisation successful?

2M7.2 Co-operation

Successful co-operation, within or between organisations, depends on a number of aspects which must come together and be accomplished by the co-operating partners (Becker et al. 2007). First of all, without communicating with each other about their interests, partners will not be able to establish joint projects achieving predefined aims and solving perceived common problems. Transparency - having the vital knowledge necessary to achieve the common purpose the network is pursuing - is a necessary condition to enable each partner to measure the perceived advantage of networking and co-operation as compared to competition. Possible conflict situations can only be settled in a sustainable way if there is mutual readiness to except compromise and to invest money, time and emotions into the common endeavour. Networks are exchange mechanisms striving for a win-win situation. Without commitment and mutual reliability, trust as a necessary condition of sustainability will not grow, and without trust none of the other elements will prosper.
Facilitating can become an essential factor in building a trust-based culture of co-operation because it is completely oriented towards creating transparent problem-solving processes, along with an open way of dealing with conflict. Facilitating establishes simple and transparent rules of fair exchange, which in many cases become the procedural charter of networks. Obviously, facilitating cannot guarantee reliability, but experience shows that transparent communication creates a higher degree of commitment and hence, reliability. Mutual reliability (reciprocity) is the most important condition for creating and maintaining trust relationships and creating social capital.

A culture of co-operation is a necessary condition for developing communities of practice into communities of performance, i.e. communities that do not just work together but work together to achieve something in common, learning organisations.

_Cf. Message 2M15: Learning networks - constructing social capital_

_Cf. Message 2M9: Communities of practice and self-organisation_
2M8.1 Managers

We conceive managers as people responsible for transforming the knowledge and competence of their personnel into products and services useful to other people and into economic success for the organisation. Managers can also be leaders.

2M8.2 Leaders

Leaders are people who take responsibility in building common sense for common action.

As the definitions show, in our view, management and leadership are not identical, but they may overlap. Here we suggest that if management is exercised in a facilitating way it may come close to this overlapping of both functions. No doubt, both management and leadership can be trained, but there it must be accepted that leadership can only be trained to a certain extent since it includes features of personality which one either has or does not have.

Nevertheless, facilitating processes in network contexts has much to do with managing communication and action but little to do with management as an official, hierarchical function. Facilitating, above all, means supporting and leading people to fruitful thinking, planning and co-operating. Therefore facilitators, whether they are managers or not, have a temporary leadership function. They may be managers at the same time, but then facilitating is a distinct way to be a manager. In our view, managers who are good facilitators tend to be leaders, too.
While management is responsible for organising a company, managers leading a company are responsible for organising a company in a way which makes people want to work and learn.

Hence, to resume the management function we refer to a management and leadership philosophy which comes close to this idea. John Adair’s action-centred model conveys such a philosophy, aiming at the overlapping of both functions. Adair, a British consultant, goes beyond the simple organisational function of management and frames a notion of management that includes leadership. For him management has three core responsibilities:

- The task
- The team
- The individual

The three overlapping circles (graph) represent a functional relationship (Adair 2008). Their basic principles are:

- “Achieve the task. The task needs a team since one person alone cannot accomplish it.
- Build and maintain the team. If the team needs are not met the task will suffer and the individuals will not be satisfied.
- Develop the individual. If the individual needs are not met the team will suffer and performance of the task will be impaired.”

The following summary describes a catalogue of activities belonging to each of the three core responsibilities (Businessballs 2008).

**2M8.2.1 Task**

“Your responsibilities as a manager for achieving the task are:

- Identify aims and vision of the group, purpose, and direction - define the activity (the task)
- Identify resources, people, processes, systems and tools (inc. financials, communications, IT)
- Create the plan to achieve the task - deliverables, measures, timescales, strategy and tactics
- Establish responsibilities, objectives, accountabilities and measures, by agreement and delegation
- Set standards, including quality, time and reporting parameters
- Control and maintain activities against parameters
- Monitor and maintain overall performance against plan
- Report on progress towards the group’s aim
- Review, re-assess, adjust plan, methods and targets as necessary”
2M8.2.2 Group

“Your responsibilities as a manager for the group are:

- Establish, agree and communicate standards of performance and behaviour
- Establish style, culture, approach of the group - soft skill elements
- Monitor and maintain discipline, ethics, integrity and focus on objectives
- Anticipate and resolve group conflict, struggles or disagreements
- Assess and change as necessary the balance and composition of the group
- Develop team-working, cooperation, morale and team-spirit
- Develop the collective maturity and capability of the group - progressively increase group freedom and authority
- Encourage the team towards objectives and aims - motivate the group and provide a collective sense of purpose
- Identify, develop and agree team- and project-leadership roles within group
- Enable, facilitate and ensure effective internal and external group communications
- Identify and meet group training needs
- Give feedback to the group on overall progress; consult with the group and seek their feedback and input”

2M8.2.3 Individual

Your responsibilities as a manager for each individual are:

- Understand the team members as individuals - personality, skills, strengths, needs, aims and fears
- Assist and support individuals - plans, problems, challenges, highs and lows
- Identify and agree appropriate individual responsibilities and objectives
- Give recognition and praise to individuals - acknowledge effort and good work
- Where appropriate, reward individuals with extra responsibility, advancement and status
- Identify, develop and utilise each individual’s capabilities and strengths
- Train and develop individual team members
- Develop individual freedom and authority”

Adair defines action and improvement cycles for task management with corresponding requirements for dealing with groups and individuals and, as we would put it, for developing communities of practice into communities of performance.
2M9.1 Communities of practice

A community of practice (CoP) is a congregation of people with mutual engagement, a joint enterprise and a shared repertoire of meanings (Wenger 1998, 45ff.). More explicitly, a CoP shows three fundamental elements:

- Sharing a domain of knowledge which creates common ground and a sense of common identity and, as a consequence, legitimises the community
- Caring about this domain, continuously re-creating the social fabric of learning
- Sharing practices that people are developing to be effective in their domain

Such CoPs have a life cycle and may show varying stages of maturity, from their beginnings to their decline and end.

The concept of the CoP helps in understanding how groups of people in or across individual organisations learn, and also how organisations can learn. It is deeply rooted in the principle of self-organisation.

2M9.2 Self-organisation

Self-organisation related to groups of people or organisations means that a number of individual group factors such as competences, attitudes, methods used, and certain processes with good or bad results, through their interaction (basically attraction or repulsion in common experiences) spontaneously lead to the emergence of a new, relatively
stable structure, method, process or logic of action that is perceived as more effective and/or efficient. For example, Wikipedia is an encyclopaedia that grows according to this principle of self-organisation, which is characteristic of open systems.

Facilitating can be a very useful support method that uses self-organisation principles to render self-organisation processes of CoPs less casual and accidental.

2M9.3 Communities of practice …

are everywhere, and we all belong to a number of communities of practice wherever we co-operate more or less loosely with other people. This may be at work in our department and across departmental lines, in a business process or in project teams, or in our leisure activities such as sports, charity work, travelling etc. Networking in whatever context is a typical form of participation in a CoP.

Communities of practice vary in their characteristics; they can be defined in three ways (Wenger et al. 2002):

- What they are about (their domain)
- How they function (their community)
- What capabilities they produce (their practice)

Participation in a CoP is voluntary, and it is obvious that we do not belong to all CoPs with the same degree of commitment and intensity, but we contribute to them and take advantage of them - and we learn in them. These varying degrees of commitment may change over time and we may assume different roles within such a community.

Communities of Practice have a life cycle with five typical phases.

- In Phase 1 (potential) one or several persons start promoting a certain topic or activity.
- Phase 2 (coalescing) is marked by the emergence or formation of a basic structure with more or less clearly defined aims, tasks and ways of communication.
- In Phase 3 (maturing) begins what actually characterises the CoP, the development and exchange of knowledge and competence. The expansion of activities usually leads to a growth in the number of people belonging in one way or other to the community. With the growing stock of shared knowledge, the models and practices, aims, tasks and ways of communication are permanently revised and adapted to the changing needs of the community’s members and their common enterprise.
- Phase 4 (stewardship) is reached when most of the CoP’s members have achieved the level of competence and sense of responsibility which is required to cope with the common enterprise and its tasks. From now on the quantity of information and knowledge fed into the common stock of knowledge is smaller than the quantity of information and knowledge extracted from it.

- In the last Phase 5 (transformation) the community becomes less important as a reference point and common marketplace, either because the exchange with other sources of knowledge becomes more important or due to the reduced relevance of the topic which originally led to the creation of the community.

Communities of practice may or may not follow this life cycle but these phases help us to understand in which phase of maturity they are and how the self-organisation process in such a CoP can be supported from inside or outside. A CoP sooner or later enters one of the two patterns of functioning depicted in the graphic below, which represents the downward spiral of less effective and the upward spiral of effective communities of practice.

Two Patterns of Organizational Performance for Communities of Practice


**2M9.3 ... and communities of performance**

Once communities of practice have succeeded in establishing an upward spiral of effectiveness and efficiency they tend to become more than a mere community of practice. During the first three phases of their
Communities of practice and self-organisation

life cycle, CoPs basically are more or less spontaneous mechanisms of exchange. In Phase 4, called Stewardship, a CoP is at the peak of its effectiveness; it has reached a state of affairs where it usually achieves what it has undertaken to attain. Just as important, people have developed the sense of belonging and identity to their community which is necessary to feel responsible for the common enterprise. In order to distinguish this phase from all the previous phases, we call this a community of performance (CoPe) (Franz 2003a). It goes well beyond mere exchange and mutual learning; these properties continue to be the main characteristics and to represent the core purpose of the CoPe, but CoPes achieve effectiveness by practicing efficient mechanisms of facilitation and management and, at the same time, they are deeply immersed in the sense of common usefulness, achievement and success. In our view, one of the foremost missions of management and leadership is to lead CoPs to this stage of CoPe and, once arrived there, to keep alive and perpetuate this phase of stewardship as long as possible. Without a corresponding style of management and leadership (see Message 2M8) this will not be achievable.

Communities of performance are very advanced forms of communities of practice; they typically are or exist in learning organisations. They represent the social spirit of organisations and networks with a developed internal culture of learning and change, and they exist in a framework of an explicit common purpose and strategy and continuously managed or co-ordinated action to implement this strategy. If they are institutions, they usually have a self-image of being service agencies to their clientele. Professional organisations or associations of companies within an industrial sector tend to develop from mere initial communities of practice to such communities of performance with semi- or fully institutionalised agencies.

A facilitation style of leadership and management is just one necessary requirement for becoming a community of performance. A second one for reaching and perpetuating this phase is effective competence management, i.e. management of development, use and maintenance of the growing and changing competence incorporated by the individual people belonging to a CoP and by the whole functioning body of such a CoP. Usually this is called knowledge management (see Message 2M10), but we prefer to speak of competence instead of knowledge; competence being defined as the ability of individuals or groups, also organisations, to decide, act and learn adequately with respect to the functional and situative context.
# 2M10  
## Basic concepts of knowledge and knowledge management

### 2M10.1 Knowledge

Defining knowledge is difficult as there are many different approaches. Our own definition should be seen in a constructivist and systemic as well as a neurophysiological context, as was roughly described in Message 2M4 on perception and communication. Moreover, it should not be forgotten that our application context is facilitating co-operation. Knowledge must be distinguished from data and information.

- Data are signs or structured accumulations of signs - things seen or heard or sensed in any way - figures, statistics, texts, pictures, etc. – which an individual or organisation (a system) may or may not perceive. They are there, independently of me.
- Data become information “for me” once they are perceived as different from existing data and able to affect existing information or knowledge.
- Knowledge is selected information embedded in the system of existing knowledge and experience (as well as physical and genetic dispositions) with proven or expected relevance (sense and meaning) for present or future contexts of the life of an individual or an organisation.

It is important to recall that we are not talking about knowledge that is separate from people, such as books, databases or similar stocks of recorded knowledge. For our context, these sources only contain data which are transformed into information and knowledge by active people. The way we use search engines on the internet is symptomatic of our approach.

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*Cf. Message 2M4: Basic concepts of perception and communication*

*Cf. Chap 3.1: The didactics of action learning*
Our context of talking about knowledge is co-operation and facilitating communication for action and learning. Therefore one of the logical conclusions derived from the above definition has radical consequences for facilitating: If knowledge is the result of data and information selectively perceived and processed by our brain according to relevance to the perceiving system (individual or organisation), knowledge is always individual knowledge and cannot be transferred or taught. It can only be offered to others as data, and only these others, the possible receivers, can decide whether, how and how much of this data they perceive and accept as information. Only the use of such information in practical life contexts will decide whether this information is embedded into existing knowledge, rejected or modified.

The consequences from this conclusion for co-operation and facilitating co-operation are manifold.

- In order to make sure that people working together have, as far as possible, the same understanding of what they are expected to do or want to achieve together, it is useful to create collective situations and contexts of learning, decision-making or planning. Making people participate in a common process of learning and creation will enhance the probability that these people will receive the same data and experience similar conditions of processing this data into information that is meaningful for the common work context.
- Only an ongoing active exchange about the experiences made using this information in work will create a common stock of knowledge about this common work context and foster the development of team spirit and identity.
- Applied to organisations and networks, this means that it is useful to allow for and actively support the development of communities of practice by creating favourable conditions of exchange and common learning.
- One favourable condition is having people trained as facilitators, i.e. people who render communication more effective and efficient, not least because this helps such communities of practice to learn how to create favourable conditions of exchange and learning themselves.
- It is not knowledge as something separate from people, stored away in databases that should be of primary concern for strategies of knowledge management; it is more important to develop the individual and collective competence of co-operation in organisations or across organisational borders or, as we have also called it, the competence of co-operativity. It is for this reason that we prefer to talk about competence development or management instead of knowledge management.
2M10.2 Competence development

Traditionally, organisational design (and usually knowledge management, involves designing organisational structures, rules and processes) has focused on creating structures, systems and roles. Contrary to this traditional approach, competence development focuses on creating favourable conditions of self-organisation. The actual aim of competence development is the creation and development of “aliveness” (Wenger et al. 2002), openness and creativity. Instead of knowledge management, Etienne Wenger, Richard McDermott and William M. Snyder speak of “cultivating communities of practice”. They have formulated five design principles for such a type of organisation, each of them culminating in the statement that it must come from inside the community instead of being imposed on it. Put another way, the community can only be designed by itself.1

1. *Design for evolution.*

There is no general remedy for how to design a successful community of practice (CoP); a community will create its own mix of regularities and rules. But in any case it is important to create space for new ideas, change, integration of and adaptation to new members, and to introduce simple rules of functioning (e.g. regular meetings, a common web platform, etc.) that foster dynamics and allow for evolution. The community will find its own pace of change and continuity in the tension between internal needs and external pressure (see principle 7).

2. *Open a dialogue between internal and external perspectives.*

Communities often have an innate trend of closing down, of excluding external influences and of protecting their expertise. But to remain open to new ideas and new people they need external views and contrast. This strengthens their own expertise and their pioneering spirit. Confronting communities with what other communities do and how other communities function helps them sharpen their critical assessment of their own performance. Common debates on new impulses foster the development of shared meaning and create common sense.

3. *Invite different levels of participation.*

People participate in communities for very different reasons, some for learning, some for maintaining personal relationships, others for sharing the joy of fruitful communication at work. So “good community architecture invites many different levels of participation.” Not all need to participate at the same level of intensity, not all can be active core members, at least not at the same time. People also need to change their level of participation according to their individual needs and possibilities.

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1 All comments on the seven principles are a mix of excerpts from Wenger et al. and own observations fitting into their pattern.
It is also important to offer small occasions and roles where people can make a valuable contribution or even excel. All this creates a plurality of perspectives, which is part of the richness of a community.

4. **Develop both public and private community spaces.**
   This principle corresponds with two former ones. CoPs should organise various types of meeting and decide from event to event how formal and how open the meeting should be. Community events should usually provide time and space for both formal and informal exchanges across all levels of participation.

5. **Focus on value.**
   Communities, along with focusing on the needs of their members, should have a value focus that delivers a valuable contribution to the common framework organisation and its objectives. The sense of belonging and identity is then made up of the internal value a community may provide to its members and of the measurable quality contribution to the common framework organisation or network and its purpose. It is important to make that visible, along with how the community has been able to achieve it. Sometimes small or spontaneous ideas mentioned in an informal way may grow to become important and significant contributions when they meet a receptive mind. Such processes should be traced and made visible within the community.

6. **Combine familiarity and excitement.**
   Along with a few formal routines of commitment creating stability, communities should strive to become a protected and yet exciting place for those who need somewhere to expose half-baked ideas and concepts which are still too soft to be exposed to a larger public. They should also be a test bed of inventions and other novelties. Conferences, meetings, and workshops dedicated to offering such creative situations can provide the necessary excitement which makes learning easier and more intense.

7. **Create a rhythm for the community.**
   Communities should create their own specific rhythm and tempo of functioning. Along with the familiar regularity of meetings communities will have to find their own pace and frequency of creating events for exchange and learning. The tension must be found and felt between business as usual and exciting new projects, small and large gatherings, inside and outside oriented events, and going slow and racing.

Many of these principles can also be found, although in a very different framework and wording, in our own design concept of learning organisations and networks (Message 2M15: Learning networks – constructing social capital).
Project work as we define it here is not just working in projects. For working in projects, all other Messages and all Tools may be of some help, and we have provided six specific tools for viable projects in the C section of the Tools Chapter.

What we are aiming at here is to define project work as a professional work style, as the way of thinking and tackling almost all aspects of work as projects. Every problem, every task, every event, every agreement taken or promise made, every purposeful co-operation within or across organisational boundaries can be defined as a project.

As we said when presenting the SMART tool, projects are the pursuit of defined objectives in a defined time span with defined resources. These co-ordinates of project work (see graph) are applicable to almost every activity. Several of the simplest tools in this book are conceived to make this way of thinking easier. The most important one is Tool 4A1: To-do form. This basic tool helps defining all decisions as projects, asking for:

- The what, i.e. in this case the aim or aims pursued with the decision which is the origin of your task
- The how, demanding identification of the way it is to be carried out and the resources needed or available
- The when, i.e. the time available or needed for achieving the defined aims
- If you take such decisions not only yourself but with others, the tool also asks you who will do it or be responsible for having it done or organising it
- Finally, the to-do form asks you to check whether the activities agreed have been completed

Cf. Chapter on Tools, section C

Cf. Tool 4C1: SMART - five basic rules for planning a feasible project

Cf. Tool 4A1: To-do form
Thus, the tool not only supports you in planning and organising your own and your community’s work in a practical manner, but if applied in the way described here it also fulfils an ongoing evaluation function following the classical control cycle of planning, doing, checking and new planning or doing better (see Message 2M12). The aim of evaluation is goal attainment and improvement as well as learning about how the project was carried through successfully or how to do things better the next time. Learning in and for work is a hidden agenda of such a project work style, and this must be made a normal and visible part of everyday work.

In other words, working in this way of defining decisions as projects, planning and carrying them through as projects and evaluating them as you do with projects, makes it easier to build up a capacity and characteristic which is key to co-operation in and across organisations, and which builds reliability or, as we have called it in Message 2M6, responsibility. Say what you are going to do and do what you said you would do. The consistency of words and actions is a fundamental condition of organisational quality. Of course, it is always appreciated when you do better than you promised. But promising more than what is possible will soon label you as unreliable, weaken the common achievements, and finally exclude you from co-operation or bring the co-operation to an end.

Cf. Message 2M12: The nature of quality: continuous improvement, continuous learning

Say what you do. Do what you say.
The nature of quality: continuous improvement, continuous learning

2M12.1 Quality definition of ISO 8402 (used for ISO 9001 and 9004)

“In this International Standard, quality is defined as the totality of characteristics of an entity that bears on its ability to satisfy stated and implied needs.”

This is the sober definition of quality as it is used in the framework of the International Standardisation Organisation (ISO) and the corresponding institutions at European (EN) and national levels (e.g. BSI for the UK, DIN for Germany). “Entity” here means product or service or process, also an organisation or a person (p. 4). Depending on how it is implemented it can work quite well for products and material processes, even for most services and for persons regarded as an abstract workforce as it is directed towards the organisation of functioning structures and processes. ISO 9001 is a quality management system.

However, for a holistic understanding of organisations as essentially purposeful co-operations of people it is not sufficient just to keep structures and processes functioning. Direction, orientation, meaning, and making sense become essential elements of what an organisation needs to develop its internal functioning as a community and its relationships to its natural and societal environments.

2M12.2 Total Quality

Total Quality does not define quality, since everything has quality. Therefore Total Quality approaches, such as the American Malcolm Baldrige Model or the Excellence Model of the European Foundation for Quality Management, do not set out to be quality management methods
but models for management quality. The word “quality” does not appear in the Excellence model of EFQM. A 5 year study covering no less than 600 companies participating in the Baldrige award contest shows that, after implementing the TQM system, they outperform by far the various control groups of companies without such quality approaches. Depending on the control group used, the mean outperformance ranges from 38 to 46%. And this is not only true for large companies; in fact, for SMEs this outperformance is significantly higher. The study “clearly indicates that effective implementation of TQM principles and philosophies leads to significant wealth creation” (Hendricks/Singhal 2001).

With this base line argument in mind, our main concern for quality in the context of this book is the quality of (the management of) organisations and networks. Throughout the Messages, we have put forward the idea that facilitating can help in making communication and co-operation in and across organisations more effective and efficient, enhancing the degree of responsibility in communities of practice with the aim of developing them into communities of performance. This plain idea implies conceiving such development as processes of learning and improvement.

Quality is often reduced to not making mistakes. There may even be ways of reducing defaults, mistakes and errors to zero, but they evidently only apply to the execution of continuously repeated work processes. Zero default programmes cannot be applied to processes of thinking up new ideas, planning new strategies and developing action plans for implementing them. It is our conviction that most of the serious defaults and mistakes in organisations are caused by management as a result of insufficient and ineffective management of communication. There is no programme for achieving zero default communication but facilitating methods can help to render communication more effective and more efficient. Above all, thinking in terms of facilitation ensures that careful and diligent communication is a prerequisite for successful action, greatly reducing misunderstandings, and that organising active participation is an important factor in preparing effective implementation of what was planned.

Quality may have many faces; for management, one of them lies in the simple phrase: “Say what you do and do what you say”. One could add: “and reflect on why some things work out and others don’t when planning to do it better the next time.” This short sequence reproduces the Deming PDCA control cycle of plan: do, check, act for improvement.

The whole EFQM Excellence Model constitutes such a control cycle for the management of an organisation or any part or process of it with the ultimate aim of learning and improvement (innovation).

Basically, the whole model and its philosophy is captured in a catalogue of very specific “how statements” (How we make sure that …)
which provides the basis of the self-assessment as well as of the external assessment, if you want to have your status confirmed by an authorised expert. While the five first elements, the so-called enablers, get you to describe how you manage to do what you want to do and how you do it, the final four elements prompt you to describe and measure the results of what you have done. The catalogue is a perfect disguise for the two fundamental questions of all quality approaches:

- Are we doing the right thing?
- Are we doing it right?

2M12.3 Elements of management quality

- Leadership: The control cycle established by the nine criteria starts in this first one by asking whether those who are responsible for the success of the organisation are aware of this responsibility towards the five stakeholders of the organisation whose expectations are to be satisfied. Here is where the substantial and economic objectives and values of an organisation must be stated.
- Policy & Strategy: Logically, here the (self-) assessment catalogue asks how you are pursuing all the objectives and values you have been claiming under leadership, which policies and strategies are in place, and how they are implemented.
- People: This element requires details of how you ensure you have the right people in the right places, how you treat these people, and how you safeguard their continuous development according to the objectives and strategies formulated in the first two elements. The

Cf. Tool 4D2: The five satisfactions (stakeholder analysis)
The nature of quality: continuous improvement, continuous learning

The fact that “people” is a separate element (the corresponding element in ISO 9001 is listed under “Management of Resources” along with machines and materials) and has the second highest value in the scoring system of assessment after customers, shows that organisational culture and participation are of great importance in this system.

- Partnerships & resources: Here you are requested to describe how you manage your resources and the corresponding, mostly contractual, partnerships with the suppliers of machines, materials, advice, information, and sometimes also people.

- The element “Processes” gets you to describe how you have structured what you do in order to pursue your aims and strategies.

- The following four elements simply require you to state and measure your performance in achieving all the substantial and economic objectives and values, referring to the main stakeholders and the overall performance of the organisation. They ask for results.

The whole model invites you to set off on a never-ending journey towards the moveable target quality, a journey of continuous learning and improvement. It demonstrates a perfect understanding of the circumstance we have been describing throughout this book: that learning means appropriation through applying what has been learned from previous performance. It all builds on the indispensable congruence between saying and doing. To do what you said you would - reliability - is the basis of self-respect of an individual person just as well as of a group of people, an organisation. The readiness to act in congruence with your learning is the dominating feature of a learning organisation.

2M12.4 A basic theory of quality

Improvement is a change in the degree of quality. So far, we have been using quality concepts such as customer orientation, improvement and TQM without trying to explain what quality is. Nearly all authors avoid this explanation by giving specific, individual product or service-related definitions. However, for organisation development and consulting purposes it is of vital importance that all persons involved have a common understanding of what quality is. The shortest possible definition is: \( xS + yP = nQ \). Quality is the intersecting quantity of satisfaction and perfection from each of the participating perspectives (see graph). In other words, quality is a

Five enablers. Four result elements.
multi-perspective construction which has to be consensuated in a co-operative context.

\[ x \cdot \text{Satisfaction} + y \cdot \text{Perfection} = z \cdot \text{Quality} \]

Quality itself can only be defined as the perceivable essence of things (products), actions (performance) and impacts (e.g. satisfaction). It is their perceived property. As it depends on individual perception, it is objective as well as subjective, which means that each perspective on a specific quality item is dependent on the interests and expectations of the perceiver. Thus, quality of organisation is by no means the basis of harmonious community concepts, as “community of performance” and “community of practice” might suggest. Quality is the object of struggle. Also, power has quality.

As such quality might have (objectively or conventionally) absolute dimensions, but it is definitely also relative to “my” interests and expectations, hence it is the result of a social definition process. Quality is, like money, a universal currency, unlimited in qualitative terms but limited in terms of quantity. Quality is a perceived or defined property of an aim or result and of the process of achieving it; a social relationship, and a universal principle. Just like a wheel, it is a moveable target (see graph). More than a “fact” (in Latin: what has been made), quality, like truth, is an attitude. It is an attitude for individuals and a culture for organisations. It concerns all dimensions of an organisation, namely its potential (people, technology, materials), its process, and its performance (products, services, economic viability).
Quality is locked into the concept of commodity, but primarily to its use value. The same applies to the production of commodities. Thus, in a company it is not sufficient to look at the production processes; without looking at the working processes you will not understand very much about the organisation. It is of crucial importance to understand that quality is a market concept (ideally) based on the freedom of decision and the equality of conditions. Quality is a contract. This explains why it is a concept based on a democratic and participative core that is opposed to undemocratic structures of dominance and power.

Obviously, the fact that quality is primarily locked to the use value of products and services cannot hide that it cannot be stripped of its twinning relationship to their exchange value, ultimately their price. If I cannot afford a Mercedes Benz, my subjective range of quality will focus on a car from a lower segment of the car market.

However, the essence of these considerations is that quality is a concept based on interest (hence perspective or standpoint) and competence (knowledge and experience), only measurable in relative terms of satisfaction and perfection.

Applied to organisations, we can say that a learning organisation is a system of improvement and self-improvement (enhancement of competence) of individuals, groups, and the whole organisation, including their formal and informal purposes, structures, rules and values. That improvement and self-improvement is directed towards achieving purposefully defined aims via a community of performance.
Small and medium sized enterprises (SMEs), that is, companies with up to 250 employees, constitute the engine of most of the world’s economies. In the enlarged Europe, some 23 million SMEs represent 99% of all enterprises and provide about 75 million jobs (EC 2008).

SMEs are a major source of entrepreneurial skills, innovation and employment, but they can be the companies most affected by the globalisation process and are often confronted with certain difficulties and barriers; for example, SMEs frequently have difficulties in obtaining capital or credit, particularly in the early start-up phase.

Therefore, support for SMEs is one of the policy priorities at national and European level. Policies for SMEs could address:

- Education and training
- Research and technological development
- Information diffusion and accessibility for firms (databases, websites, information centres - all of a general, non-customised nature)
- Policies providing customised services to firms (for example, environmental services, labelling, certification and testing, participation in exhibitions, transportation intelligence, logistics, design or new production techniques).
- Policies supporting labour recruitment
- Policy backing the internationalisation process
- Policy for improving quality development in firms
- Policies for setting up incubators of small firms
- Policies improving venture or risk capital availability

In order to avoid distortions in the Single Market, the European Commission has provided a legally secure and user-friendly definition of SMEs in the Recommendation 2003/361/EC. Its recommendation concerns all Community policies applied within the European Economic Area.
Area favouring SMEs and it is addressed to the Member States, the European Investment Bank and the European Investment Fund.

‘The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euros, and/or an annual balance sheet total not exceeding 43 million euros.’ (Extract of Article 2 of the Annex of Recommendation 2003/361/EC)

The Recommendation also formally identifies sub-categories of SMEs: medium-sized, small and micro.

<table>
<thead>
<tr>
<th>Enterprise category</th>
<th>Headcount</th>
<th>Turnover or</th>
<th>Balance sheet total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium-sized</td>
<td>&lt;250</td>
<td>≤€50 million</td>
<td>≤€43 million</td>
</tr>
<tr>
<td>Small</td>
<td>&lt;50</td>
<td>≤€10 million</td>
<td>≤€10 million</td>
</tr>
<tr>
<td>Micro</td>
<td>&lt;10</td>
<td>≤€2 million</td>
<td>≤€2 million</td>
</tr>
</tbody>
</table>

At regional level, one of the transversal strategies put in place by relevant local stakeholders, such as Chambers of Commerce, local development agencies etc., for supporting SMEs consists of encouraging co-operation and networking. Co-operation and networking could cover a wide range of areas such as training, R&D, quality, internationalisation - actually nearly all the policy areas enumerated above. In this, Action Learning and facilitating techniques have proved to be among the most effective and powerful methods for initiating and sustaining the SME empowerment process and for making co-operation in and outside the single company easier.

See Message 2M14: Basic concepts of networks and clusters
2M14 Basic concepts of networks and clusters

2M14.1 Networks

Networks represent a specific, relatively open and flexible form of loosely coupled, yet purposeful co-operation between individuals and individual organisations on the basis of shared structures, rules, interests and values.

2M14.2 Clusters

Clusters are regional aggregations of mostly small and medium-sized enterprises (SMEs) with varying forms and intensities of co-operation. According to Porter (1998) they are labelled as a ‘cluster’ when they take on the form of “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities”. In this particular context, companies compete but also co-operate, interacting with their external environment and creating dynamic mechanisms of knowledge creation and use.

The growing interest in geographical concentrations of firms in the same or related industries for economic growth processes has stimulated a wide international debate which has resulted in an overproduction of theoretical concepts and ‘labels’ best represented by the notions of ‘clusters’, ‘industrial districts’ (Becattini 1989), ‘learning regions’ (Cooke 1996), ‘milieux innovateurs’ (Aydalot, 1986; Maillat 1998), ‘local productive system’ (Courlet 2000) and ‘regional innovation systems’ (Braczyk 1997; Howell 1999).

Cf. Message 2M13: Basic concepts of SMEs

Cf. Message 2M15: Learning networks-conducting social capital
There is a large semantic ambiguity in this wide stream of literature because many researchers apply these labels carelessly, as if they were synonyms, while others devote considerable effort to trying to define clear theoretical boundaries among them.

Porter introduced the term cluster with the meaning of both a territorial and functional group of interconnected companies and associated institutions. He did not provide clear criteria and “operational rules” for identifying clusters. The geographical scale of clusters is extremely flexible, ranging from sub-regions, to regions and even to nations. The sectoral boundaries are even more flexible because in Porter’s definition, in order to identify interconnected companies, suppliers, service providers and associated industries, the boundaries need to be shifted from the focus industry upstream and downstream, horizontally and vertically, depending on the economic interrelations linking the value chains of firms and institutions.

As Porter has put it, what is typical of a cluster is its organisational nature: “Clusters represent a kind of new spatial organisational form in between arm’s-length markets on the one hand and hierarchies, or vertical integration, on the other. A cluster, then, is a new way of organising the value chain. A cluster of independent and informally linked companies and institutions represents a relatively robust organisational form offering advantages in efficiency, effectiveness and flexibility”. (Porter 1998:79)

Clusters can therefore be considered as specific organisational forms whose main characteristic is that they are particularly capable of favouring knowledge creation, use and exchange within local socio-economic contexts.

**Co-operative agreements**

**2M14.3 Co-operative agreements**

In the cluster, co-operative agreements represent a family of arrangements between two or more organisations. These could embrace a wide range of arrangements, from cross-share-holding deals, to licensing arrangements, formal joint ventures, and informal co-operative deals. Collaborative ventures vary from highly formal long-term agreements linking two or more organisations, to short-term consortia of organisations engaged in a relatively short-term project, i.e. from shared research to formal joint ventures and minority equity participation.

Collaborative ventures can be categorised as vertical, horizontal, or diversified.

*Vertical backward* (or upstream) alliances represent co-operation between a business and its suppliers (e.g. including co-operation with
the suppliers of capital goods such as machinery and tools), while vertical forward (or downstream) is between a business and its distributors or customers. Vertical co-operation may focus, for example, on issues of quality and delivery.

Horizontal co-operation between firms in the clusters has two main aspects. Firstly, it takes the form of fair competitive behaviour, such as refraining from labour poaching or from setting prices below rival costs, sharing of technical information, and subcontracting out to less successful competitors (Brusco 1982). Secondly, it can converge to provide joint programs for the provision of collective goods, notably training or education and research and development, but also medical care and unemployment insurance.

Finally, diversified alliances are between companies in industries which are not closely related to each other (e.g. usually important from a portfolio perspective for businesses to enter into a new competitive arena).

**Networking in clusters**

Co-operation in clusters usually establishes links between local institutions and the economic performance of firms and economies. As a consequence, in a cluster we need to take into account not only the firm’s relations with other firms, but also the institutional context around the firm (e.g. development agencies, intermediaries, public authorities, educational institutions etc.). In this context, the complexity of relations between individual firms, and between firms and institutions implies varied typologies of structures, which can also be considered as networks. Relations of interdependence and collaboration between all types of local actors characterise these network forms of organisation. For example, inter-firm alliances may be self-organised or supported by some catalyst such as public and semi-public institutions.

Public institutions are organisations that are in total or almost total public ownership, that operate in the targeted area by providing incentives, services and/or control mechanisms to the firms, and that follow general goals for the development of the territory. Examples of public institutions are: local government, local development agencies, public research centres, etc.

Semi-public institutions are organisations that are privately owned and operate in the area involved by the project, providing general incentives and services. Despite their private ownership, services provided by semi-public institutions have a public/collective nature. Semi-public institutions might require payment for their services, but the most
important features are those services that normally _have a general (non-customised) character and require a rather limited payment_. Examples of semi-public institutions are: associations of firms providing non-customised and collective goods such as information or technical support to firms, non-profit organisations for economic development (foundations, etc.), industry education and training associations, and technological institutions.
The following theoretical deliberations try to encompass the 14 previous Messages in one conceptual framework. They constitute a learning organisation development theory which here is also applied to networks. Networks have similar conditions to projects in organisations or groups of managers in matrix organisations where different experts from different parts of the organisation work together without a hierarchy. The project management responsibility is no more than a delegation of powers for the specific purpose. In networks, sometimes this delegation of powers may not exist; organising co-operation towards common objectives on the basis of joint strategies may be the only defined task of a network manager or facilitator. This definitely applies when networks are the project and when projects are driven by networks where the participants represent different organisations. As we have said before, learning organisation management in networks can be summarised as leadership without hierarchy, building social capital.

Therefore this Message contains two large sections divided internally by sub-headings.

- Part 1 deals with networks and social capital,
- Part 2 is dedicated to our theory of (network) management as facilitation.

2M15.1 Networks and social capital

2M15.1.1 Learning networks?
Initiating, building or developing co-operation of SMEs, in clusters or independently, is a task which can be roughly described as network development. The task is normally taken over by public or semi-public agencies
or by private agencies with a public or semi-public mission and funding, sometimes also called meta-organisers. Their function is to discover, orient and improve the potential of a network or cluster to enhance the individual performance of organisations belonging to the network as well as the performance of the network as a whole. Enhancement of the control potential is also the aim of learning, be it of individuals, organisations or of networks. However, it may be doubted whether networks can learn. Individuals can learn, organisations can learn, but can networks learn?

2M15.1.2 Can organisations learn?
We understand organisations as social organisms constituted of people (members) and groups of people on the one hand, and by formal and informal purposes, structures, rules and values on the other. Purposes, structures, rules and values only become an organisation by people enacting them. Without their interaction more or less conforming to these rules, the organisation does not come to life. Hence, organisations are the distinctively structured and regulated form of purposeful interaction of individuals and groups. Consequently, the question of whether organisations can learn must be answered with ‘yes’ and ‘no’. It is ‘no’ in so far as they are an objectively existing construction of purposes, structures and rules which can only be altered by people who have learned to do so. (How they have learned to do so is a very important variable of how, what and how much organisations learn.) But it is ‘yes’ when we consider organisations to be a purposeful interaction of people (co-operation) who apply and modify these structures, rules and values or even replace them by new ones. By doing so, they learn in organisation and in being the organisation. Even so, one could object that it is still the individuals who learn. The answer to this could be sought by posing a counter-question: Would they learn what they learn without belonging to this specific organisation? Definitely not! The conclusion is that organisations learn as their members learn, individually as well as collectively, being the organisation and changing the organisation.

It must be stressed once more that, of course, individuals can also learn individually and independently of the organisation. But this is not our primary concern, even if this learning is used by the organisation. For this discussion, organisational learning is always purposeful or intentional learning as opposed to informal or discrete learning. One could also say it is learning with a double condition and contingency. On the one hand it is more or less strictly conditioned by the organisation’s purposes and economic constraints as well as by its present structure and state of development, but on the other hand it is learning in order to become a learning organisation. Both conditions must be met to be successful. A learning organisation which is not economically viable is a clever zombie.
A learning organisation can thus be described as a processing structure determined by purposes, rules and values, conceiving itself as improvable. It wants and enables its members to learn with this end in mind and considers this capacity of learning for improvement as a necessary characteristic of survival.

2M15.1.3 Networks of organisations
If organisations are basically the intentional, structured and valuing co-operation of people, networks of companies are the intentional, structured and valuing co-operation of organisations represented by people. The question is: Who learns in networks? People? Organisations? Networks?

The English term learning organisation conveys several meanings, which do not completely translate into other languages. One is an organisation which learns, another is a qualifying organisation – these are the two translations possible in the Latin languages. However, there is also the idea that the organisation of the company and of its works is, at the same time, the organisation of learning. This is only connotated in English. Moreover, it means that organisation is understood as a process, a dynamic fuelled by a process of learning. If it is true that organisations only learn through their co-operating members, then networks obviously are not structures in which organisations learn. The learners in networks understood as communities of practice are the networking people, i.e. the actual actors, who convey what they have learned into the decision-making process of organisations. Organisations in networks are processors of learning results of networking individuals; the input comes from lessons learned via the individual and is not the result of organisational learning within the organisation. Learning of individuals in networks may lead to different action and different ways of doing things in organisations. The implementation, in its turn, may initiate or constitute a learning process in the individuals’ respective organisation. Thus, learning in networks via a multi-staged process may eventually lead to the network learning something. But a cautious interpretation would be that networks as such do not learn and it is the individuals within them who learn. However, they are not the network; they are just representatives of organisations that form the network.

2M15.1.4 Learning in networks - constructing social capital
Nevertheless, these learning processes create a common stock of practice and experience, approaches and achievements, relationships and attitudes, sympathies and antipathies among people active in the network understood as a community of practice. In their common learning and practice, they build up a growing social capital within a network by enhancing their co-operativity, as we have called it. This social capital
constitutes a potential, an option, which can be drawn on or not and which may or may not be put into practice by individual or collective action. The decision on whether and how to take this potential into consideration is up to the individual actor and his or her organisation and the specific considerations required at a given moment in time. After all, it is the individual action which provides analytical evidence of how and how much such factors influence real activities. Put another way, social capital is the result of a learning process and the final culmination of the learning process, i.e. appropriation or taking decisions or acting according to what has been learned or achieved in terms of trust building; it is activated social capital.

The concept of social capital has several “fathers”. Although Fukuyama’s theoretical contribution (1995, 1999) seems to be underestimated in the literature, without any doubt the three constitutional “fathers” of social capital approaches as they are mainly used today are Bourdieu, Coleman and Putnam.

**Bourdieu**

For Pierre Bourdieu, social capital is “the aggregate of the actual or potential resources which are linked to the possession of a durable network or more or less institutionalised relationships of mutual acquaintance and recognition” (1983b:248) and he also refers to it as “a capital of social connections, honorability and respectability” (1984:122) which shows that he is more concerned with social capital as an individual attribute in terms of individual networks intentionally pursued and used for individual purposes and aims, such as getting a job, belonging to an in-group, etc.

**Coleman**

Although not opposed to Bourdieu’s approach (which he pretends to ignore, referring to Glenn Loury), James Coleman (1988), the late American sociologist, favoured a broader and systematic (macro-micro) access to social capital in the framework of a general social theory of social action encompassing individuals, social groups, organisations and societies. Coleman’s approach, drawn up in analogy to the human capital approach, is a rational choice model following the assumption that all social interaction, be it individual, of groups, organisations or whatever social collectiveness, is based on four constitutive elements, i.e. actors, resources, control and interest. Social capital is conceived as one of the four forms of resources, along with private goods, events (actions and specific capacities, human capital) and information.

**Putnam**

Putnam was the one who succeeded in introducing social capital into the political sphere. He defined it as those “features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions” (1993:167). The World Bank’s definition of social capital (1999) is very close to that of Putnam, namely “social capital refers to the norms and networks that enable collective action. Increasing evidence shows that social cohesion – social
capital – is critical for poverty alleviation and sustainable human and economic development.” More recently, Putnam has shifted the emphasis from trust to reciprocity, insisting on a horizontal approach to social capital as co-ordinated action.

Francis Fukuyama has established something like a missing link between:

- Bourdieu with his focus on individual interest, intention and activity
- Putnam referring to horizontal relationships of trust and reciprocity, thus taking the norm or the network instead of the interaction for the social capital
- Coleman operating with a rational choice model and a macro-micro-macro level scheme of social capital based on social interaction

He introduces a meso level between the macro and micro levels. It was Fukuyama’s research that established a cultural link between strong family structures, e.g. in the Latin European countries, and the corresponding industrial structure of capitalism. According to him, social capital is an “instantiated informal norm that promotes co-operation between two or more individuals”, in other words, social capital is co-operation influenced and influencing social norms (culture).

Thus it seems reasonable to construct an approach overcoming the weaknesses by trying to integrate the strengths of each and all these approaches. Jürgen M. Schechler (2002), a young German economist and social scientist who specialises in network economies, has constructed such a model. For him, social capital is the result of social interaction of individuals in groups, organisations and networks based on reciprocity (including trust) and leading to (more) trust. This social action on the micro level is influenced by existing social norms and values on the macro and meso levels. These norms and institutions are understood as already substantiated social capital, which can be reproduced, developed, enhanced or newly created by real social interaction. The model is built on the basis of a smoothened rational choice approach of socially active individuals.

The following explanations of the model’s levels and mechanisms of functioning already provide translations considering our network and cluster context:
Levels of functioning

2M15.2  Levels of functioning

- The macro level
  This consists of general norms and institutions such as the economic system and its mechanisms, the legal and political system and its mechanisms, and general cultural rules and values. A generally positive attitude of national governments or the EU Commission towards, e.g., cluster formation may also play a role on this level.

- The meso level
  This is constituted of intermediate social groups and communities such as families, clans, specific associations and networks with their interests, norms, values, institutions and cultures - in our case, clusters with their corresponding networks. Also regional or local governments and their attitude towards cluster development may exert an important influence, not to forget the direct or indirect influence of, for example, company headquarters or contracts of domination on subsidiary decision-making on the local level.

- The micro level
  This is the level of individual decision-making and action or interaction with other individuals from which, on the basis of reciprocity, mutual trust may or may not arise. Here is where decisions are made and action takes place, where company or network managers opt for competitive or co-operative strategies, taking or not taking into account what “the network” or “the cluster” expects them to do.
The following mechanisms consider social capital primarily as a process based on an already existing potential. Describing, measuring and analysing existing social capital requires the adoption of further and possibly different concepts and methods. It is important to repeat that social capital is formed or effective only in so far as it is activated in individual or collective action – this is what Fukuyama means by ‘instantiated’. Social capital may well exist without being used; in fact, most of the existing social capital is not activated but remains either unused or latent. It may even diminish and become obsolete over time simply because it has not been used and reactivated or because it is no longer accepted, e.g. by children no longer accepting cultural standards familiar to their parents. A very current German saying goes: little gifts maintain friendships. In other words: relationships must be “actualised”; if they do not receive attention by both sides they will fade away.

By using the term ‘actualisation’, we are drawing on the constructivist hypothesis of re-presentation as a process of recalling existing knowledge or memories of the past into the present by re-presenting them to the own mindset. As we (Franz and Kopp 2004) have argued in another context, for practical learning processes (learning by doing) re-presentation also means “making memories fit for action in a present context”, i.e. actualisation. The present context is very important as it has a very important selective influence on what we recall. A curriculum vitae is a good example of this. Although it is normally a written document and not just remembrance, it will usually be modified by leaving out certain aspects and adding others, depending on the context for which it is used, in order to make it more meaningful to the addressee of the CV. In other words, even a professional life is a purposeful construction with varying identities. We tell different people different stories about the same subject, ourselves.

As we are focussing here on the development and enhancement of cooperation as a basic factor of social capital production, our attention is directed towards mechanisms of actualisation.
• So called *situative mechanisms* (A)

These situate the interacting individuals on the micro level, and influence their selection of options of action and attitudes. Variables from the macro level may influence individual action directly (A1) or may be mediated through cultural standardisation on the meso level (A2). Finally, influence variables from the meso level such as strong clan or family ties or weaker network ties may modify the individual selection or decision-making process (A3) on the micro level. In Western clusters, the “old families”, existing associations or chambers of commerce may have this selective influence providing bonding or bridging social capital, whereas in the former socialist countries, old party clans may play this role, reinforcing or counteracting new institutions such as chambers of commerce or specific employers’ associations.

In a cluster context, along with the individual interest of a person or company, specific competitive or co-operative cultures and habits may exert pressure to act in a particular way. Also, economic policies from any level promoting cluster action may be pondered. In other words, how a decision maker is embedded in a social and institutional context, be it competitive or co-operative, will most probably make a difference.

• The so called *action formation mechanism* (B)

This leads to the selection of options regarding how to implement reciprocity. For social actors in clusters, the basic decision to be taken is whether to opt for competitive or co-operative action strategies or a specific mix of both. Networking constitutes a third option besides make or buy, virtually: “make or co-operate” (Kogut et al. 1992:348). How far they are influenced by A1, A2 or A3 mechanisms, depends on the individual person’s and the organisation’s specific interest. Strictly speaking, the level of action is always the micro level, i.e. the individual one (B1); nevertheless, the meso and macro levels may be strong action determinants, especially for representatives of norms and institutions of these levels, and may lead to communicational adaptation. Therefore, B2 and B3 are symbolical “action” strands. Social capital is confirmed or modified, enhanced or eroded, created or destroyed exclusively in social action. This is what Fukuyama wants to say by “instantiated norms”. Social capital exists in norms and institutions, but it “lives” only through communication and action, only through co-operation, and it will only go on existing if these norms are confirmed or constructively modified.

• So called *impact or transformation mechanisms* (C)

These transform the result or output of social interaction into an impact on existing norms and institutions or contribute to the creation of new ones. These processes are described by the C arrows, C1 having an immediate impact on the macro level, C2 influencing the
development of the meso level, and C3 including impacts from the meso onto the macro level. Successful cluster practices in one region may lead to political programmes on the macro level (C1) or probably through the C2 strand as they normally would include already effective co-operation or certain degrees of cohesion expressed in networking and specific associations or project initiatives. Most probably, both strands, C2 and C3, together might have major effects on the macro level, resulting in special policies and programmes, e.g. on the EU level.

Each of these action processes can also be conceived as a learning process following an interested strategy intentionally organised by a network manager.

2M15.5 Co-opetition networks

Network relationships tend to develop weak ties. Granovetter defined the intensity of relationships in terms of the frequency, duration, emotional closeness and reciprocity of relations between individuals (1973:1361). Strong relationships develop strong emotional ties and a high degree of reciprocity. Weak ties, on the other hand, pursue information gains and advantages of collaboration in order to make work easier; they are emotionally less intense but also function on a basis of reciprocity. Granovetter argued that weak ties help to overcome strong internal orientations by bridging the gaps to more remote social groups and organisations. It is easier to establish weak ties as they require less investment, particularly in terms of time. Networks have a wider span in terms of the number of persons involved and in terms of space. They are more likely to permit access to novel information as more sources are involved. “The strength of weak ties”, thus, consists of the larger exchange potential and the lower degree of solidarity, a mixture which altogether does not lend itself to building strong identities. Network relationships can be instrumental or expressive or both. They tend to be primarily instrumental. Instrumental relations are clearly work-related and draw on the exchange of information, expertise, professional advice and material resources, while expressive relations are based on friendship and social support and require higher and longer investments (Ibarra 1993).
Schechler (2002:127ff) has suggested a reduced model of how to measure the proportional influence of four basic factors of social capital in networks: competition and co-operation, solidarity and habit. Their proportional influence is graphically shown in a field of forces. According to Schechler, solidarity could be a valid indicator of a high potential of social capital. Co-operation indicates a high degree of interest in developing or confirming existing social capital, whereas high values of competition may indicate low degrees of development or an erosion of social capital. Habit provides values which confirm the importance of other salient factors, e.g. in our graph, solidarity seems habitually to be under developed. In Schechler’s view, cluster networks are typical co-opetition communities, a notion which has been coined by Nalebuff and Brandenburger (1996) and which suggests that network partners accept the co-existence of both the principles of competition and co-operation as basically beneficial. Nevertheless, as mentioned above, what makes a difference in the development of a network or cluster is co-operation enhanced by solidarity.

Although these four action principles may constitute a serious reduction of descriptors for the social capital of a cluster network, they seem to be very helpful in measuring social capital as it is expressed in individual actions and measures. They also provide a certain orientation for what network management is required to achieve in order to facilitate cluster development towards a higher degree of mutual reliability (solidarity). As solidarity may be perceived as a concept which is focused on network actions of aid, the term ‘cohesion’ would be probably preferred instead for a general network or cluster context.
2M15.6 Network management as facilitation

2M15.6.1 Learning in networks

Even if it is true that it is only individuals, as representatives of organisations, who learn in networks of organisations and who as a community of practice may learn together what they would not have learnt in their organisations, it must be explained how this learning can be facilitated and fostered by the network management, i.e. how network managers can facilitate this learning process in a holistic way. Networks constitute an additional supra-organisational level of organisation, so called meta-organisers. Therefore, some basic reflection on organisational learning may be quite helpful.

Harald Geissler is one of the German authors from the educational side of the debate who has most influenced the progress from reflecting on ‘learning in organisations’ to considering the ‘learning of organisations’ (1991:79). For him, ‘learning like working is an individual as well as a collective process’ (1996a:267) which has to be seen as ‘one complex context’ (1991:82). He defines learning as a ‘change in the control potential’. Hence, organisational learning is considered to be a change of an organisation’s control potential implemented within a complex context of collective and individual learning processes. Even so, the questions remain: who learns, how, and with what objectives?

As to the objectives of organisations, we agree with Sattelberger (1991) for whom the overarching aim consists of staying or becoming capable of surviving under changing or unstable environmental conditions by intentionally transforming the ability of the organisation to face the future successfully. He takes up the definition of learning as a change in the control potential, especially in relation to the organisation’s potential for controlling future challenges which may or may not be known in the present. This overall objective, which is also perfectly applicable to cluster management, is translated into three immediate learning objectives (p. 13):

(a) responsiveness to the needs of the respective target groups (customers, suppliers, investors, the public, employees, stakeholders of whatever kind)
(b) ‘learnability’, the ability to apprehend additional valid knowledge about oneself and one’s natural and social/societal environment
(c) competence, defined as ability to act, with the aim of satisfying given and perceived needs

According to Sattelberger, there are five distinctive forms of organisational learning which directly or in some modified way also apply to networks and the organisation of networks (1991:15):
(a) the learning of an elite or dominating coalition, e.g. top management, given the fact that learning and power are intimately related and that the learning of the powerful stands the best chance of having real influence in organisational decision-making processes

(b) the learning of other subcultures, e.g. political alliances, functional units, specific levels or parts of management, innovative groups

(c) fundamental knowledge shared by all members of the organisation such as organisational maps, shared frames of reference, communities of practice and assumptions

(d) the change of the organisation itself by transferring or translating learning experiences into organisational standard procedures, norms, values, strategies, artefacts, systems, structures, programmes or rules which come into effect independently of the memory of the members of the organisation

(e) the use, change or development of the organisation’s knowledge base, i.e. of the total amount of knowledge available in the organisation

Summing up, we can say that learning is oriented towards the improvement of an individual’s or an organisation’s control competence. The process of learning itself can be defined as a process of construction or re-construction of reality, in other words, as a theoretical and practical process of appropriation oriented to enhance personal mastery (as Senge would call it) or an organisation’s competence to cope with known or unknown future challenges. Although modifications of detail may be necessary, the same can be said about the intentional development of networks promoting clusters.

2M15.7 Six dimensions and action principles of network management

How such development can be practically pursued is shown by the matrix in the Table. It shows six dimensions of how to become and to be a learning organisation. As these six dimensions are aimed at creating and developing a learning culture in organisational contexts, we think that this learning organisation theory and method can also be applied to networks of organisations. Using facilitation methods will greatly help in adhering to these six principles.

These six dimensions are, at the same time, the objectives and the ways of achieving them, as well as the product and the process of producing learning and improvement. They are based on a general theory of quality which is briefly resumed in Message 2M12. Each of these dimensions must be compatible with and applied to all the
others, thus constituting a strategic planning tool, a methodical guide and an analytical evaluation matrix of the dimensions of a learning organisation and of all further methods and instruments used in the process of developing one, e.g. all our Tools. Each of the following six characteristics of a learning organisation can be cross-checked against each other as the matrix suggests. The same cross checking of aims and ways also helps in examining the validity of tools and instruments deployed in the implementation and development of learning organisations (of networks). It will soon become obvious that this is a cyclical, discourse-based total quality approach. The matrix (see Table) contains the whole theory.

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<thead>
<tr>
<th>Ways</th>
<th>Stakeholder orientation</th>
<th>Improvement process</th>
<th>Learning process</th>
<th>Participation process</th>
<th>Decision-making process</th>
<th>Appropriation process</th>
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<tbody>
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<td>Stakeholder orientation</td>
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<td>Improvement process</td>
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<td>Learning process</td>
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**Principle 1: Stakeholder orientation process**

There is no sense in inducing any sort of change in an organisation without clearly identifying who will benefit from the improvements, and in what ways this change is good or better for whom. Each organisation has to pursue the satisfaction of five stakeholders who have an interest in the success of the organisation (or network in our case). In a certain way, each of these stakeholders is a customer to the network organisation; hence we often reduce stakeholder to customer orientation. These five stakeholders are (see the mind map):

- the investors of capital, time, interest
- external customers
- the employees
- partners, i.e. suppliers of parts, services or necessary information
- the societal and the natural environment
For each decision taken and action or project of a cluster network implemented, these five stakeholders and their specific interests must be identified in order to direct and orient the action in line with the interests at stake.

The mind map is an analytical tool that can regularly be used in companies and networks for exploring the immediate interest and advantage structure envisaged by a specific project or change of the organisation. It also serves to check the fit of individual solutions or targets with strategic orientations, and also to examine the strategic orientations themselves. For strategic purposes, it can be developed along the lines of the Balanced Score Card devised originally by Kaplan and Norton (1997).

Another very simple tool supporting customer orientation (external as well as internal) is our Tool 4D3, which seeks to analyse the specific task or objective of a change or problem-solving process.

**Principle 2: Improvement process**

Each project, change or problem-solving process is initiated with the intention of making something better. Why go for change if it is not for the better? Why initiate a project if not for solving a problem? Why initiate a network for promoting a cluster if it does not lead to benefits? Therefore, the development of a learning organisation as well as a learning network is an intentional improvement process. Improvement is a change for the better in the degree of quality. The only meaningful measurement of before-after difference of this is the intention of those who have induced or suffered this process. This is not only true for organisation development; it is especially true for intentional learning. Learning in an organisational context is by definition the endeavour of improving one’s control potential or competence, i.e. self-improvement. Learning is an improvement process. What was said before about working well is true: one must be able, want and be allowed to work, and so it is with learning. The task is not fulfilled by seeing it as an improvement process; it must also be shaped, i.e., managed, like an improvement process.

It is particularly here that the general theory of quality may serve as a reference (cf. Message 2M12).

**Principle 3: Learning process**

The only original innovation of the learning organisation thinking is to conceive organisation as a way of learning, and hence the development of organisations as a learning process. Consequently one understands from this the requirement that shaping organisation development is a learning process embedding learnability within an organisation. As we saw at the beginning, this is also the most difficult part to conceive and, hence, to shape.
Learning is defined as the process of re-constructing reality virtually. Organisation development is defined as the process of re-constructing reality practically. As learning is, on the one hand, an improvement and self-improvement process, and on the other, an appropriation process of constructing or reconstructing a new reality, it implies a twofold learning strategy. This can be re-stated in the formula: learning by doing must be completed through doing by learning. In terms of organisational learning we can only admit that the organisation has learned something when at least the second learning loop must have been performed, i.e., the group(s) of persons must have a concept of how they have achieved this. They must be able to reproduce this process, in other words, they must have learned how they have learned.

Therefore, virtual and real managers of change, development or transformation (Sattelberger’s three scopes of change) must possess an understanding of learning that allows them to shape learning processes. The process of learning (and real work) must be shaped in a way that makes it as easy as possible for the learners (workers, deciders) to understand how they are learning and how they can contribute to the advancement of this learning process.

There can be no doubt that this is easier for them when, as well as wanting to learn what they are supposed to learn, they also know how the learning is organised. In fact, this is the only way of achieving a higher degree of self-reflection and sustainability.

Competence development means developing the capacity of deciding, doing and learning (checking) better. But how can we transform competence into knowledge and knowledge into competence? There are many complicated explanations which are difficult to understand and more difficult to use in practical terms. Therefore we have tried to develop a simpler tool that can be used for any problem-solving or improvement and learning process. It not only facilitates the planning and shaping of effective and efficient learning processes but also enables clients to evaluate what has been achieved (see Message 2M5).

Corresponding with this simple learning theory, we use an interrogative strategy of mobilising competence which we have called a process of re-actualisation (see above), of restoring existing but unconscious competence, adapting it to the specific context of application.

Large parts of learning in organisations must start by making conscious again (re-presenting) what I/we know or think we know. This is not only a way of mobilising the existing competence; it may also show, together with the customer-orientation tools, that requirements have changed and our competence or parts of it are no longer consistent with the new requirements. But the most important effect is that it helps to make people participate actively in learning and problem-solving by showing that together they know more about the problem and ways
of solving it than any individual participant would assume. Intentional learning becomes intimately entwined with experimental and experience-based learning.

<table>
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<th>4 questions strategy</th>
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<tr>
<td>1. What do we know?</td>
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<tr>
<td>Do we really know that?</td>
</tr>
<tr>
<td>2. What do we not know?</td>
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<tr>
<td>3. What do we need to know?</td>
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<tr>
<td>4. Where do we get it from?</td>
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The Four-Questions-Pattern is a simple way of leading people to this point of mobilisation; at the same time, it is a method which they can use easily without the helper. Methods of visualising this process (Metaplan techniques, mind mapping, fishbone diagrams etc.) are of the utmost importance for this process. Starting with the customer orientation, the new competence can be built up, then the advantages of the new competence can be made clear (improvement), and the way that this has been achieved (learning process) can be described as a systematic method. The same applies to the three other elements - participation, decision-making, appropriation.

**Principle 4: Participation process**

Quality is a moveable target. A target can move for two reasons: because the target has changed one or some of its components or its position, or because the perceiver has moved or changed his or her position. Any change requires a re-presentation of the target from each of the different positions from which it is perceived. As we have seen in the customer orientation section, all learners of an improvement process are customers and suppliers who want to see their part of the definition of quality respected in order to be able to work well.

Nevertheless, we live in times of quality-based markets, and you can be forced to work, but you cannot be forced to work well. If any of the other individual positions are harmed or just not respected, before long this will have negative consequences for the two main targets of an economic organisation, i.e. firstly, achieving sufficient yields for an extended reproduction by, secondly, fulfilling the specific purpose (production, service) of the organisation. Therefore, it is very important that all customers and suppliers of (the specific) quality (item) position themselves with reference to the specific subject on the agenda. The important point about this is that each stakeholder can perceive his or her special requirements and contributions to the definition and the production of quality.

This is what we call participation. All those who are affected by a problem or its solution must be involved in a way that respects
their interests and responsibilities. This consequence implies a non-hierarchical approach to improvement and learning processes. Problem-solving processes must be organised in a way that gives each contribution its own special right, since it is based on a specific experience and view of the problem. The same applies to learning. The apparently clear-cut roles of teachers and learners get blurred in the process of a common learning process where everybody feeds in his/her special experience and questions. Again, modern brainstorming and moderation methods (Metaplan techniques of visualisation, mind mapping and other brain-writing instruments, etc.) can be of great importance for organising such joint learning processes.

This approach necessarily implies a discourse-oriented and decentralised concept of quality and improvement responsibility for the organisation as well as for learning, especially if the organisation wants to become a learning organisation. We have seen that learning is a process of improvement and self-improvement where the learner-customer is a co-producer of the learning quality. Hence learning processes must be organised through participative and co-operative processes of construction and re-construction of competence. A former Labour Director and living legend in the German steel industry, Alfred Heese (1992), used to say: ‘Participation is not everything, but without participation everything is nothing.’

**Principle 5: Decision-making process**

This means that it is not enough to ask people’s opinions. Participation without consequences is not participation. If quality is understood as a contract that comes into existence under conditions of free will and equality, each of the contracting parties must be able to say ‘no’. We know that these conditions do not always exist, and very often there are even good reasons why they do not currently exist. But there is no way to achieve and maintain momentum in a learning organisation when they never exist.

It would be unthinkable and impossible for a learning organisation to be based on compulsion or even force and inequality, or on fear and structural disadvantage. Therefore, the most important requirement of participative processes of learning and improving the customer orientation is transparency. Whenever people within a participative process have come to a conclusion, that conclusion must be made reality as soon as possible unless there are very good reasons why this cannot happen. Anything else will lead to deception and hinder the implementation of whatever other decision has been taken. The English concept of empowerment means exactly this: participation in order to take decisions to realise what has been decided.
Transparency is a tricky thing. It is only accepted and only works under conditions of trust. Transparency means control. Control is only accepted as control of processes, not as control of persons. Nevertheless, data and facts controlling processes are always also data and facts about people. Therefore, transparency must be embedded in a culture of improvement. This means not asking who is to blame but how to make it better. Control is good but trust is better. Transparency needs trust. Trust needs transparency.

Transparency is also an indispensable precondition of learning about a problem, how an organisation works or what the implications of certain decisions are, and how one can know how something is better if one is not informed. Improvement needs transparency and openness just as much. But the softest fact, in the long run, becomes the hardest. Transparency is the necessary precondition of voluntary and responsible cooperation. There is no free will without good information. Transparency is the enemy of frustration. Frustrated people know they have to work, but do they work well?

Principle 6: Appropriation process
Whatever I have learned or changed or improved, it is vital that in the end I am satisfied with the result. The same applies, although possibly to different degrees, to each stakeholder of an organisation or network. So for those responsible for organising the learning process and its results this means that evaluating the learning output and outcome against my own and the customer’s orientation requirements will tell me what I have achieved, i.e. improved. It may not be perfect but it will be as perfect as possible according to the defined requirements and under given conditions. Also, I must have the hope or prospect of being able to make it even better the next time. Only then will I make the decision, and help with all my improved competence to implement and perform what I (and we) have learned (together). This is part of what responsibility means.

But responsibility means more. It means to be able to respond to questions that I have accepted I will be asked or which I have asked myself. People who do not ask do not want to see problems or to make themselves responsible for solving them. Sattelberger uses the term ‘customer responsiveness’ to describe this qualitative ability of responding to needs and requirements. However, responsiveness is only the aim and result of a process, a perceived property of an attitude or culture, not a process category itself. Therefore, we prefer the less contemporary learning theory term of ‘appropriation’, which embraces the result and the process of learning and of taking decisions about how to make it better.
2M15.8 Conclusions

The theoretical concept of a learning organisation can be applied to organisational learning processes in network and cluster management and is fully compatible with the theoretical concept of social capital as it has been described here. Learning and the arrangement of learning processes are central to the building of social capital; both learning and the building of social capital are based on existing trust and need further development of trust in order to be successful. Therefore, trust-based management is a necessary requirement in (cluster) networking, and respecting the didactical logics of learning arrangements along with the systemic thinking of total quality management may greatly facilitate the success of networking and cluster initiatives. Facilitation principles, methods and tools can offer very valuable support for making this learning organisation and learning network successful.
Thought is not said
Said is not heard
Heard is not understood
Understood is not agreed
Agreed is not done
Done is not continued
Continued is not equivalent to valid for ever!

Konrad Lorenz¹

¹Konrad Lorenz (1903–1989), Austrian zoologist, animal psychologist, one of the founders of modern ethology; head of the Max Planck Institute for Behavioral Physiology, Nobel Prize winner in Physiology in 1973, first winner of Prix Mondial Cino Del Duca in 1969.
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