Enriching Staff Proficiency
Building a Framework for Long Term Investment

Rebekah Powell
Program Specialist
Methodist Children’s Home
Integrating Research-Based & Practice-Based Knowledge

Act Knowledgeably
Act Effectively
Act Deliberately
Act Strategically
Act Reflectively
Staff Understanding of TBRI

**Pre Survey**
- 38% Fully Understand
- 31% Understand Some
- 21% Mostly Understand
- 5% Fully Understand
- 5% Understand Some
- 5% Mostly Understand

**Post Survey**
- 85% Fully Understand
- 13% Mostly Understand
TBR...Y: 6 Session Course

101. Why Do Mindfulness Strategies Matter?
102. Why Do Engagement Strategies Matter?
103. Why Do Physiological Strategies Matter?
104. Why Do Ecological Strategies Matter?
105. Why Do Proactive Strategies Matter?
106. Why Do Responsive Strategies Matter?
Core Elements of TBR...Y

- Accountability through sending weekly emails and setting monthly goals
- Structure by building off each session, providing space for reflection, and allowing time for practice
- Information provided during each session in snapshots to prevent overload
- Brainstorming to hear from coworkers and supervisors and to empower staff to problem solve
Lessons Learned

Agency (Leadership)
- Commitment of new culture
- Encourage trainings and participation
- Support employees balancing work demands and reflection
- Separate 'reflection based trainings' from HR processes

Training
- Trained facilitators to link experience with knowledge
- Cultivate 'felt safety' and maintain confidentiality
- Topics applicable to the job
- Formal and scheduled meeting times
- Maximize time and resources

Staff
- Highly motivated and committed learners
- Balance work demands and reflection
- Participate in positive cohesiveness of group
- Respect confidentiality
Integrating research-based and practice-based knowledge through workplace reflection

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Gunilla Nordström and Per-Erik Ellström

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Abstract

Purpose – This paper seeks to present a theoretical framework with the aim of contributing to improved understanding of how reflection can provide a mechanism to integrate research-based knowledge with the pre-existing practice-based knowledge.

Design/methodology/approach – The paper begins with an explanation of important concepts: research-based and practice-based knowledge, four levels of action and two modes of learning. Two mini cases concerning managers in the public sector in Sweden then provide an illustration of how research-based knowledge can be utilized to challenge practice-based knowledge. The concluding discussion addresses some of the challenges involved in achieving reflection in the workplace that utilizes research-based knowledge.

Findings – The reflection programmes had several characteristics that facilitated their implementation: they achieved a balance between the workplace demands on the participating managers and time required for the reflection; the participants were specifically recruited, had full management support and were highly motivated to be part of the reflection groups; the facilitators played key roles in structuring the managers’ discussions and linking their experiences to relevant research-based knowledge.

Research limitations/implications – Methodological limitations of the cases constrain the conclusions to be drawn from these studies. However, it should be emphasized that the case studies were intended primarily as illustrations of how workplace reflection can be used to integrate research-based and practice-based knowledge. Obviously, there is a risk of social desirability bias because the interviewer was also involved in developing and implementing the reflection programmes. She also participated as a supervisor in mini case 2.

Originality/value – The literature on reflection has largely focused on reflection in the context of education, training and preparing for work or a profession. The role of workplace reflection and learning for practitioners and managers in work has received far less attention. The emergence of the evidence-based practice (EBP) agenda has further highlighted the importance of workplace learning and reflection, as practitioners are increasingly expected to critically appraise research studies and integrate new findings into their practice. A more EBP requires reflecting practitioners who are able to synthesize research-based knowledge with their own practice-based knowledge acquired through experience. However, the process of integrating research-based and practice-based knowledge has not been the focus of much study.

Keywords Reflection, Evidence-based practice, Learning, Knowledge, Management, Public sector organizations, Knowledge management

Paper type Conceptual paper

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.
Introduction
The concept and practices of reflection have generated a great deal of interest over the last decades. Many articles and books on the subject of reflection have appeared in the wake of the publication of Donald A. Schön’s seminal book *The Reflective Practitioner* (Schön, 1983). Despite this more recent attention, the foundation for the concept of reflection goes back to John Dewey’s writings in the early part of the twentieth century. Dewey saw the act of reflection as central to human learning and conceptualized it as “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends” (Dewey, 1933, p. 9). Reflection is typically described as a mechanism to translate experience into learning, by examining one’s attitudes, beliefs and actions, to draw conclusions to enable better choices or responses in the future.

The literature on reflection has largely focused on reflection in the context of education, training and preparing for work or a profession. The role of workplace reflection and learning for practitioners and managers in work has received far less attention (Boud et al., 2006; Gray, 2007). The emergence of the evidence-based practice agenda has further highlighted the importance of workplace learning and reflection, as practitioners are increasingly expected to critically appraise research studies and integrate new findings into their practice (Thomas, 2004; Trinder, 2006; Gabby and Le May, 2011). However, caution has been raised that evidence-based practice without the benefit of careful analysis or reflection may have unforeseen and potentially harmful effects (Gray et al., 2009). There is often a need to unlearn outdated or ineffective knowledge or habits that might otherwise act as barriers to new learning (Miller and Mount, 2001; Rushmer and Davies, 2004). A more evidence-based practice requires reflecting practitioners who are able to synthesize research-based knowledge with their own practice-based knowledge acquired through experience (Nutley et al., 2007). However, the process of integrating research-based and practice-based knowledge has not been the focus of much study.

This article presents a theoretical framework with the aim of contributing to improved understanding of how workplace reflection can provide a mechanism to integrate research-based knowledge with pre-existing practice-based knowledge. The article begins with an explanation of important concepts: research-based and practice-based knowledge, four levels of action and two modes of learning. Two mini cases concerning managers in the public sector in Sweden then provide an illustration of how research-based knowledge can be utilized to challenge practice-based knowledge. The concluding discussion addresses some of the challenges involved in achieving reflection in the workplace that utilizes research-based knowledge.

Theoretical framework
Research-based knowledge is derived from empirical research as well as concepts, theories, models and frameworks. Practice-based knowledge is gradually built up from practitioners’ experience, which is manifested in their craft expertise and skills; the source is often specific problems that require solutions. Key characteristics of research-based and practice-based knowledge are summarized in Table I. The table presents a simplified dichotomization of the two knowledge concepts (Nilsen, 2010).

Research-based knowledge is scientifically grounded and generated in a highly structured and meticulous process, which typically begins with a thorough analysis of
the problem under study. Different types of problems can also be the starting point for developing research-based knowledge, but this process typically involves a great deal of problematizing of the issue under study before research questions are formulated and the issue is investigated. Thus, research-based knowledge can rarely provide quick solutions to problems. In contrast, practice-based knowledge predominantly serves to solve the problems that occur in everyday life and work, which means that the knowledge is connected with specific situations or environments. The subjective and context-bound nature of practice-based knowledge limits its generalizability, whereas research-based knowledge typically has ambitions for applicability beyond the immediate boundaries of the specific study although aims for generalizability depend on the ontological assumptions of the research (Nilsen and Ellström, 2011).

Research-based knowledge is explicit, primarily articulated in different types of text, which facilitates communication and knowledge exchange. A broader definition of research-based knowledge also includes other forms of codified knowledge that may not have been subjected to such a rigorous quality control process, e.g. different types of reports and results. Practice-based knowledge, on the other hand, tends to be tacit, expressed through action rather than words. This type of knowledge can therefore be difficult to access and communicate to others (Nilsen and Ellström, 2011). Tacit knowledge can be converted into explicit knowledge in the form of rules, directives, and work routines, thus generating organizational learning (Grant, 1996), as described in the field of organizational knowledge (Ellström, 2010a).

It should be noted that many other attempts have been made to distinguish between different types of knowledge, from categorizations by philosophers into personal knowledge (knowledge of something’s existence), procedural knowledge (“know-how”, i.e. knowledge of how to perform a task) and propositional knowledge (knowledge of facts). Eraut (1994) expanded on the concept of procedural knowledge in his description

<table>
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<tr>
<th>Characteristics</th>
<th>Research-based knowledge</th>
<th>Practice-based knowledge</th>
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<tbody>
<tr>
<td>Rationale for knowledge development</td>
<td>Obtaining improved understanding or explanation of problems</td>
<td>Finding solutions to problems</td>
</tr>
<tr>
<td>Desirable knowledge attributes</td>
<td>Relevance to a wider sphere than the specific research situation. It is also desirable that the knowledge has been developed in a process that is accessible to and understandable by others</td>
<td>Hands-on use in concrete, everyday situations</td>
</tr>
<tr>
<td>Applicability of the knowledge</td>
<td>Applicability beyond the specific research situation</td>
<td>Context-specific, which restrains applicability beyond the specific situation</td>
</tr>
<tr>
<td>Articulation of the knowledge</td>
<td>Explicit, codified knowledge, primarily expressed in writing</td>
<td>Usually tacit knowledge expressed in action</td>
</tr>
<tr>
<td>Ease or difficulty with which the knowledge is shared</td>
<td>Easy to share</td>
<td>Difficult to share</td>
</tr>
<tr>
<td>Accessibility and availability of the knowledge</td>
<td>Public, available in certain channels, e.g. journals and reports</td>
<td>Unique, personal, and difficult to access</td>
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</tbody>
</table>
of process knowledge. Gibbons et al. (1994) distinguished between two types of knowledge production. Mode 1 refers to academic, investigator-initiated knowledge production, i.e. not unlike the concept of research-based knowledge, whereas Mode 2 is socially constructed knowledge by multiple actors in specific contexts, i.e. somewhat similar to the concept of practice-based knowledge.

In practice, aspects of research-based and practice-based knowledge are intertwined. It is rarely an either/or choice for practitioners, but more often a question of making sense of many different types and sources of knowledge, some of which may be research-based and others that are practice-based. It is neither possible nor desirable to draw a strict line of demarcation between these two types of knowledge. Fitzgerald and Dopson (2005) view the relationship as “circular”, stating that the two knowledge aspects reinforce each other as they become woven together. Nonaka et al. (2001, p. 497) of the organizational knowledge field describe a “spiral of knowledge creation” that can be set off by the interaction between tacit and explicit knowledge. Both research-based and practice-based knowledge are required to achieve a high level of competence, which is defined as an individual’s ability to act knowledgeably, effectively, deliberately, strategically, and reflectively in a situation (Svensson et al., 2004). Either knowledge aspect may dominate under different circumstances and the extent to which different knowledge types are utilized can depend on factors such as education, profession or type of activity (Nilsen, 2010).

The process in which the two types of knowledge are integrated has been described somewhat differently by different researchers. Desforges (2000) describes this integration as a “transformation” process, in which “old” knowledge in a particular problem context is merged with “new” knowledge. Nutley et al. (2007, p. 43) depict the process as “complex, varied, and unique” and believe the end result represents “an interaction between the ideas and findings contained in the research and the existing knowledge, experiences, and attitudes of the practitioners themselves”. In general, this integration process has been understood from a constructivist perspective, i.e. individuals construct new personal knowledge by combining different forms of knowledge. Before research-based knowledge actually leads to changes in thinking and behaviour, the newer knowledge has to be actively related to what individuals already know.

Practice-based knowledge is indispensable for performing many work tasks well and solving different types of problems that are encountered in the course of daily work. These actions can be described on a continuum, from being conscious and deliberate to being routinized and performed with little or no conscious control. Based on theory and research within the field of cognitive action theory, four levels of action can be conceptualized (Ellström, 2006a) (see Figure 1). Action at one level does not exclude parallel or integrated activity at other levels. In practice, the optimal handling of a certain task may require performance at different levels, in series or in parallel (Olsen and Rasmussen, 1989).

Adaptive learning yields routines and habits for handling problems and demands that occur in daily life (Ellström, 2001, 2006a). Adaptive learning is represented by an upward arrow in Figure 1, illustrating the progression from reflective, conscious action to more rule- and skill-based action that requires little conscious attention. This mode of learning can be conceptualized as a process in which an individual learns to master new tasks or follow certain instructions, becoming increasingly proficient. The learning is based on experience. Adaptive learning is also central also to socialization
of individuals within an organization. This type of learning yields efficient, effective, and reliable task performances that are stable over time. Variations in performance within and between individuals in an organization are reduced, promoting homogeneity (Ellström, 2010b).

Establishing routines and habits through learning from experience can be seen as a way to cope successfully with the daily flow of events while maintaining a sense of security and stability in life (Giddens, 1984). Routines and habits preserve crucial time, energy, and mental capacity, thus freeing mental resources for other purposes (Rushmer and Davies, 2004). However, once established, habits and routinized thought and action patterns can be very difficult to change and unlearn. There is ample theoretical and empirical evidence to suggest that there are strong mechanisms at work to preserve established attitudes, beliefs, and behaviours (Conner and Norman, 2005; Verplanken and Wood, 2006).

Experience-based adaptive learning is insufficient to challenge the prevailing status quo of well-learned and routinized thought and action patterns (Nilsen and Ellström, 2011). Instead, creative learning is required. This learning entails a movement from the level of skill-based action to the level of knowledge-based or reflective action, represented by the downward arrow in Figure 1. Creative learning is assumed to occur when individuals or groups in an organization question established thought and action patterns and break out from routinized actions to develop new ways of understanding and handling situations involved in a job (Ellström, 2006b, 2010b). Creative learning is broadly similar to concepts such as Argyris and Schön’s (1978) “double-loop learning”, Engeström’s (1988) “expansive learning”, and Mezirow’s (1991) “transformative learning”.

People function well at a routinized level of action until problems or surprises of one kind or another arise (Gersick and Hackman, 1990). Dewey (1933) viewed reflection as a process that begins with a perceived difficulty or disturbance in the routinized way of handling a certain task or situation. In this view, conflicts and ambiguity are not potential threats to learning, but rather provide potential for achieving creative learning. Emerging research suggests that the deliberate use of research-based knowledge could trigger creative learning because it facilitates the surfing and

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<tr>
<th>Two modes of learning</th>
<th>Levels of action</th>
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<tr>
<td>Creative learning</td>
<td>Rule-based action</td>
<td>Actions performed on the basis of a rule or procedure, which draw on experience from similar previous occasions, instructions, or communication with others</td>
</tr>
<tr>
<td>Adaptive learning</td>
<td>Skill-based action</td>
<td>Routinized actions typically performed smoothly on the basis of tacit knowledge and with little subjective effort, conscious attention or control</td>
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<tr>
<td></td>
<td>Knowledge-based action</td>
<td>Consciously controlled actions, generated and selected by analysing tasks and goals in relation to factual knowledge or more general theoretical knowledge that we are able to articulate and codify</td>
</tr>
<tr>
<td></td>
<td>Reflective action</td>
<td>Actions based on assessment and reflection concerning not only the performance and consequences of actions but also reflection concerning the tasks and goals at hand</td>
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</table>

Figure 1. Four levels of action and two modes of learning
critiquing of tacit or taken-for-granted assumptions and beliefs (Bilson, 2006; Fitzgerald and Dopson, 2005; Ohlsson, 2002; Rosell, 2002; Svensson, 2002). It appears that research-based knowledge can provide practitioners with analytical tools that make it easier to go beyond their specific here-and-now circumstances of current work practices or problems, thus potentially yielding alternate perspectives and new ways of reasoning and behaving.

It is important to emphasize that both adaptive and creative learning are needed in most organizations. There is often a requirement to deal alternately with well-known tasks and handle new problematic situations. Thus, it is not an issue of either/or adaptive or creative learning, but of a question of both/and where the two types of learning can be seen as extremes on a continuum of learning. The challenge is one of providing opportunities for creative learning in organizations without sacrificing the necessary adaptive learning, or vice versa.

**Promoting reflection at work – two short cases**

This section provides two examples of how reflection can provide a mechanism to integrate research-based and practice-based knowledge. The two cases illustrate how managers in the public sector in Sweden deliberately drew on research-based knowledge to challenge existing practice-based knowledge regarding everyday situations and problems encountered in the workplace, thus triggering creative learning.

In the first mini case, reflection groups consisted of managers from three sectors (social work, health care and education) in a middle-sized municipality in Sweden. The managers all had responsibility for both economic and personnel issues in their respective organization. The participants were internally recruited by the management of each organization. Each group consisted of nine managers, three from each sector. The group met once a month during one year, with an interruption for the summer. The reflection meetings lasted approximately three hours, including a coffee break. The programme has been ongoing since its inception in 2005. The purpose of the reflection programme is to facilitate the managers’ learning for improved handling of everyday decision making in situations they considered particularly challenging or difficult.

Each reflection group was supervised by a facilitator whose task was to observe, provide a structure for the meetings and actively contribute to the discussions with theoretically-based knowledge and experience in the areas of leadership and organizational development. The facilitator used challenging questions to make the participants examine their assumptions or opinions and discuss alternative ways of viewing the issues. The topics were derived from the participants’ real-life situations and dilemmas encountered in the workplace, including issues such as workload, problem solving in everyday work, feedback from managers and colleagues, conflicts among the staff, goal clarity and the execution of leadership in the workplace. The discussion also touched on broader issues, such as changes in the surrounding environment. The facilitator encouraged the participants’ activity and contribution of experiences.

The second mini case involved reflection groups as part of a trainee programme for managers in social work in one of Sweden’s ten largest municipalities. The programme was initiated in 2006 and was scheduled to take place every second year. Two
programmes with five participants in each have taken place at the time of writing (early 2011). The first group of participants was selected from 130 applicants aged between 25 and 33 years old with disparate educational backgrounds. The second group was similar in composition, although there were fewer applicants.

The programme’s objective was to develop the participants’ competence and prepare them for future management tasks in social work and the municipality sector. Another aim was to achieve improved conditions for boundary-crossing work practices and networking within social work. A more long-term goal was to change general public attitudes toward social work to make it more attractive to pursue a career in this sector. The programme participants were seen as important ambassadors for the role of social workers.

The first programme lasted five months, whereas the second programme was extended to nine months based on the evaluation of the first programme. The programme consisted of several components, including continuing professional education and various forms of work practice. An important element was group meetings devoted to reflection on issues relevant to management and leadership in social work. These reflection meetings were held monthly, lasting two to three hours, with a facilitator providing a structure for the discussions. One of the authors (GN) of this study functioned as a facilitator. These meetings were based on the participants’ questions, log books, articles and web lectures prepared by the facilitator concerning a wide range of topics, from abstract concepts such as learning to dilemmas experienced at the workplace. The discussions utilized theories, models and frameworks, taking the participants’ present concerns as their starting point. For example, discussions about workplace conflicts drew on theories and research findings on mechanisms behind conflicts and how individuals react in conflicts. This integration of research-based and practice-based knowledge helped the participants to view the issues from new perspectives.

Both reflection programmes have been made permanent because of the positive response from the participants. The programmes were evaluated by means of interviews with all participants in the initial 2005 programme described in case 1 and all participants in case 2. The interviews were conducted by the second author (GN) and covered various aspects of the programmes. Field notes were taken during the interviews. One one-ended question concerned the participants’ perceived impact of the reflection on their regular work practice. The responses to this question were analyzed for this paper.

The field notes were read by GN to obtain a sense of the whole before they were examined with the purpose of identifying different ways in which the reflection had impacted on the work practice of the participants. Through the process of data analysis, three overarching themes emerged:

1. the participants experienced an enhanced self-efficacy concerning their role as leaders;
2. the participants felt acknowledged for their reasoning and ways of handling different work situations, including various work dilemmas; and
3. the participants believed the reflection increased their general understanding of their work as their assumptions and experiences were challenged.
Discussion

This article describes a theoretical framework and two mini cases on the utilization of research-based knowledge in reflection for managers in the public sector. Research-based knowledge is central to the agenda for a more evidence-based practice, which assumes that the rational and systematic application of research findings can yield more effective and accountable practice. Evidence-based practice is seen as a response to growing demands in many fields that professional practice should be underpinned by scientific knowledge and evidence of the effectiveness of various practices (Trinder, 2006).

The focus of the evidence-based practice agenda has predominantly been on practitioners’ instrumental use of knowledge, i.e. actual changes in work practices, rather than on conceptual use in the form of enhanced awareness, knowledge and understanding of one’s work and shifts in ideas and attitudes concerning various work aspects (Nutley et al., 2007). However, the mini cases clearly point to the relevance of a more conceptual use of research, as the participants emphasized that the reflection improved their overall understanding of their work and enhanced their role security and belief in how they reasoned and acted concerning various work situations. The research-based knowledge did not contribute to solving specific short-term problems in the workplaces, but was important in improving their understanding of the problems the managers had encountered, thus possibly leading to improved handling of similar situations in the future. Otto et al. (2009) have suggested the need for a “second generation” of evidence-based practice that recognizes the importance of reflexive professionalism, i.e. the ability to synthesize research-based and practice-based knowledge to make sound judgements and decisions about what is desirable and appropriate in various work situations. They argue that research cannot always provide “tried-and-tested solutions” for direct application in practice, which makes it important that practitioners develop reflective abilities.

Evidence-based practice is often described in terms of prescribing methods and routines to reduce variations in different practice contexts, thus making practice more standardized, codified, and transparent (Dopson et al., 2005). Implementation of and adherence to a particular best practice tend to be emphasized, i.e. adaptive learning. In contrast, this article highlights the potential importance of using research-based knowledge to challenge established patterns of thought and action to achieve creative learning. This type of learning may be particularly important for unlearning as practitioners’ current knowledge “may be incomplete, dangerously flawed, or simply incorrect” (Rushmer and Davies, 2004, p. ii2). Unlearning has been defined as the “process through which learners discard knowledge” (Hedberg, 1981, p. 18) and as the “process of reducing or eliminating pre-existing knowledge or habits that would otherwise represent formidable barriers to new learning” (Newstrom, 1983, p. 36). The mini cases suggest that reflection made it possible to surface aspects of knowledge that practitioners had taken for granted or were unaware of, thus opening them up to deeper and more useful understanding of their work practice. Unlearning has been recognized as an important but neglected step in moving towards an evidence-based practice (MacDonald, 2002; Rushmer and Davies, 2004). This issue has not garnered much research attention, possibly stemming from the assumption that past learning will fade away over time and that further learning serves simply to refine or replace what has previously been learned.
The literature on reflection provides strong arguments in favour of this activity, but empirical research has described many challenges to reflection due to the pace and demands of the modern workplace. Management interest in the creation and maintenance of learning mechanisms has been found to vary considerably, from total unawareness of the possible existence of learning and reflection in the workplace, to ranking such activities as primary means of competition (De Geus, 1992; Garvin, 2000; Shani and Docherty, 2003). The extent to which expectations for a more evidence-based practice in various fields has led to an increased focus on workplace learning and reflection in practice is currently not known.

The reflection programmes in the two mini cases exhibited several characteristics associated with successful workplace reflection. The programmes provided a formal, scheduled opportunity to meet and discuss matters of relevance to the managers’ learning. The participants had full support from their respective management and their participation was encouraged, which gave this activity some priority. Research has indicated the importance of forums that provide legitimacy for reflection (Docherty et al., 2006).

The reflection meetings lasted for several hours and the programmes were carried out over an extended period of time in the two mini cases. The programmes seemed to achieve a balance between the workplace demands on the participating managers and time required for the reflection. Time is generally considered a necessary but certainly not the only condition for reflection; as Ellström (2011, p. 115) points out, it takes “time to observe, time to think, and time to exchange ideas with others”. However, there is an obvious conflict between time for production and time for activities that involve reflection and learning in the workplace. It was considered necessary to conduct the reflection programmes in the two mini cases separate from the daily practice of the managers in order to avoid disturbances or interruptions.

The participants in the reflection programme were highly motivated to be part of the reflection groups. The reflection literature has emphasized that this activity requires the individual’s active engagement. Loughran (1996) contends that reflection is dependent on wholeheartedness and responsibility on the part of the learner. Langer (1989) similarly argues that reflection can occur only when the individual makes a conscious choice to be mindful. This view is shared by Boud et al. (1985) and Mezirow (1991) who state that conscious awareness and deliberate choice are prerequisites to reflection. The participants were specifically recruited for the reflection programmes, which likely contributed to their commitment.

The facilitators in the two reflection programmes played key roles in structuring the managers’ discussions and linking their experiences to relevant research-based knowledge. Some researchers have cautioned that guided reflection may inhibit the dynamic and unpredictable nature of reflection processes, potentially turning reflection into a situation akin to responding to a questionnaire or following a recipe (Cressey et al., 2006). However, Gray (2007) argues that collaboration with a facilitator, coach or mentor is essential to facilitate managers’ reflection as this is an activity or skill that managers must learn because managers typically place a higher premium on action than reflection. Some form of supportive mechanism may be particularly important when the aim is to utilize research-based knowledge in the reflection. Without the facilitators’ active input, it would have been impossible to draw on research-based knowledge to the extent that was done in the two mini cases. Research on practitioners’
utilization of research findings has highlighted the importance of facilitation
(i.e. enabling strategies that provide practical assistance for individuals and groups) to
support changes in practice (Walter et al., 2003).

Methodological limitations of the cases constrain the conclusions to be drawn from
these studies. However, it should be emphasized that the case studies were intended
primarily as illustrations of how workplace reflection can be used to integrate
research-based and practice-based knowledge. Obviously, there is a risk of social
desirability bias because the interviewer (GN) was also involved in developing and
implementing the reflection programmes. She also participated as a supervisor in mini
case 2. Social desirability is the tendency of respondents to provide answers with the
aim of being viewed favourably by others.

Further research is needed to provide more empirical evidence of how
research-based knowledge can inform work practice in many areas and how
workplace reflection can be used as a mechanism to integrate research-based
and practice-based knowledge. This article points to many research challenges relevant to
workplace reflection issues and the evidence-based agenda. These include
investigations into the extent to which reflection in the workplace that specifically
draws on research-based knowledge occurs in various practice contexts and the extent
to which it is part of the management agenda. To what extent have expectations for a
more evidence-based practice led to increased recognition of the importance of
reflection to synthesize research-based and practice-based knowledge? To what extent
is research-based knowledge utilized for adaptive versus creative learning and for
instrumental versus conceptual use? To what extent can the utilization of
research-based knowledge facilitate or trigger creative learning and organizational
learning? And to what extent can creative learning facilitate unlearning at the
individual and organizational levels? Another important issue is how reflection that
specifically draws on research-based knowledge can best be organized. What are the
requirements of facilitators in this type of reflection that makes use of research-based
knowledge? There are many research questions that need to be answered for improved
understanding of the role of research-based knowledge in reflection at work. The
increased attention paid to evidence-based practice in many fields makes these issues
highly relevant for further research.

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Per-Erik Ellström is the Director of Helix Vinn Excellence Centre, Linköping University. He views the workplace not only as a production system, but ideally also as a system for the promotion of learning, health and innovation. He is a Professor in Education with special emphasis on education and learning in working life. He has pioneered practice-based research, in which researchers investigate work places and organisations but also provide experience and knowledge feedback and reflect with practitioners for mutual learning and innovation.

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Facilitating Management Learning
Developing Critical Reflection Through Reflective Tools

Abstract

The aim of this article is to explore how the practice of critical reflection within a management learning process can be facilitated through the application of reflective processes and tools. A distinction is drawn between reflection as a form of individual development (of, say, the reflective practitioner) and critical reflection as a route to collective action and a component of organizational learning and change. Critical reflection, however, is not a process that comes naturally to many managers and may have to be learned or facilitated, either in formal classroom contexts, or through learning processes such as coaching, mentoring and action learning. The article discusses some of the tools available to learning facilitators, in helping a group or client towards a more critically reflective understanding of their situation and organization. These include processes such as storytelling, and reflective and reflexive conversations, and the use of tools such as reflective metaphors, critical incident analysis, reflective journals, repertory grids and concept mapping. Such tools provide an aid to critical reflection, which is seen as one process that mediates between experience, knowledge and action. Key Words: coaching; critical reflection; facilitated learning; management development; mentoring; reflective tools

The aim of this article is to explore how the practice of critical reflection within a management learning setting can be facilitated through the application of reflective processes and tools. To date, much of the discourse on critical reflection within the management literature has highlighted the significance of reflective processes to management understanding and self-knowledge, without offering much enlightenment on the mechanics of how this can be achieved. This article attempts to examine a range of reflective processes and tools (the latter including storytelling, metaphors, critical incident analysis and repertory grids) that might serve to assist the work of workshop facilitators, coaches, mentors and others who are engaged in assisting the management learning process. Some of these processes and tools have traditionally been used in professional contexts other than management learning. In this article, the focus is on their relevance for management learning itself. It should be noted that these tools and processes...
are offered as exemplars for illustration—the list is not meant to be exhaustive. A deliberate distinction is also drawn between reflection and critical reflection, the latter incorporating a focus on the questioning of assumptions and social rather than individual perspectives, as well as attention to the analysis of power relations in organizations. The article strives to show, then, how reflective tools can be used to facilitate this critical element of reflection.

Management Learning and Critical Reflection

Reflection is an active and purposeful process of exploration and discovery, often leading to unexpected outcomes. It is the bridge between experience and learning, involving both cognition and feelings (Boud et al., 1985), aiding managers in achieving emancipation from ‘perspective-limiting assumptions’ (Kayes, 2002: 138). It is important because it allows us to critique our taken-for-granted assumptions, so that we can become receptive to alternative ways of reasoning and behaving (Raelin, 2001). Hence, reflection is much more than understanding. It involves the absorption of a concept into personal knowledge structures, relating the concept to the person’s other forms of knowledge and experience (Leung and Kember, 2003). Yet, while reflection is a key component of learning, it has received insufficient attention in the management or leadership literature (Ollila, 2000). One explanation for this is that managers themselves have always placed a higher premium on action than reflection (Daudelin, 1996).

Action and experience, however, do not inevitably lead to learning (Jarvis, 1995). One element of human experience is to build up a mental model of the way the world works. As long as experiences conform to this structure, mental models can remain unmodified and no learning takes place. Non-learning, then, can be a response to everyday experience. A direct, primary experience may also lead to non-learning if the reaction to the experience is one of mental or physical discomfort—a personal crisis, for example, may serve to absorb attention rather than facilitate calm reflection. Anxiety and avoidance strategies may also serve to hinder learning (Vince, 1996). Management learning can be enhanced, however, by proactive critical reflectivity—the surfacing and critiquing of tacit or taken-for-granted assumptions and beliefs. This takes place through the dialectical relationship between reflection and action in which reflection is a precursor to action, but the process of action leads to further thinking and reflective processes (Høyrup, 2004). Within these processes, if reflection is overemphasized, what we are left with is abstract theory. Reflection requires the ‘active application of concepts in practice’ (Marsick and Watkins, 1990: 8).

Reflection has been described as the practice of ‘periodically stepping back to ponder the meaning of what has recently transpired to ourselves and to others in our immediate environment’ (Raelin, 2002: 66). Reflection can also be seen as a form of response to experience—the total response of a person to a situation or event (Boud et al., 1985). Reflective learning may also involve disbelieving what was previously held to be true (Weick, 2002). It is important to distinguish, however, between reflection (examining the justifications for one’s beliefs), critical
reflection (making an assessment of the validity of one’s assumptions, examining both sources and consequences) and critical self-reflection (reassessing the way one has posed problems and one’s orientation to perceiving, believing and acting). By critiquing the presuppositions on which beliefs are built, critical reflection encourages learning at a deeper, transformative level (Mezirow, 1990). These notions of reflection, however, are largely rooted in psychological processes of individual growth (which include the development of the ‘reflective practitioner’).

One of the criticisms of management education is that it has been too influenced by such individualistic, psychological perspectives (Reynolds and Vince, 2004). What is needed is a critical approach that focuses on collective, situated processes that help us to inquire into organizational practices. This context includes social, cultural and political factors (Reynolds, 1998, 1999a). Adopting a critical perspective means making ‘a ruthless and courageous examination and deconstruction of assumptions, norms, expectations, limitations, language, results and applications of one’s work’ (Boyce, 1996: 9). This model of critical reflection, then, raises questions that are moral as well as technical in nature, highlights the processes of power that are embedded in social structures and practices, and recognizes that experience is a social as well as an individual phenomenon (Reynolds, 1999b). Critical reflection must be a social act of collective empowerment if it is to move beyond personal to social transformation (McLaren and da Silva, 1993). Reflection, then, is not restricted to being a process of quiet self-fulfilment, but is a political process directed against irrationality and injustice (Kemmis, 1985). This shows individuals how their beliefs and attitudes may be ideological illusions that help to preserve a social order which is alien to their collective experiences and needs.

Critical reflection, for example, promotes consciousness and hence the potential for autonomy, allowing human beings to make informed judgements that are not impeded by ‘socially unnecessary dependencies associated with subordination to inequalities of wealth, power and knowledge’ (Alvesson and Willmott, 1996: 13). Western society is dominated by the ideology of individualism, encouraging us to assume that we are self-determining, sovereign human beings. Personal attributes are rewarded, and individual success celebrated as a manifestation of individual ability and effort. A critical evaluation of autonomy, however, recognizes the reality of interdependence, and sees the necessity for taking personal responsibility for participating in changing conditions that are associated with domination. This means that critical reflection needs to be shifted from individual to organizational learning and from a focus on individual to collective action if it is to be a component in the politics of organizational learning and change (Vince, 2002). A retrospective focus on the past needs to be replaced by the practice of reflection as an integral part of day-to-day management (reflection-in-action). Management action will generate knowledge about power relationships in organizations and this knowledge will provide further (collective) opportunities for reflection (social reflection-in-action) and further political activities or decisions.

Yet if managers are to learn from critical reflection, they also need to develop learning systems that are different. In this sense, reflection, as a critical learning process, needs to be trained (Ollila, 2000); it is thus a learning process that can
be helped by the support of facilitators (Boud et al., 1985; Marsick and Watkins, 1997). A process of critical inquiry, reflection requires some facilitation ‘to help learners reframe their knowledge base’ (Raelin, 2005: 135). These perspectives, however, still tend to view critical reflection as a psychological process, at best, one that involves generating problem-solving capabilities. Yet if managers are to attain what Alvesson and Willmott (1992) term ‘micro-emancipation’, achieved through the ability to find ‘loop-holes’ in managerial and organizational control, then critical management pedagogy needs to embrace both content (organizational procedures and relations) and processes (participative values) (Reynolds, 1999a). This means going beyond transformative and learner-centred approaches to experiential learning, where psychological and individual discourse still predominate, to approaches that emphasize social and political processes, including language, power, history and culture (Reynolds, 1999a).

If reflection is a prime process in management development, how can managers become more critically reflective? Engaging with critical reflection that challenges existing norms, and the existing social, cultural and political status quo, can prove unsettling both mentally and emotionally, and may even cause disruption both at work and at home (Reynolds, 1999a). Critical reflection may also lead to scepticism and cause one to call into question long-established belief systems, leading to a strong feeling of anxiety and even the loss of a sense of identity (Alvesson and Willmott, 1992), as well as fear, resentment and feelings of being intimidated (Brookfield, 1987). How, then, can managers be supported in their critical reflective processes? This article now examines a number of reflective processes and tools that may serve to provide support.

**Tools and Processes for Promoting Critical Management Reflection**

One of the problems faced by many modern managers is that the pace and demands of the workplace allow little space for reflection (Raelin, 2002). Indeed, rather than step back and reflect on what is happening around them (although this itself can be individualistic and limiting), managers are often happy to clutch at the first logical explanation that comes along (Vince, 2002). This is why the promotion of processes and implements for facilitating the reflective process may offer a starting point and focus for reflection. Tools, by definition, help us to perform tasks more efficiently, speedily, or both. The power of reflective tools and processes comes in their ability to encourage managers to stand back from what is happening, and to examine their personal thinking.

Some of the dialogical processes and tools discussed here are used by professional practitioners such as teachers and healthcare workers, whereas others emanate largely from the field of management development, including formal approaches such as accredited programmes or workshops. What they all have in common is that they are used by managers for the process of sense making, the complex process through which people create and maintain their intersubjective world (Balogun and Johnson, 2004). The purpose of this section is to illustrate how specific processes and tools from the fields of both professional development and formal management development can be applied to the facilitation of
management learning both at an individual, psychological level, and at a critical (social, cultural and political) level. Where available, reference is also made to a limited number of empirical studies that show how some of these reflective tools have been used to assist the learning of managers and other professionals.

A summary of these processes and tools is provided in Table 1. A distinction is made between processes (stories and conversations) that involve discursive conversations and tools (instruments) that can be used either as stand-alone devices or to facilitate reflection. In each example, attention is given to how these processes and tools can be used to engage with critical reflection. This description, however, is presented critically, that is, the limitations or potential contradictions of using these approaches will also be explored.

**Storytelling**

Storytelling is a powerful means by which we can seek to explore and understand our own values, ideas and norms (Gold and Holman, 2001). It can help us to create order out of a chaotic world (Bolton, 2001). Storytelling is a collective act (in the sense that stories are told to people), encouraging us to share meanings (because meanings must be made explicit if the story is to be understood). As such, then, stories help to establish a social cohesion which otherwise might be unattainable. Storytelling is therefore an important management skill (Boje, 1991a), and ‘the preferred sense-making currency of human relationships among internal and external stakeholders’ (Boje, 1991b: 106). Stories often contain either implicit or explicit arguments for or against a proposition. They also help managers to articulate accounts of quite complex events in which they are immersed, but in a way that helps them to develop new insights and understandings, new perspectives and therefore new ways of acting (Gold et al., 2002). This analysis of arguments also helps managers to more easily recognize the perspectives of their colleagues. Shared stories in organizations can be valuable as a way of amending and altering organizational reality, as a means of sharpening and renewing a sense of purpose within organizational groups or teams, and for creating a sense of vision and strategy. Stories are emotionally and symbolically charged narratives that do not present information or facts, but serve to enrich and infuse facts with meaning (Gabriel, 2000), including social and political meaning.

Being a good storyteller does not make someone a good manager. To understand the principles of storytelling means having a degree of self-understanding, self-insight and self-respect—important cornerstones of management. Storytelling involves:

- the story, someone tells it to someone who listens;
- the understanding, the people and the teller begin to understand something that was only superficially known to them before;
- the shared meaning, couples or groups use their shared understanding of the story as a metaphor that facilitates wider understanding of other phenomena (Kaye and Jacobson, 1999).
<table>
<thead>
<tr>
<th>Reflective processes (shaded) and tools</th>
<th>Application (individual, pair or team)</th>
<th>Facilitation process</th>
<th>Links</th>
<th>Advantages</th>
<th>Critique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storytelling</td>
<td>At all levels, but most likely at individual due to the personal nature of the narrative. In pairs if told to an external agency, e.g. a coach</td>
<td>Facilitator, coach or mentor gets manager to provide an articulation of problems or events through a story. The meaning of the story is then jointly explored.</td>
<td>Stories may be narrated/constructed within reflective journals. They may contain reflective metaphors and the analysis of turning points—critical incidents.</td>
<td>Creative exploration of values, novel ideas, organizational norms or contradictions and individual viewpoints (including alternative perspectives). Self identity and characterization—we are ‘told’ by stories.</td>
<td>Danger of exposing deep seated psychological anxieties. Potential lack of connection or focus with organizational issues if not rooted in ‘reality’. Do not necessarily engender critical reflection (on self and organizational perspectives). Potentially self-reverential, introspective and narcissistic.</td>
</tr>
<tr>
<td>Reflective and reflexive conversations</td>
<td>Often in pairs – the learner with experienced practitioner</td>
<td>Facilitator may observe or listen and stimulate reflective conversation through questioning, criticism or advice.</td>
<td>Reflective conversation may contain reflective metaphors and discussion of critical incidents.</td>
<td>Aid reflection-in-action, and the search for new meanings, options and perspectives.</td>
<td>Need to critique own intellectual assumptions (Palmer and Dunford, 1996) and the impact of our acts on others (Cunliffe, 2004). Need for reflexive conversations and multiple interpretations of reality.</td>
</tr>
</tbody>
</table>

Table 1  Reflective processes and tools framework

### Reflective dialogue

| Facilitator usually encourages turn taking, and encourages the group to challenge taken-for-granted perspectives and assumptions. Welcomes disagreements. |

Reflection dialogue may contain **reflective metaphors** and discussion of **critical incidents**. Promotes shared critical reflection. Mental models are made explicit for group critique and evaluation.  

**Potential for disagreement and conflict, unless group processes are well managed by the facilitator**

### Reflective metaphor

| Facilitator encourages manager to think up a metaphor to describe themselves, an event or situation. The choice of metaphor and its implications for individual and organizational behaviour are analysed. |

May be embedded within a **story** or used as a trigger within a **reflective conversation**. Their emotive content may trigger **critical incidents**. Help to define what is happening, assess a situation and create shared understanding for action (including collaborative action for organizational change). May help to identify salient clues (Hill and Levenhagen, 1995).  

**May be pressed into service too quickly as a model for action when metaphors are best used to search for new knowledge (von Ghyczy, 2003). They may divert attention towards certain interpretations and away from others (Palmer and Dunford, 1996)**
(Table 1 continued)

<table>
<thead>
<tr>
<th>Reflective processes and tools</th>
<th>Sources</th>
<th>Application (individual, pair or team)</th>
<th>Facilitation process</th>
<th>Links</th>
<th>Advantages</th>
<th>Critique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflective journal</td>
<td>Bolton (2001); Uline et al. (2004); Varner and Peck (2003)</td>
<td>Highly individual, but content may (at discretion of author) be shared with others</td>
<td>All or some elements may be kept confidential, or shared with a facilitator to explore thoughts, ideas and analysis. Facilitator provides support and/or challenge</td>
<td>Can contain stories, use of metaphors and the noting of critical incidents</td>
<td>Aids reflective and critical thinking and developing self-awareness (and social awareness), particularly if contents are shared and collectively critiqued</td>
<td>May be largely descriptive not analytical and cause discomfort in cultures not used to personal disclosure</td>
</tr>
<tr>
<td>Critical incident analysis</td>
<td>Flanagan (1954); Tripp (1993)</td>
<td>Highly individual, but content may (at discretion of author) be shared with others</td>
<td>Events/incidents noted or verbally described. Classified as critical, or not, through reflective discussion/analysis with facilitator, coach or mentor</td>
<td>May be noted with stories, identified in reflective conversations and documented and analysed in reflective journals</td>
<td>Highlights key turning points and catalysts for personal and organizational change</td>
<td>Criticality of events not always evident at the time. May personalize the event and fail to locate its criticality within its social, political or organizational context</td>
</tr>
<tr>
<td>Repertory grids</td>
<td>Easterby-Smith et al. (1996); Kelly (1955)</td>
<td>Normally individual, although elements may be construed through group discussion</td>
<td>Can be used as a diagnostic tool. Core constructs can then be discussed and analysed with the facilitator or group.</td>
<td>Can be used in <em>reflective conversations</em> with a coach to explore norms, values and beliefs.</td>
<td>Identification of personal constructs and tacit knowledge.</td>
<td>Knowledge cannot be ‘dichotomized’ in the way that repertory grids use bipolar constructs – it is more holistic and complex.</td>
</tr>
<tr>
<td>Concept mapping</td>
<td>Deshler (1990); Novak (1993, 1998)</td>
<td>Individual, but can also be used by groups.</td>
<td>Facilitator helps manager(s) to explore how and why concepts are selected and linked.</td>
<td>Can be used to map and analyse <em>critical incidents and metaphors</em>.</td>
<td>Makes cognitive frameworks explicit for subsequent analysis and discussion.</td>
<td>Not all people are comfortable or skilful in thinking conceptually (Kolb and Shepherd, 1997).</td>
</tr>
</tbody>
</table>
Storytelling can often involve the weaving of the story into on-going conversations where teller and listener are sending cues to manage how the story is interpreted (Boje, 1991a).

Organizational stories need to be: concrete (about real people, actions and events); familiar to those in the work setting; and believable to the listeners (S. Morgan and Dennehy, 1997). They must also allow listeners to learn about organizational norms—‘how things are done around here’. Structurally, they involve the description of the setting, a build up (‘trouble’s coming!’), and a crisis or climax. Then, crucially, they (hopefully) also involve learning and new behaviours or awareness. The process of storytelling can be improved by practice—by managers listening to stories told by others, or by trying the act of storytelling themselves (perhaps by taking a story from a newspaper or book and retelling it). This could also involve telling stories in pairs (S. Morgan and Dennehy, 1997). This shared meaning might evolve through, say, a coaching process that encourages coachees to tell a story about their vision for their organization, a new set of ideas or an experience that evoked particularly strong emotions (either positive or negative). Indeed, coaches themselves might provide a personal narrative that illuminates options for handling difficult situations (as an exemplar), or even coach managers and leaders in the principles of storytelling, partly as a way of expanding their reflective skills. There should be a focus on their insider’s knowledge, including family issues, thoughts, struggles, concerns and role models that have been influential (Kaye and Jacobson, 1999).

The impact of storytelling and argument analysis has been researched within a professional development course for managers (Gold et al., 2002), who found that this approach drew managers into questioning their current organizational practice, personal identity and relationships with those around them—including experts and figures of authority. It facilitated reflection, self-awareness and a better (critical) understanding of others as well as themselves. It also helped some managers to engage in a critique of authority. However, despite evidence of enhanced reflective processes, there was little indication of managers critiquing their own authority or expertise—hence, a self-critical use of critical reflection did not emerge.

What is required is a critical approach to using storytelling, through using organizational myths and exploring alternative meanings and interpretations of the same myth (Alvesson and Willmott, 1996). Central to this approach is valuing doubt and uncertainty, so that a space can be opened up for critical self-reflection and emancipation. There is a danger, however, that some people will go no further than mere common-sense explanations that lack the wisdom to challenge conventional accounts. Not only should reflection focus on the object of the critique, but the authority of the critique itself should be brought forward for disputation, to avoid the danger of merely replacing the authority of one account with another. Courageous storytellers have to be honest ‘soldier[s] in the struggle against personal alienation’ (Barone, 1992: 143). Such stories can help to address Vince’s (1996) concern for the surfacing of the under-emphasized emotional aspects of organizations, providing a focus on feelings, meaning and experience, allowing a unique, critical insight into social practices (Dehler et al., 2001).
Reflective and Reflexive Conversations and Reflective Dialogue

Reflective conversations are part of what Schön (1987, 1991) has called reflection-in-action. In contrast to models of technical rationality that purport objectively to ‘know’ the world independently of the practitioner’s values and views, the practitioner’s reflective conversation with a situation is seen as unique and uncertain. In these circumstances, the practitioner acts as an agent and, through his or her transactions with the situation, helps to shape it. Hence, a manager’s understanding of the situation must include his or her own contribution to it. Yet, the situation also has a life of its own, independent of personal intentions, and this may foil projects and reveal new meanings. Hence, the practitioner must be willing to enter into situations of ambiguity and uncertainty. ‘The unique and uncertain situation comes to be understood through the attempt to change it, and changed through the attempt to understand it’ (Schön, 1991: 132). Practitioner inquiry becomes a form of research, in which means and ends are framed interdependently, and in which knowing and doing are combined. Such inquiry involves experimentation, a process of reflection and further experimentation.

A reflective conversation occurs as a result of dilemmas within the field of practice that are bounded by a role frame, that is, the conventions and personal frames of reference through which practitioners view their professional roles. Role frames act as filters through which problems are analysed and new strategies devised. Schön (1987) sets the reflective conversation within the context of what he terms the practicum, a virtual context that approximates to the world without being part of it. Typically, a learner takes on a problem under the supervision of a professional practitioner (as coach). Within the practicum, the learner performs set tasks, with the role of the coach being to demonstrate, advise, question and criticize.

These notions are taken a stage further with the concept of the reflexive conversation (Cunliffe, 2002). Reflexivity is very different from reflection, which can be regarded as a modernist idea that searches for patterns, logic and order. In contrast, reflexivity means ‘complexifying thinking or experiences by exploring contradictions, doubts, dilemmas, and possibilities’ (Cunliffe, 2002: 38). It embraces subjective understanding of reality in order to think more critically about one’s values and the effect of one’s actions on others (Cunliffe, 2004). Reflexivity, then, means being able to be critical of our own intellectual assumptions (Palmer and Dunford, 1996), and reflecting on reflecting (Day et al., 2003). Hence, managers must lay emphasis on reflexivity, on focusing upon their own actions, thoughts and feelings (Bolton, 2001). They come to make sense of their situations from within the activity itself. What is necessary is that these managers are given help to recognize that they are acting beings within these structures, making sense of actions in practical and responsive ways from inside the experience. ‘This “inside-out” approach assumes that, rather like a hologram, every small insight, question, or action leads to different ways of relating, which work from within, to influence the whole’ (Cunliffe, 2002: 40). Hence, reflexive conversations may serve to promote multiple interpretations of reality—including critiques of previously uncontested forms of organizational ‘truth’. This means challenging decisions that are justified solely on profit,
posing instead 'more collaborative, responsive, and ethical ways of managing organizations' (Cunliffe, 2004: 408) to transform old ways of managing and theorizing.

Reflective and reflexive conversations can be distinguished from (but contain some similarities to) reflective dialogue, the latter comprising situations where groups of managers share their thoughts and feelings on a subject and then self-reflect on themselves and their reactions to the dialogue of other participants (Mirvis and Ayas, 2003). Reflective dialogue provides managers with the opportunity to critically examine the underlying assumptions behind their thinking and to develop a shared language that emerges from the practice of collective inquiry (Jacobs and Heracleous, 2005). Through group dialogue, assumptions and mental models are made more visible and intelligible so that collaborative inquiry into their causes can commence (Isaacs, 1993). Critical reflection on existing mental models (a diagnostic moment) allows for the shaping of emergent mental models (a generative moment) (Jacobs and Heracleous, 2005), but this will occur only if disagreements with the group are seen as an opportunity for learning. Rather than imposing one's own views, a manager must suspend his or her assumptions and listen to the interpretations of others (Schein, 1996).

**Reflective Metaphors**

A metaphor is a form of expression in which a concept used for one thing is symbolically applied to another (Marshak, 1993). As such, metaphors display a paradoxical and logical inconsistency (Hill and Levenhagen, 1995). For example, to say that an organization is a ‘machine’ may capture some of its salient features, but is clearly false in the literal sense. However, metaphors can be a very powerful medium for understanding and presenting ideas, insights and intuitions not always available through the kinds of rational discourse prevalent in many formal development programmes. Metaphors do not simply describe an external reality, they also become part of that reality and ‘prescribe how it ought to be viewed and evaluated’ (Tsoukas, 1991: 570; original emphasis). We could take an example of someone describing an employer as a person who ‘sucks the blood of his employees’ (Tsoukas, 1991: 570). This is more than a description of a real process; it is used to evoke certain commonly held images and, thus, implicitly offers value judgements and prescribes a mode of behaviour. By contrast, a literal language discourse could describe the same person as someone who ‘extracts surplus value from the labour of his employees’ and then proceed to define the concept of surplus value in order to demonstrate the process of surplus value appropriation. Literal language tends to be the dominant discourse in science and rationalist management theory (and formal management development programmes), but, unlike metaphors, fails to capture the continuous flow of events or get close to the experience.

Metaphors, however, are not complete descriptions of an entity. For example, if we complimented a manager for his ‘bullish’ instincts, we would be implying something about his strength and determination, while ignoring other elements of the metaphor such as size, bellow and quadruped physique. A metaphor, then, is based upon a partial truth and requires a one-sided abstraction in which
certain features are emphasized and others suppressed (G. Morgan, 1980). So, effective metaphors rely on ‘constructive falsehood as a means of liberating the imagination’ (G. Morgan, 1980: 612). Rather than looking for reassuring parallels in business metaphors, we should instead seek troubling differences (von Ghyczy, 2003). Using metaphors to generate strategic perspectives begins to work only when the metaphors themselves do not work. ‘Attracted by familiar elements in the metaphor but repelled by the unfamiliar connection established between them, our minds briefly “lag behind”, engulfed in a curious mixture of understanding and incomprehension’ (von Ghyczy, 2003: 88).

The use of metaphors is essentially a shared enterprise, which needs to be pursued in the spirit of critical inquiry. Indeed, given that metaphors contain an emotive content and are likely to evoke an emotional response (potentially a critical incident—see later), they may serve to challenge accepted mental models (Hill and Levenhagen, 1995). Here, they can be useful in two aspects: alignment, that is, the task of organizing action towards a single purpose, and motivating individuals towards concerted action. This includes attunement, preparing individuals to send and receive information, with metaphors helping to focus on salient cues. Metaphors, then, enable us to see organizations in a new way, thus opening up fresh creative possibilities (McCourt, 1997), and potentially rich strategic insights (Gray, 2003). Knowing what type of metaphor someone is using helps us to understand how they are construing a situation.

An empirical study of 98 first-line managers and supervisors shows how the use of metaphors to describe their organization reveals a range of perceptions, attitudes and feelings that were previously subconscious or not articulated (Oswick and Montgomery, 1999). Indeed, the study reveals how metaphors can be used to give voice to previously tacit perceptions. However, the research also points to a potential danger if metaphors are used to focus on just one element of an organization (e.g. organizational change), rather than the organization as a whole. Hence, metaphors may act to focus attention towards one set of interpretations, to the detriment of others.

In a similar vein, metaphors have been commandeered by those who are attracted to the idea that the human world should mirror the apparently consensual operations of nature, over which they, as the expert analysts or managers of these systems preside (Alvesson and Willmott, 1996). So, metaphors are rooted in particular assumptions and ideas about the world, and their popularity derives from their role in legitimizing particular power-invested world-views. Metaphors themselves should be reflected on critically, including the way in which they are selectively adopted. The linkages between metaphors and the issues of power, knowledge and responsibility are either made weakly or are not made at all. For example, organic and machine metaphors are used to portray organizations as stable, unitary, robust and conflict-free. Metaphors like ‘colonization’ or ‘mystification’ are more practically relevant, but the theory and practice of management is dominated by ‘a narrow range of metaphors that deny or disregard its darker features’ (Alvesson and Willmott, 1996: 95). Within learning situations, then, the role of workshop facilitators, mentors or coaches could be to open up and give voice to critical metaphors that may serve to challenge accepted management norms, structures and practices.
Reflective Journals

A reflective journal is a personal and unstructured product of reflective writing (Bolton, 2001), and, as such, contains personal anecdotes, stories, or descriptions of work-related problems. It is important to distinguish between reflective journals, logs and diaries. A log contains a simple recording of events, a sort of aide-mémoire (Bolton, 2001). In contrast, a diary can contain stories of events, hopes, fears, memories, thoughts and ideas. A reflective journal, however, goes beyond this, and contains deliberate thoughts and analysis related to managerial practice. As such, it could contain a description and analysis of critical incidents from the workplace. Reflective journals move learners through all levels of Bloom’s (1956) taxonomy and are capable of promoting critical thinking (Varner and Peck, 2003).

Reflective journals have a long pedigree in the professional development of groups such as pre-service teachers and health professionals, where they provide a medium through which learners can identify viable topics for concern, and reflect critically on their experiences (Uline et al., 2004). Such journals help professionals (such as managers) to think about their attitudes, beliefs and assumptions in order to promote self-evaluation. Typically, a reflective journal will address at least two issues. One is a daily personal reflection on a person’s experiences within the organization. The second is a reflection on how their personal objectives (which are agreed with a personal supervisor—in a role not dissimilar to that of a coach or mentor) are being implemented and met. The contents of a reflective journal are usually confidential to the writer so that it becomes a safe environment for learning. The contents, however, may be shared with others (e.g. fellow workshop participants, a facilitator or coach) if the writer seeks feedback or support.

Keeping a reflective journal helps us to ‘define and redefine our purposes, locate and reconstruct our values and to fix our affective orientation to people and things within our organization’ (Ghaye and Lillyman, 1997: 46). They can contain a description of critical learning incidents (see below), reflections on personal professional values and an analysis of the contradictions between what the professional or manager wants to do (espoused theories) and what he or she may do in practice (theories-in-use). Reflective journals can be used for collecting data so that elements of managerial practice can be evaluated or so that pent-up frustrations can be released. Writing a reflective journal sensitizes self to self and enables those providing feedback and help, such as a coach, to become sensitive ‘within the moment’ (Johns, 2000: 33).

A research study among 87 pre-service teaching professionals reports that reflective journals are successful for the development of reflective skills (Uline et al., 2004). The use of journals allows greater insights into the relationship between theory and practice, and reveals learning issues that require further discussion and development. Again writing from the perspective of teacher-educators with pre-service teachers, another study shows how the reflective writing process can provide a valuable tool in the coach–client relationship (Spalding and Wilson, 2002). Journals act as a permanent record of thoughts and experiences and can provide a means of establishing and maintaining a relationship between coach and client. For the coach, they can act as a ‘window’ into the client’s feelings and
experiences and as a dialogical tool for promoting discussion and reflective thinking—in line with Dewey’s (1933) assertion that reflection must be taught.

However, aspects of the previous discussion may serve to illustrate some of the potential weaknesses of journal writing as a reflective tool for managers. Although journal writing may facilitate self-reflection, the personal (private) nature of this process may tend to promote reflection as introspection. If critical reflection is to occur, journal contents (or at least those contents that a manager is willing to divulge) may benefit from being exposed to group discussion. Within the process of group reflective dialogue, for example, this collective critiquing of a manager’s personal accounts, reflections and analysis may generate new insights, perspectives and strategies for action and engagement.

Reflecting on Critical Incidents

The concept of critical incidents (first devised by Flanagan, 1954) involves an interpretation of the significance of an event (Tripp, 1993). These are not necessarily dramatic events, and may occur in the routine of everyday managerial practice. What makes them critical is that they are indicative of significant underlying trends, motives or structures. At first sight, many of these events appear to be ‘typical’ rather than ‘critical’. They become classified as critical, however, through the process of reflective analysis. The creation of a critical incident, then, comes in two stages. The first is that the nature of the incident becomes noted and described, such as through a reflective journal. In the second stage, the incident becomes critical when it is linked to a wider social context (Tripp, 1993). This also includes how the political world works (Brookfield, 1990).

Central to the first stage of this process is that descriptions need to be richer and more detailed than mere diary entries. They are also, rarely, the final product, but will be continually developed and updated, since detailed description provides the foundations for subsequent reflective analysis. Typical ways of creating a critical incident is to look for two, contrasting types of event: typical and untypical. The latter includes events that are counter-instances or ‘exceptions to the rule’, possibly promoting analysis of what causal factors precipitated the event—in Argyris’ (2002) term, double-loop learning. Critical incidents, then, can be highly personal in nature and can help to trigger deep, and sometimes discomforting, introspection, even becoming ‘developmental turning points’ (Skovholt and McCarthy, 1988: 69). A significant proportion of critical incidents can be classified as ‘mistakes’ (Cormier, 1988), which can challenge the individual’s sense of self, competence, professional and managerial identity and their relationships with others. Yet, they are essential catalysts for developmental progress, and hence valuable potential focal points for personal learning.

In an empirical study of small to medium-sized enterprises, entrepreneurs report the importance that critical incidents have had on their learning (Sullivan, 2000). Such incidents allow these leaders to dissect, reflect, learn and act in new ways, and are, in some cases, crucial in saving the viability of their businesses. What is significant is the availability of mentors with whom the critical incidents can be discussed—again, demonstrating the importance of learning through the facilitation of reflection.
Another empirical study reports on 135 critical incidents among pre-service teachers, finding that the use of such incidents increases their reflective capabilities (Griffen, 2003). They are able to develop more rounded, multiple perspectives, and to overcome personal fears. They do not, however, make significant improvements in their levels of thinking, tending to limit themselves to traditional or personal perspectives rather than wider, social views. The author concludes that using critical incidents to generate higher levels of thinking may require the use of probing questions to explore incidents within the framework of wider organizational and social contexts. The use of probing questions, of course, is just one resource within the coach’s toolkit (Egan, 1998).

Locating critical incidents within the phenomenological tradition (i.e. entering another person’s frame of reference), such events can be used to promote an alternative critically reflective perspective (Brookfield, 1990). As part of an exercise, three people write about a critical incident based upon their recollection of a news or political broadcast that made them angry. Each member of the triad relates their incident, with the other two members trying to identify the assumptions about appropriate political behaviour that they assume to be embedded in the description, using critical incidents as ‘heuristic mechanisms through which we account for events in our lives’ (Brookfield, 1990: 177). These assumptions help to uncover the kinds of value systems the narrator holds. However, once again this approach focuses mainly on individual perspectives, the personalization of events potentially serving to hide their criticality within a social, political or organizational context. In contrast, if critical incidents are shared collectively with other managers, space may be created for recognizing the commonality of such incidents across organizations, the institutional causes of these incidents and their broader social and political impact on members of the organization.

**Repertory Grids**

Another potentially important tool for eliciting reflective processes is the repertory grid, first devised by clinical psychologist Kelly (1955) to explore individuals’ personal constructs, that is, their personal thinking about sets of ideas, people or events. Kelly's personal construct theory is essentially a theory of personality, suggesting how people are motivated, how they learn and how they communicate. People’s behaviour is influenced by the ways in which they classify what is happening around them, hence they construe and interpret situations, noting their salient features in order to anticipate events. A person’s system of personal constructs is not just a collection of treasured memories, it is a guide to living. ‘It is a repository of what one has learned, a statement of one’s intents, the values whereby one lives and the banner under which one fights’ (Candy, 1990: 281). The user first identifies a small set of elements (e.g. situations he or she has experienced, which could include problems or crises), and then defines some constructs (some of the attributes of these elements). Constructs are formed with two opposing poles, for example, ‘motivating–demotivating’, ‘creative–destructive’, ‘friend–enemy’. The repertory grid, then, is a matrix of elements, with each element rated (numerically along a scale) against the specified
constructs. Analysing the grid allows for the identification of those elements that feature most strongly (are accorded the highest rating), and how they are construed.

As a diagnostic instrument the repertory grid has become quite common in a range of disciplines from psychotherapy to management team building and decision making, as well as for making tacit expert knowledge explicit (Stumpf and McDonnell, 2003). This also includes training and development areas such as performance appraisal, competence development and problem solving (Easterby-Smith et al., 1996). Hence, the repertory grid is an excellent conversational tool for management learning, because it reveals the way in which learners perceive the world around them, and allows an expert (coach, mentor or facilitator) to gain understanding by inspecting and reflecting on the grid and to separate out salient information from background ‘noise’ (Stumpf and McDonnell, 2003). A grid conversation, for example, encourages a manager to make explicit what distinguishes one experience from another. A coach, then, can facilitate the manager in examining the grid and can identify constructs that he or she thinks might be important or personally revealing.

Even though first devised as a tool for self-understanding, repertory grids are also highly flexible and can provide the potential for the collective exploration of organizational culture, social structures and political dimensions. Repertory grids can be analysed beyond the level of individual psychology to explore how groups of learners construe the same array of elements (Candy, 1990). So, an action learning set or a similar grouping could discuss a range of elements, say, features of organizational behaviour such as downsizing, bullying in the workplace, corporate social irresponsibility, financial mismanagement, etc. Individual members of the set will define their own constructs for each of the elements, but then the set collectively identifies differences and also similarities in their constructs to calculate and discuss the extent of their shared construing. The identification of points of difference as well as similarity can become the basis for ‘collective action and even social transformation’ (Candy, 1990: 285; my emphasis). Hence, the shared construing of constructs becomes not just a matter of individual critical reflection on personal constructs, but a means of shared construction towards critical reflective action.

**Concept Mapping**

Concept mapping is a graphic technique that attempts to tease out a learner’s cognitive framework in a given domain in order to gain an insight into the person’s understanding (and also beliefs and biases). The learner maps a series of concepts hierarchically and then links the concepts with arrows that are labelled with explanatory phrases. A pair of concepts linked like this is called a proposition. Concept maps are often confused with, but are not the same as, mind maps. The latter help rapid brainstorming of ideas and the formulation of simple associations. Concept mapping, however, is a more reflective process, emphasizing the ‘how’ and ‘why’ of links. It may promote the development of thinking skills by providing an ‘explicit point of focus for reflection’ (Kinchin and Hay, 2000: 45). However, an empirical study found that the process of creating
a concept map is not automatically intuitive for some participants, especially in interpreting the maps (Kolb and Shepherd, 1997). Hence, if some individuals are more capable of conceptual thinking than others, the facilitation of interpretation, say, with a coach, or within a mentoring relationship, might assist understanding. Indeed, concept maps are tools that can provide the basis for the negotiation of shared meanings and social communicative validation through the process of dialogue (Deshler, 1990).

The notion of concept maps was first developed by Novak (1998), who argues that they are an ideal way of empowering learners, for getting them to identify key concepts, to become engaged with meaningful learning and even to learn how to learn. They are a way of helping individuals (and organizations) capture, store, share and create new knowledge (Novak, 1998). Concept maps contrast sharply with rote learning, where the learner is seen as an empty vessel, passively absorbing information (Freire, 1985). Learners should work with words that have meaning in the life of the learner, so that they have control over the acquisition of new knowledge (Novak, 1998). Through this process, concept maps help us to check our assumptions about the relationships among our ideas, gaps in our thinking and our anticipation of events.

In addition, although concept maps can be used to identify and analyse features of the taken-for-granted assumptions of an individual, they can also be used for analysing concerns drawn from organizational or group life (Deshler, 1990). This could include concerns that are part of public decision making, allowing us to engage in social action. Hence, within a management learning context, dilemmas can be introduced through the creation of concept maps as a means of provoking reflection. Critical reflection is likely to occur when the themes under review are of significance to participants, or are puzzling, cognitively dissonant or constraining. It is through dialogue and the discussion of concept maps that we are able to challenge false consciousness, circular thinking and misconceptions (Deshler, 1990). Hence, if used within, say, a management development workshop, dialogue allows for the discussion and negotiation of shared meanings and understanding. Collective or corporate concept maps can be used by groups to engage in ‘transformative organizational or group learning’ (Deshler, 1990: 347). This is because concept mapping has the capacity to go beyond instrumental rationality and to engage with what Habermas (1984, 1987) calls explicative discourse, a mode of communicative action which is directed towards paying attention to language itself as a means to understanding ourselves (self-reflection) and our relations with others.

**Some Critically Reflective Thoughts**

Management learning can encompass reflection by managers on their experiences, which, in turn, can act as a direct source (and resource) of learning and can be enhanced by critical reflectivity. Managers, however, do not necessarily automatically engage with critical reflection. Management learning processes (such as coaching, mentoring or action learning) require specific and active interventions with facilitators, or collaborative learning with peers. This article has
sought to demonstrate how reflective tools and processes can contribute to the learning of managers, and particularly the critically reflective element within it. It is acknowledged, however, that empirical research in the application of these tools to learning has taken place largely in the fields of professional development (health care and education being two examples) rather than management itself. The current analysis has largely focused on the potential of these tools for management learning and highlights the need for further empirical research in this field. As has been noted, some experiences (particularly routine or discomforting ones) may lead to non-reflection and non-learning. With the demands of the modern workplace, individuals have less time to engage with the kinds of social and community-level relationships that help to shape learning (Conlon, 2004). Without the supportive mechanisms of a coach, mentor or colleague, employees may experience feelings of helplessness, frustration and eventual burnout.

Yet it is with some of these supportive mechanisms that this article has been concerned, since, as we have seen, the reflective tools described have the capability to be used in collaboration with a workshop facilitator, coach, mentor or peer group. Their potential is not just for reflection but critical reflection because they allow managers not only to explore their personal feelings, but to make informed judgements based upon a recognition of the imbalances of knowledge, power and wealth that exist in society and organizations. Stories and metaphors offer creative and illuminating ways through which managers can see both themselves and their organizational situations in new ways, opening up fresh insights and possibilities for action and experience. Similarly, critical incidents, perhaps written up and examined within a reflective journal, if shared with others, allow not only for analysing of individual experiences, but for critiquing the social and political impact of such incidents within a broader organizational context. Whereas reflective tools and processes constitute resources for individual self-reflection, critically reflective tools allow for the critiquing of collectively constructed norms and values within which experience and reflection are embedded, potentially contributing to our understanding of reflection in terms of not only individual but also organizational learning.

References


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