



Reflection as a core process in organisational learning

Steen Høyrup

*Department of Educational Sociology, Danish University of Education,
Copenhagen, Denmark*

Keywords *Reflection, Learning, Learning organizations*

Abstract *The article presents a theoretical analysis of the concept of reflection. The author argues in favour of the necessity of conceiving the concept of reflection in a broad sense, and not using the concept in the meaning of introspection. To grasp reflection in its complexity and as a core process in organisational learning it is necessary to distinguish between different kinds of reflection – reflection and critical reflection – and different levels of reflection: individual, interaction level and reflection as organised practice. This terminology is used as lenses through which a case of organisational development of production groups is interpreted. This interpretation is related to criteria mentioned for organisational learning. It is concluded that most of the criteria are met. This way the concept of reflection may be a fruitful way of understanding organisational learning.*

Introduction

The society of today and tomorrow – with a knowledge-based economy and the global market – needs organisations that are productive, innovative, flexible and good places to work and live for the members of the organisation.

How can this be accomplished? One line of thinking is planned efforts to engage workplaces in organisational development to be fruitful and productive seats of learning. One approach to understanding learning at work in this context is reflection. How can reflection promote organisational learning? The question leads to another question: what kind of learning – conceived as reflection – is going on in different learning environments at the work place?

Both concepts – organisational learning and reflection – need reviewing, revitalization and reconstruction as a basis for clarifying how reflection can promote organisational learning.

The article gives proposals for understanding organisational learning, reflection and the relation between the concepts – on a theoretical level and with reference to an empirical case study.

The concept of organisational learning

Several sociological traditions contribute to and give meaning to very different conceptualisations of organisational learning (Gherardi and Nicolini, 2001). Albeit we find diverse schools of organisational learning we should choose a firm point of departure to shed light upon our problem.

In reviewing the current state of organisational learning in Europe, Nyhan *et al.* (2003) states what they call four main messages, which in this connection can be interpreted and applied as operational criteria of organisational learning. The criteria are (Nyhan *et al.*, 2003, p. 4):



- (1) In order to build learning organisations, one has to ensure that:
 - there is coherence between the “tangible” (formal) and “intangible” (informal) dimensions of an organisation; and
 - organisational learning goals are reconciled with individuals’ learning needs.
- (2) Stimulating or challenging work is a prerequisite for implementing a learning organisation. Work should be organised in such a way that it promotes human development. In other words, it is about building workplace environments in which people are motivated to think for themselves, in order for them – through their everyday work experiences – to develop new competences and gain new understandings and insights. Thus people are learning from their work – they are learning as they work.
- (3) The provision of support and guidance is essential to ensure that developmental work leads to developmental learning. A condition for developmental learning is that people are supported and guided while undertaking their developmental work tasks to ensure that these become opportunities for learning. Support for planning and reflection is essential (underlined by the author). This means that people have space and time to reflect on their work in a learning mode, through receiving supportive feedback on what they are doing and how they are doing it. From an organisational learning point of view, reflection activities need to take place in collective learning settings so that people can engage in finding common meanings in making sense of the collective work they are doing (underlined by the author).
- (4) To address organisational learning there is a need for boundary-crossing and interdisciplinary partnerships between the vocational education and training and human resource development communities.

In the statement quoted above, it is interesting to see that the concept of reflection plays an important role as the driving force of organisational learning. Learning is seen through the lenses of reflection. In the following the concept of reflection should be given a more precise and – to some extent – new and constructive meaning.

The concept of reflection

As stated by Moon (1999), a common and agreed upon concept of reflection does not exist. For our purpose – to investigate how reflection can promote organisational learning – it is important not to be caught in the trap: to grasp reflection as an individual cognitive process that is as a process of introspection. It is important to grasp the full complexity of the concept of reflection. This means:

- to distinguish between different forms of reflection: reflection and critical reflection; and
- to distinguish between different levels of reflection: the individual level, the level of interaction and the organisational level: organising reflection.

Different forms of reflection: reflection and critical reflection

Mezirow understands reflection as an assessment of how or why we have perceived, thought, felt, or acted (Mezirow, 1990, p. 6). As a preliminary definition we quote Van Bolhuis-Poortvliet and Snoek, here from Woerkom:

Reflection is a mental activity aimed at investigating one's own action in a certain situation and involving a review of the experience, an analysis of causes and effects, and the drawing of conclusions concerning future action (Woerkom, 2003, p. 40).

Although the definitions above conceive reflection as a complex process, involving interaction, the definitions seem to underline the individualised perspective: It is the individual who reflects – in a social context. This is the perspective often used in relation to the notion of “the reflective practitioner”, and problem solving as the core process of reflection.

But individuals also reflect together in an organisational context. Reflection in teams is important here. Reflection processes are embedded in social interaction.

Critical reflection

While reflection focuses on the immediate presentation of details of a task or a problem, the hallmark of critical reflection is the questioning of contextual aspects taken-for-granted – social, cultural and political – within which the task or problem is situated (Reynolds, 1998, pp. 184-189). Critical reflection includes the social context of reflection. Critical reflection involves a critique of the presuppositions on which our beliefs have been built.

Mezirow presents an interesting distinction: we can reflect on the content, process or premise of problem solving. The latter is critical reflection: reflection on the premises of problem solving.

Critical reflection involves a critique of the presuppositions on which our beliefs have been built. (Mezirow, 1990, p. 1). In critical reflection the individual challenges the validity of his presuppositions. This way critical reflection is not concerned of the how or the how-to of action but with the why, the reasons for and the consequences of what we do (Ibid, p. 13). Mezirow states that critical reflection may imply learning at a deeper level, transformational learning.

Mezirow states it in this way:

Uncritical assimilated meaning perspectives, which determine what, how and why we learn, may be transformed through critical reflection. Reflection on one's own premises can lead to transformative learning (Ibid, p. 18).

Critical reflection involves awareness of why we attach the meanings we do to reality, especially to our roles and relationships – meanings that are often misconstrued from the uncritically assimilated half-truths of conventional wisdom and power relationships (Mezirow, 1981, p. 11).

Our frame of reference can be wrong; individuals can be caught in an uncritical acceptance of distorted meaning perspectives. We make misconstructions of meaning, we can make wrong interpretations of experiences because we live and make experiences in a culture with a lot knowledge taken-for-granted.

Reflection may imply reconstruction of knowledge, but critical reflection may imply changes in the very psychological mechanisms that constitute the basis of our interpretations of the world. And this form of learning is not restricted to the deepest levels of personality; it is also related to our social role and social relationships.

In line with this Brookfield argues:

Critical reflection assumes that adults can engage in an increasingly accurate analysis of the world, coming to greater political clarity and self-awareness. By learning how to surface

assumptions and then subject these to critical scrutiny, people can sort out which assumptions are valid and which are distorted, unjust and self-injurious (Brookfield, 2000).

In Brookfield's terms, critical reflection is hunting assumptions. Hunting assumptions and posing questions may lead to a deeper kind of learning. In critical reflection we scrutinise important social, organisational and cultural conditions of our lives.

Woercom points to the individual perspective in critical reflection: critical self-reflection. The content of the critical reflection is individual categories such as values, self-identity etc. This notion corresponds to Brookfield's and Mezirow's concept of critical reflection.

An interesting area of reflection is critical reflection on organisational values. When individuals question and exchange knowledge and understandings about existing organisational values, and the management of the organisation creates a space for and values these processes as resources for organisational development, then reflection may imply involvement of the organisation's members in organisational learning. Reflection builds the bridge between individual and organisational learning.

Levels of reflection

Reflection on an individual level is informed by theories in three broad areas:

- (1) The thinking of John Dewey.
- (2) The field of adult education.
- (3) The domain of problem solving.

The thinking of John Dewey

A necessary precondition for reflection is the inhibition of action. Habit does not work with implications of feelings of disturbance and uncertainty. When we act in routine ways we do not reflect. Another process is postponement of immediate action, an internal control of impulses. This postponement gives the individual the space to put ends together: the peculiar relation between the active elements of experience – trying and inquiry – and the passive elements, we suffer the consequences of changes caused by our actions, as Dewey puts it. Feedback processes are core processes of reflection. Other core processes in reflection are defining the problem and thinking ahead: construction of a tentative concept. The process of reflection starts with the individual's attempt to define what is wrong in the situation. The individual defines the problem by constructing a tentative conception of the difficulty. The basis of this concept construction is the individual's observations and the individual's investigation of both the situation and the conditions of the situation. The conceptualisation of the problem influences further acquisition of knowledge and thinking:

- *Formation of a guiding idea for action.* The analysis and diagnosis of the situation leads to a working hypothesis formed as a tentative guiding idea for action: a plan.
- *Elaboration of the meaning of ideas in relation to one another.* The validity of the working hypothesis can be tested in an experiment on the level of thinking and in this individuals can apply and integrate the available knowledge in their memory. The union of observation and memory is according to Dewey, the heart

of reflection. Reflection thus becomes a conscious and voluntary effort to establish belief upon a firm basis of evidence and rationality.

- *Testing of the guiding idea in action. Feedback processes.* Here the guiding idea is tested in action by trying to realise it in practice.

Contributions from adult education

David Boud gives a thorough account of reflection in learning and is chosen here as a representative of the approach of adult education (Boud *et al.*, 1985). We are in the domain of deliberate and intentional learning where learners are aware that they are learning.

Reflection is a form of response from the experiencing learner. The experience is followed by a processing phase: this is the area of reflection (Ibid, p. 19).

Reflection is conceived as the intervening process that constitutes the link between:

- experiences, including elements of behaviour, ideas and feelings; and
- outcomes including new perspectives on the experiences' commitment to action and readiness for application.

Boud gives us this conceptualisation:

Reflection is an important human activity, in which people recapture their experience, think about it, mull it over and evaluate it. Reflection in the context of learning is a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understanding and appreciations (Boud *et al.*, 1985, p. 19).

Boud points out three elements, which are important in the reflective process:

- (1) Returning to experience.
- (2) Attending to feelings.
- (3) Re-evaluating experience.

In returning to experience the individual stands back from the immediacy of the experience – by creating a distance to it – and reviews it with the leisure of not having to act on it in time, recalling what has taken place. There is a split between thinking and action. This is to many authors a crucial process: putting experience at a distance enables individuals to make sense of them.

Returning to experience can be seen as an important function in learning because it counteracts a serious shortcoming in experiential learning: we can make false perceptions, false implications and in the end false learning. Through this process of reflection, false perceptions can be detected and the learner can view the experience from other perspectives and have the possibility to look at the event in a wider context compared to the more concrete context in which it was situated. These new perspectives on experience constitute learning.

In attending to feelings the process of reflection has two aspects: utilising positive feelings and removing obstructive feelings. In these terms Boud calls attention to the emotional aspects of reflection.

The removal of obstructive feelings is related to learning in the way that it is a necessary precursor to a rational consideration of events. With negative feelings the individual cannot execute a thorough examination of the experience. Awareness of positive feelings are important for learning as they can provide the learner with the

impetus to persist in what might be very challenging situations and they might facilitate the learner's freedom to move to different perspectives of his experience. Contrary these negative feelings can fix the learner at a single perspective.

Re-evaluating experience is the most important of the three components of reflection. Boud describes this important component of reflection this way:

Re-evaluation involves re-examining experience in the light of the learner's intent, associating new knowledge with that which is already possessed, and integrating this new knowledge into the learner's conceptual framework. It leads to an appropriation of this knowledge into the learner's repertoire of behaviour. This can involve a rehearsal in which the new learning is applied mentally to test its authenticity and the planning of subsequent activity in which this learning is applied in one's life (Boud *et al.*, 1985, p. 27).

What seems to give reflection its distinctive character in relation to learning is the way it is embedded in thinking and action. On one hand, reflection may involve a split between thinking and action that gives the individual optimal opportunities – through examining his experiences – to change his conceptual frame of reference. But reflection also involves commitment to action and testing the new frame of reference through action. Reflection in this way is a dialectic process.

It looks inwards at our experiences, feelings and conceptual frame of reference, and outwards at the situation in which we are going to act. When we consider the interaction of the internal and the external, our reflection orients us for further thought and action. Reflection in this way is a kind of meta-thinking where we consider the relationship between our thoughts and understandings and our actions in a context. At the same time reflection is a social process. This gives us the possibility of learning.

The domain of problem solving

Problem-solving in this connection should be seen in the perspective that the individual adapts to a life of continual and rapid changes, and most of what we learn in life is the result of our efforts to solve problems. In our thinking, problem-solving is a way of constructing, organising, indexing and extending knowledge (Billett, 1996). Knowledge is being constructed by engaging in problem-solving activities encountered as part of everyday workplace activities.

We have seen that Dewey's thinking belongs to this category. Another outstanding thinking is Schön's.

Schön's concept of reflection in action

In their problem solving professionals rely heavily on "knowing-in-action" (a kind of tacit knowledge) and reflection. Schön coined the term reflection-in-action to describe the way various professionals deal with situations of uncertainty, instability and uniqueness and value conflict. These demands and characteristics are met in most workplaces today. Professionals respond to the problem situation by turning their thoughts back to the process of knowing implicit in their action. When acting in problem solving, the individual attends to a kind of knowledge that is embedded in action. The knowledge can be conscious or tacit. Schön's theory involves this intimate relationship between knowing and action.

How is reflection initiated? When something does not accord with expectations, when we are surprised, we might respond through the activity of reflection-in-action that occurs at the time of the action. In the previous theories "stop and think", a split

between thinking and action was a cornerstone in reflection. Reflection-in-action is an on-the-spot process of surfacing, testing and evaluating intuitive understandings – sometimes not conscious – which are intrinsic to experience. Reflection-in-action serves to reshape what we are doing while we are doing it.

Framing is a core concept in this context. Facing a problematic situation, one important process is defining the problem, also labelled framing and re-framing. Framing refers to how we think about a situation, how we select, name and organise facts to tell a story to ourselves and others about what is going on and what to do in a particular situation (Raelin, 2002, p. 72). Schön argues that in real world practice, problems do not present themselves to the practitioner as given. They must be constructed from the materials of the problematic situations. The professionals convert the problematic situation in an active way to a defined problem; they must make sense of the uncertain situation. When they set or define the problem, they also organise the situation, i.e. they select what they will treat as the “things” of the problematic situation. They also set the boundaries of the attention to the problem and they impose coherence on the problem, stating what is wrong and in what direction the situation need to be changed.

Reflection on an interaction level

It seems that most theories are explicit about the individual level of reflection whereas the level of interaction is more implicit. However interaction is important in the thinking of Dewey and Boud. Woercom points to the fact that most of the core processes in reflection – critical opinion sharing, asking for feedback, challenging groupthink, learning from mistakes, sharing knowledge and experimentation – only can be realised in processes of interaction.

In this context Raelin (2002) uses the term “the collective perspective as reflective practice”.

Reflective practice is:

The practice of periodically stepping back to ponder the meaning of what has recently transpired to us and to others in our immediate environment. It illuminates what others and we have experienced, providing a basis for future action. In particular, it favours the process of inquiry, leading to an understanding of experience that may have been overlooked in practice. (...) It typically is concerned with forms of learning that seek to inquire about the most fundamental assumptions and premises behind our practices (Raelin, 2002, p. 66).

The process is collective; we reflect together with trusted others in the midst of practices:

Reflection brings to the surface – in the safe presence of trusting peers – the social, political, and emotional data that arise from direct experience with one another (Raelin, 2002, p. 66).

Reflective practice opens for public scrutiny of our interpretations and evaluations of our plans and actions. We subject our assumptions to the review of others (Raelin, 2002, p. 67). The outcome may be validation of knowledge, assumptions, plans and actions and a development of these through the dialogue implying individual and organisational learning. This approach to people reflecting together in an organisational context calls attention to the organisation as a context of reflective practice. The ideal here is the reflective culture that makes it possible for people to be challenged constantly without fear of retaliation (Raelin, 2002, p. 68). This is a culture

that values continuous discovery and experimentation. It should be mentioned that the workplace is not an easy context for critical reflection. Management may see it as ineffective and irrelevant to the bottom line perspective of business. Workers may be afraid to reveal shortcomings or faults. People putting a lot of “why-questions” may be seen as troublesome and may risk to be marginalised.

What do preconditions and effects of reflection look like in an organisational perspective? The following characteristics are selected from an empirical study (Woerkom, 2003, p. 376):

- *Learning from mistakes.* Reflection leads to consciousness of undesirable matters at the workplace (for example mistakes, problems, lack of motivation). Reflection makes it possible to interpret faults as sources for improvement or learning.
- *Vision sharing.* Individuals express the results of reflection by expressing their vision, asking (critical) questions or suggesting improvements. Making your vision public is important and constructive for the organisation.
- *Sharing knowledge.* Sharing knowledge can be seen as a dimension of non-defensive behaviour, promoting learning (Argyris and Schön, 1996). According to Senge (1990), sharing knowledge means that people are not only motivated by protecting their own position but want to be part of something bigger than themselves. If knowledge, insights and visions are not being shared, the organisation will not benefit from it, and the individuals will be frustrated in their attempts to change work practice (Woerkom, 2003, p. 377). Raelin describes the skill disclosing, which becomes crucial when reflection is a process of interaction, an organisational process. As people disclose more about themselves, the group learns more about its membership (Raelin, 2002, p. 73).
- *Challenging groupthink.* Groupthink is ideas that a group has accepted as sacrosanct, and critical thinkers are people who challenge this. Vince uses the terms assumption breaking. He states that assumption breaking is the most arduous of all the steps in the reflection process, because identifying and questioning assumptions goes against the organisational grain (Raelin, 2002, p. 67).
- *Asking for feedback.* Feedback is essential in order to be able to learn from the consequences of our actions. Some work places are structured in ways that do not make feedback processes visible to the actor. Employees operate in a social context and have a need for support of their ideas to make things happen.
- *Experimentation.* For employers it seems important to put ideas into practice.

The result of our analysis on reflection on individual and interaction level uncovers processes of reflection that seems related to each other. This is illustrated in the juxtaposition as a summary of our results (Table I).

Reflection on an organisational level: organising reflection

In this perspective we understand reflection as an organising process creating and sustaining opportunities for organisational learning and change (Vince, 2002, p. 63). Vince suggests that specific practices that contribute to reflection as an organising process will be informed by three characteristics (Vince, 2002, p. 63):

Individual perspective	Interaction perspective
Situations that foster reflection: complex problem situations	Organisational characteristics: climate of trust, support, and visibility of feed-back-processes. A culture of reflection
Distance to experience. Stop and think. Separation of thinking and action framing	The practice of periodically stepping back to ponder the meaning of what has recently transpired to our selves and to others in our immediate environment
Thinking processes in reflection	Vision sharing. Sharing knowledge. Collective planning, analysis and decision making
Action. Inquiry and experiments	Interaction. Experimentation. Asking for feedback. Learning from mistakes
Emotional processes in reflection: attending to feelings	Anxiety related to disclosure and making faults and threatening common values. Awareness of employability
Integration. Synthesis of different kinds of experience	Sharing knowledge
Hunting assumptions. Questioning of the taken-for-granted (critical reflection)	Challenging groupthink. Assumption breaking

Table I.
The juxtaposition as a summary of our results

- (1) The practice should contribute to the collective questioning of assumptions that underpin organising in order to make power relations visible.
- (2) Reflective practices necessarily provide a “container” for management of the anxieties raised by making power relations visible.
- (3) Reflective practices contribute towards democracy in the organisation.

The first item clearly seems to refer to the concepts of “hunting assumptions” and challenging groupthink. In this perspective “assumption breaking” is not something that happens to individuals within an organisation. It is questioning collective assumptions. In this perspective assumptions emerge, take shape and institutionalise for important organisational reasons, giving security and coherence to the uncertainties of organising. Assumptions promote constraint as well as coherence as basic elements of the organisation. Therefore assumption breaking is a serious risk; it makes power relations visible. This way the approach connects to the critical perspective. To Vince, questioning of assumptions is a practice that needs to be thought of as integral to organising rather than as the province of individuals. Reflection is a collective capacity to question assumptions.

The next item refers to feelings in reflection, especially anxiety. In the organisational perspective, making power relations visible gives rise to individual and collective anxiety that promotes defensiveness and resistance to organisational learning and change. In Vince’s terms: reflective practices need to offer opportunities for building experience and familiarity in containing anxiety.

The last item aims at developing democracy in the organisation. It is Vince’s idea that present managerial authority is constructed, justified and enacted as individual responsibility for making decisions. The focal point of authority is the individual manager. Vince contrasts this to the idea of “management in public”, which suggests that managers’ authority needs to be based on their ability to “open leadership and

decision-making to the critique and imagination of others” (Vince, 2002, pp. 68-69). Authority therefore is in the act of creating processes of inquiry involving other stakeholders. Managers can be responsible for creating “containers” for democratic dialogue and action. Such inquiry and “containment” is an example of reflection as an organising process (Vince, 2002, p. 68).

In the organisational perspective we clearly see elements of reflection from the individual, critical and collective approach. It seems that the organisational perspective does not set aside the other approaches but accentuates another aspect of reflection: collective actions and structures that imply organisational learning and change.

Vince describes four concrete reflective practices:

- (1) Peer consultancy groups.
- (2) Role analysis and role analysis groups.
- (3) Communities of practice.
- (4) Group relation conferences.

These four practices constitute an approach to reflection (Ibid, p. 64). The case below is an illustration of a concrete form of reflective practice.

Referring to a case study, an organisational development project in a factory, we will call attention to some other kinds of reflective practices: critical reflection in the context of a temporary system and different kinds of institutionalised meetings at the factory.

A case study

Understanding organisational development and learning through the lenses of reflection, a factory has institutionalised a seminar each year with representatives from top- and middle-management and employees from all departments. The factory has a ten-year-old history, including different ways of structuring and setting principles in production groups. Over time, the production groups have developed greater and more fundamental influence on the work processes of the group members, within common agreed frames of the production group. Management philosophy is that workers capabilities are resources for the factory, and that the best possible conditions for the workers – in terms of possibilities of participation, influence, learning and personal development – constitute the basis for the best quality and productivity of work. The organisation of work processes in terms of production groups are intended to realise this vision.

Production groups have these areas of authority:

- Planning of work in details. Overall planning belongs to a central department of planning;
- decisions on holidays;
- control of the work process;
- competence development in relation to management of machines and technology;
- coordination of work processes and functions in different groups and departments;
- collective reflection in the production group, in institutionalised meetings in working time; and
- development of sustainability of the factory.

Organising reflection: reflective practices

In this case we find these forms of reflective practices. An institutionalised seminar – repeated within a time of one to two years – carried out within the frames of a temporary system. The core processes are critical reflection. Participants are top- and middle-management, human resource manager, Stuarts and workers. All departments of the factory are represented. An external consultant facilitates the processes at the seminar. The purpose of the seminar is to reflect on basic conditions of work.

The seminar is structured in two periods: a period where focus is on the single production group. The existing structure – called “constitution for the productions groups” – is discussed. The participants in the seminar express and share their experiences from daily work in relation to each item of the “constitution”. Are the principles of the constitution realised in daily work? Are we satisfied with the principles? Can we find areas in the constitution we want to consolidate or change? The content of the collective reflection is the premises, values and structure of the factory; the reflection is clearly critical reflection. The frames of the temporary system support it: leaders and workers have a distance to daily work routines, work demands and pressures and social structures determined by technology and physical environment of the factory. The temporary system creates optimum conditions for critical reflection processes.

In the second period focus lies on implementation, back to work: participants are asked to make concrete elements in the constitution of “rules for the production group” that have to be realised in their own production group in daily work.

In the seminar all of the reflection processes on interaction level in our theoretical analyses are presented. We should present an elected occurrence at the seminar, illustrating a collection of reflection processes.

Prior to the seminar, the management and the shop Stuart have presented a plan for how work should be organised in a department. The employees have tested the plan in their daily work and realised, that it did not work. At the seminar the employees present their own plan as an alternative to the management plan. After a common discussion the seminar decides on the alternative plan as part of the new “constitution”.

We can understand this as experimentation on an interaction level. A group of people tests an organisation plan purposed by management and shop Stuart. Experiences are acquired and shared. Then thinking ahead, making a plan of action. The plan is presented and tested at the seminar. Decisions are made and the plan is carried out in the working situation at the factory.

Meetings at the factory in working time

An important interpretation of some meetings at the workplace is that these meetings are institutionalised, organised and reflective practices. This way the meetings serve two purposes:

- (1) They give time and space for reflection processes to be carried out.
- (2) The meetings organise reflective processes.

A connection and coordination is created. The meetings legitimate that critical reflection is on the agenda. In these meetings members of the production group can put questions as:

- Are we realising our common decided ideas from the seminar?
- What are our experiences?
- Do we have something to change?

The meetings can be daily meetings with an agenda focusing on sharing experiences and coordinating activities. The meeting can be one asked for by the members of the production group. Or the meeting can be a meeting of crisis called for by management and shop Stuart. An example illustrating the process of framing should be mentioned here.

Middle management, shop Stuart and workers from a production team spontaneously arrange a crisis meeting. They have all heard complaints from the working team. An employee does not assist his colleagues under great pressure of work although he himself has no work to do at the time. The members talk openly, trusting each other in handling the embarrassing problem. The members begin to validate their knowledge: have we all heard the same story? Can we trust our sources? The members confirm each other at this point. Then a member states: could we interpret the situation in a different way? E.g. the man is busy but it is not visible to his colleagues. Or: the man would really like to help, but the group rejects him for reasons we do not know. In this way the meeting tries to re-label the problem. A decision is made to contact the group to get further information about the problem and a basis of further action.

We can learn from the case that it is important not only to create time and space for reflection to take place – in optimal conditions – but also to support reflective practices in which a connection and coordination of reflexive processes are created. This way it seems possible that different kinds of reflective processes support organisational learning.

Conclusion: the relationship between organisational learning and reflection

We can return to our criteria of organisational learning and put the question: do the reflexive processes – as described in our theoretical analysis and the presented case study – meet the criteria of organisational learning?

It seems evident that coherence between the “tangible” (formal) and “intangible” (informal) dimensions of an organisation is established. This is created through reflective practices such as meetings, connecting critical reflection and continuous learning experiences. With the great influence of the workers in the established temporary system and the meetings on the work place and the production group, this item is also fulfilled.

Developmental or challenging work is a prerequisite for implementing organisational learning. Work should be organised in such a way that it promotes human development.

This criterion is fulfilled in the structure of the production groups with great influence on different areas of work.

A criterion mentioned is that support for planning and reflection is essential. We have seen this criterion realised through the different modes of freedom and possibility to reflect, to make plans, to keep meetings and to get feedback on actions and plans. This way reflection processes take place in collective learning settings so that people

can engage in finding common meanings in making sense of the collective work they are doing.

The last criterion, the need of a boundary-crossing and interdisciplinary partnership between the vocational education and training and human resource development communities, has not been mentioned in the case.

References

- Argyris, C. and Schön, D.A. (1996), *Organizational Learning II. Theory, Method, and Practice*, Addison-Wesley Publishing Company, New York, NY.
- Billett, S. (1996), "Towards a model of workplace learning: the learning curriculum", *Studies in Continuing Education*, Vol. 18 No. 1, pp. 43-58.
- Boud, D., Keough, R. and Walker, D. (1985), *Reflection: Turning Experience into Learning*, Kogan Page, London.
- Brookfield, S.D. (2000), "The concept of critically reflective practice", in Wilson, A.L. and Hayes, E.R. (Eds), *Handbook of Adult and Continuing Education*, Jossey-Bass, San Francisco, CA.
- Gherardi, S. and Nicolini, D. (2001), "The sociological foundations of organizational learning", in Dierkes, M., Antal, A.B., Child, J. and Nonaka, I. (Eds), *Handbook of Organizational Learning and Knowledge*, Oxford University Press, Oxford, pp. 35-60.
- Mezirow, J. (1981), "A critical theory of adult learning and education", *Adult Education*, Vol. 32 No. 1, pp. 3-24.
- Mezirow, J. (1990), "How critical reflection triggers transformative learning", in Mezirow, J. et al. (Eds), *Fostering Critical Reflection in Adulthood. A Guide to Transformative and Emancipatory Learning*, Jossey-Bass, San Francisco, CA, pp. 1-20.
- Moon, J.A. (1999), *Reflection in Learning and Professional Development*, Kogan Page, London.
- Nyhan, B., Cressey, P., Tomassini, M., Kelleher, M. and Poell, R. (2003), *Facing up to Learning Organization Challenge. Key Issues from a European Perspective*, Vol. 1, Office for Official Publications of the European Communities, Luxembourg.
- Raelin, J.A. (2002), "I don't have time to think!" versus the art of reflective practice", *Reflections*, Vol. 4 No. 1, pp. 66-79.
- Reynolds, M. (1998), "Reflection and critical reflection in management learning", *Management Learning*, Vol. 29 No. 2, pp. 183-200.
- Senge, P.M. (1990), *The Fifth Discipline*, Century Business, Mackay, Chatham.
- Vince, R. (2002), "Organizing reflection", *Management Learning*, Vol. 33 No. 1, pp. 63-78.
- Woerkom, M. (2003), "Critical reflection at work. Bridging individual and organisational learning", PhD thesis, Twente University, Enschede/Print Partners, Ipskamp.