

The Power in Visualising Affects in the Organisational Learning Process

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Abstract: This paper presents a study about the idea of structurally managing individuals' affections, i.e. affects, in relation to the organisational learning process. The instrument under investigation has been TABLE MATRIX – 'The Affect Based Learning Matrix'; a structured tool, based on the cognitive therapeutic process, to be used to identify affects and thus aiding in making analyses in relation to an organisational occurrence or change (coming or already existing), a subject, or a problem. In order to evaluate the approach, we have interviewed thirteen management representatives from Human Resources and/or Operational Development within following branches: Medicine, Finance, Education, Retail Fast Moving Consumer Goods, Manufacturing, Travel and Transportation, Construction, and the Public Sector and Religious Communities. The evaluation shows a great interest among the respondents in visualising affects in relation to learning.

Keywords: Organisational Learning, Knowledge Management, Emotions, Affects

1. Introduction

In order to achieve sustainable development within organisations they need at a larger extent to change their fundamental view upon learning: i.e. 1) humans prerequisites for learning, 2) how to effectively reduce the human barriers in relation to learning, and 3) the importance of having a structured learning (and problem-solving) process, not primarily focused upon the 'solution', but which also considers humans more subjective fundamental aspects, such as automatic thoughts and feelings. Today, it is important to observe and strengthen the individual within the organisation and his or her situation then for example more and more of those seeking help within primary care have underlying psychosocial problems (Undén and Elofsson 2001). Even work-related problems due to ill health have been doubled since 1997 in Sweden. This conveys large costs for organisations and society. Nevertheless, Mimmi Engestang, manager for competence development and coach for the customers at the Nordic temporary staffing company Proffice, says that managers today are educated according to the traditional leader model; to delegate, steer and control work (Svenska Dagbladet 2004). This widespread thinking has been shaped by the rationalistic tradition traced back at least to Plato (Winograd and Flores 1986). For the rationalist, people that are steered by their emotions are seen as non-rational. Feelings such as; love, hate, guilt, regret, frustration, and embarrassment obscure the strategist's understanding of a problem-situation and possible solutions (de Wit and Meyer 1999). However, it is the ability to express a feeling that creates our personality (Adler and Adler 2006) and if the human's nature is neglected this will lead to increased stress, resignation, mental ill health, etc.

With an organisational perspective derived from the rationalistic tradition, there is a tendency to regard learning activities at an organisational level as equal to learning on an individual level – i.e. specific diagnostic and evaluative methodological tools are used to secure ongoing learning processes instead of observing and analysing processes related to the individual (see for example Easterby-Smith and Araujo 1999). This implies less focus upon the specific knowledge-worker and useful knowledge for practitioners will not be provided in the learning process. Unlike the rationalist, the generative thinker interprets, reflects, visions, experiments and acts upon different impressions. The generative thinker agrees that logic is important, but stresses that logical reasoning is often more a hindrance than a help. Instead of defining the solution of the problem from the beginning it is important to be equipped with a broader field of vision in order to be able to think 'out of the box'. This paper will next present the cognitive-based learning support tool TABLE MATRIX – 'The Affect Based Learning Matrix', and its structure. Thereafter, we present the interviews we made with thirteen management representatives from Human Resources and/or Operational Development from different large organisations in order to evaluate the tool. The feedback has been positive and the respondents thought that TABLE MATRIX touches upon a pressing issue within organisations today. Finally, a summary and some concluding remarks are outlined.

2. TABLE MATRIX – 'The affect based learning matrix'

The issue of cognition becomes highly central in relation to the generative thinking perspective since much of the responsibility to act and operate is being laid upon the individual. TABLE MATRIX

'The Affect Based Learning Matrix', is a structured tool, based on the cognitive therapeutic process (see Figure 1 below) for identifying affects and making analyses in relation to an organisational occurrence or change (coming or already existing), a subject, or a problem (the underlying theory for this cognitive approach has earlier been described in Olsson Neve 2002; 2003a; 2003b;

2003c; 2005a; 2005b). In the cognitive process below, the issue of feeling has been given a particular place. Instead of just defining a problem and work up a solution, one should implement two steps where associated feelings and underlying automatic thoughts in relation to the situation are identified and dealt with.



Figure 1. The Cognitive Therapeutic Process

TABLE MATRIX includes both an organisational problem-solving perspective and a preventing perspective. Moreover, it can be used either in a paper-based version or in a Web-based version where the following phases are dealt with (see Figure 2 below); (1) 'SETTING OFF' (Define issue/problem), (2) 'THE PULSE METER' (Set feeling(s) into focus), (3) 'SUBMERGING' (Identify automatic thoughts), (4) 'THE CONSEQUENCE' (Clarify behaviour(s)), (5) 'CROSS BREEDING' (Investigate alternative scenario(s)), (6) 'THINKING AFRESH' (Define desired output), (7)

'SETTING THE GOALS' (Assess new behaviour), and (8) 'THE BONUS'.

These phases are supported by a culture of critical thinking, different interview techniques originating from the cognitive therapeutic area dealing with issues such as how to ask questions in a cognitive manner and in what sequence (the logical aspects), and the importance of emotional response in the dialogue. The purpose in using TABLE MATRIX is for improving the quality of the organisational learning process by more structurally emphasising the significance of individuals' affections in relation to it.

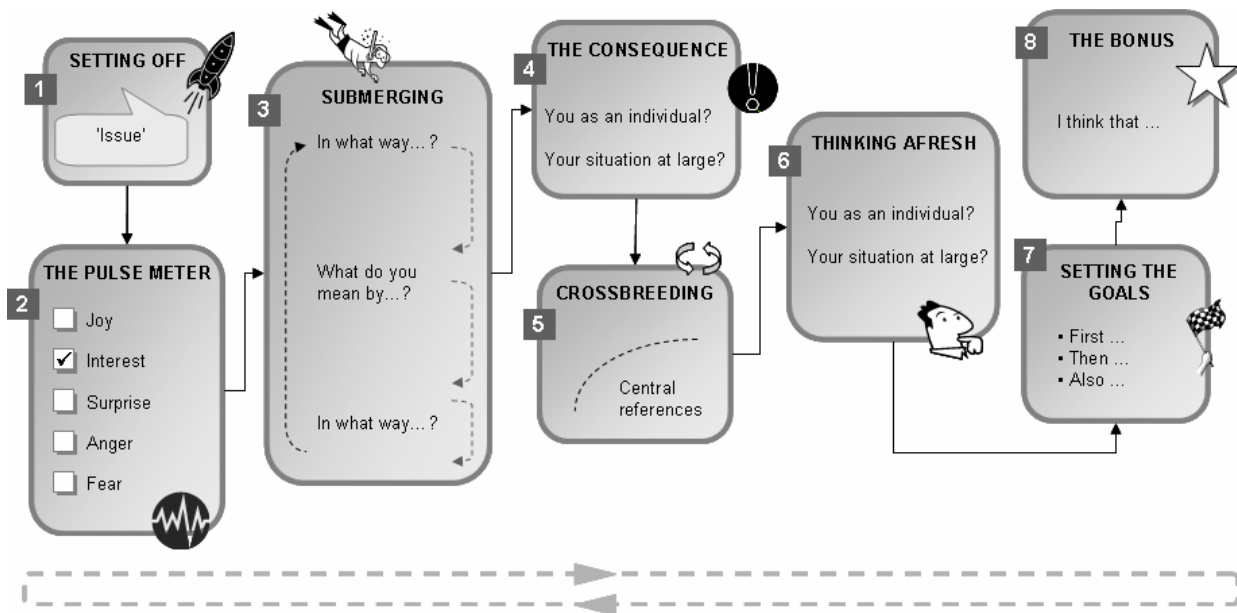


Figure 2. Phases within TABLE MATRIX

When using TABLE MATRIX within the organisational context, an overall graphical image concerning existing climate (emotions, questions, opinions, behaviours, desires, thoughts, etc.) for a group in relation to a specific issue is supplied. This graphical image functions both as basic data for various discussions among the employees and also as a strategic steering-tool for the management function.

The process in Figure 2 is outlined in the following way:

- 'SETTING OFF' – The process starts with identifying the problem situation/the issue to be explored. Collect as many perceptions of the subject as possible from a wide range of people. Here could for example the Rich Picture technique be used (see Checkland 1993).
- 'THE PULSE METER' – Collect as many feelings as possible in relation to the subject.

The identification and the awareness of existing feelings within a group make it possible to analyse these feelings and to understand what behaviour they might result in within the organisational context. Consequently, they should be acknowledged but taken care of. Silvan S Tomkins (1995) description of the nine basic affects should be used here in order to identify associated feelings. Affects are feelings so called "memory" more of a biological and physiological nature. They appear in the limbic system of the brain, i.e. the brain's most primitive parts, and signal the body's current state. Affects are important to recognise and understand in order to become aware of one's need for a specific situation. The nine basic affects are presented in Table 1 below.

Table 1. Categorisation of the Nine Basic Affects

Positive	Neutral	Negative
1. Joy 2. Interest	3. Surprise	4. Anger 5. Fear 6. Sorrow 7. Disgrace 8. Boredom 9. Detestation

These nine affects are further grouped into the following three categories: Positive, Negative and Neutral. The basic affects joy and interest are attached to positive. Surprise belongs to neutral and anger, fear, sorrow, disgrace, boredom and detestation to negative. In the early childhood affects are living separated. Gradually they are becoming more and more complex and finally they form unique patterns of emotional reactions by humans. This is what shapes our personalities. Every affect has its own time profile and influence and engage the whole body. Studies have shown that 'interest', 'anger', 'detestation', and 'surprise' can be observed very early at infants. 'Shame' (i.e. disgrace), on the other hand, is not appearing until the end of the first living year. This affect is attached to our ability to feel ashamed who assume a certain cognitive and emotional maturity in order to appear. (Adler and Adler 2006, authors' translation)

- 'SUBMERGING' – Consider automatic thoughts that appear in relation to the subject. Here the question should be answered: "What types of spontaneous thoughts are related to the subject?" This question should grasp the 'identity' of the subject. For example Kim (1993) says that a shared understanding of the organisation's key assumptions and interrelationships emerges through a process where each employee is participating in surfacing and testing each other's mental

models. However, here the automatic thought will be tested individually. The technique of questioning categorical formulations can be used in order to help individuals to express themselves in a more nuanced way by understanding the expression literally or drawing it to its extreme (see for example Freeman et al. 1990).

- 'THE CONSEQUENCE' – Clarify the behaviour phase 2 and phase 3 may result in. In this phase symptoms such as: stress, monotonously work, less engagement, and less initiative, should be identified.
- 'CROSS BREEDING' – Consider the subject from another point of view. In this phase one should investigate alternative ways, i.e. improved working procedures, of dealing with the subject. The technique of developing alternative scenarios may be used (ibid), and a good starting question is for example: "In what other ways may one look at the situation?"
- 'THINKING AFRESH' – Redefine the output. Here one should specify the new desired output the improved working procedure should receive.
- 'SETTING THE GOALS' – Define the new desirable behaviour. Explain and specify how the organisation should implement the improved working method(s). It also might be useful to iterate the process from phase 2 and discuss and reflect upon the obtained results.
- 'THE BONUS' – Express other spontaneous thoughts that occupy your mind.

When developing TABLE MATRIX, the time aspect for using it and the ability to manage the experiences and the knowledge it generates have been of essential significance then most organisations are having problems with lack of resources. The value of using the tool for the organisational member concerns: (1) an increased feeling of involvement and a forum for reflection, (2) a possibility to experience and practice a certain type of methodology for solving problems and for learning, and (3) an overall understanding for how others think and feel. At the same time, the managing level is given the possibility to receive an increased understanding of how the employees feel and think in a specific situation. This makes it easier to guide the organisation and come to a decision. In general terms, TABLE MATRIX should be used in order to motivate the organisational members to continuously rethink their actions and their implicit assumptions.

3. Interviewing management representatives about TABLE MATRIX

During the period of September 2005 to Mars 2006 we made interviews with thirteen management representatives from Human Resources and/or Operational Development from organisations within the following branches: Medicine, Finance, Education, Retail Fast Moving Consumer Goods (FMCG), Manufacturing, Travel and Transportation, Construction, and The Public Sector and Religious Communities (see below). The respondents contributed with: (1) information about their organisation's view upon learning and efforts for becoming a learning organisation, (2) their relation to the issue of 'emotion', and (3) feedback of TABLE MATRIX. In general, three major questions were asked:

- What is your relation to operational development within the organisation?
- Are you in some way working with the employees' feelings?
- By your opinion, would TABLE MATRIX be a useful tool for your organisation?

However, in the first two interviews this structure was not that clear. It was much more informal and of a talkative nature. Also, the format of TABLE MATRIX was updated and changed during the interviews: the first version consisted of seven A4-pages with two columns at each page, and the final version was more graphical with colours and figures in the size of an A3.

Participants

Medicine

Pfiser Health AB, which produces semi-manufactured articles within medicine by growth hormone. Respondent: The Human Resource Manager.

Finance

The SEB Group – a North European financial group for corporate customers, institutions and private individuals with ten home markets in the Nordic and Baltic countries, Germany, Poland and the Ukraine.

Respondent: The Head of Leadership Development.

Education

Kärtrorp Upper Secondary School – a highly ranked upper secondary school in Sweden oriented towards IT, media, natural and social science.

Respondents: The principal and one of the teachers involved in quality issues.

Retail FMCG

COOP – a leading FMCG Operator, which runs stores and hypermarkets within the Nordic Region. Respondent: The Specialist for Human Resources for the Stockholm region.

ICA AB - a leading FMCG Operator that runs stores and hypermarkets within the Nordic Region. Respondent: One of the Human Resource Consultants.

Statoil Retail AB, which embraces more than 2 000 service stations in nine north European nations offering automotive fuels, car accessories and vehicle servicing, as well as convenience products such as hot food and groceries. Respondent: The Human Resource Manager.

Manufacturing

Scania Sverige AB, which develops, manufactures and sells trucks with a gross vehicle weight of more than 16 tonnes (Class 8). Respondent: The Human Resource Manager.

Volvo Powertrain, which mainly manufactures gearboxes for heavy trucks and buses within the Volvo group. Respondent: The Manager for Human Resources and Communication.

Travel and Transportation

Posten AB – one of Sweden's largest companies, which on a daily basis performs postal services to 4.5 million households and 800 000 companies. Respondent: The Vice President for Corporate Competence.

Construction

Skanska Sweden AB – a global construction services group which offers a broad range of services from project development to construction. Respondent: The Manager for Competence Development.

The Public Sector

Apoteket AB – the sole retailer for medicinal products in Sweden. Respondent: The Human Resource Manager.

The Church of Sweden – a national church, open to everyone in Sweden regardless of nationality. Respondent: The Director of the Diocese in Stockholm.

The Swedish Association of Local Authorities and the Federation of Swedish County Councils (SKL), which represent the governmental, professional and employer related interests of Sweden's 290 local authorities, 18 county councils and two regions. Respondent: The Quality Assuror.

4. Field results

A majority of the organisations in the study are in a process of change and confront new challenges such as; increased competition, fast changing environments, more employees within the organisation than what is required by the business tasks, as well as a need for new employees with a fresh thinking; increased focus upon the human capital; and 'demanding' and self-confident employees/potential employees that are aware of their value. This in turn leads to an increased focus on practicing the ability of confronting new

situations, such as how to strengthen the individual's own perspective and how to take other perspectives into account, as well as an increased focus upon the human in the process, i.e. how to deliver things, instead of just focusing upon strategic goals. One respondent was talking about leaving "the gold watch culture" where commitment, capability and sustainability are rewarded and instead prepare for a culture more open to change and fresh thinking. In Table 2 below, we present a summary of the organisations relation to feelings and also their feedback on TABLE MATRIX.

Table 2: Results from the interviews with management representatives (sorted by date for when the interview was carried out)

Organisation	Relation to feelings	Feedback on TABLE MATRIX
COOP	(Not discussed)	"It is too well developed" "This is interesting"
Kärntorp Upper Secondary School	(Not discussed)	"We are already working with these kind of questions, but not as structured" "We are really interested in this approach"
SKL	Not in a structured way	"We are already working like this, but not as structured" Other comments (with background to the respondent's own experiences): "It takes time" "The employees don't want to fill in text into questionnaires. They are getting frustrated" "The employees want directives instead of thinking by them selves"
Scania Sverige AB	No special relation	"If we had known what the employees felt for the new system before we implemented it, the process would not have taken so much time" Other comments: "The format is not appealing" "We don't want a new method" "TABLE MATRIX could be useful for special occasions, such as kick-offs or when starting a project"

At this point, we changed the "questionnaire" format of TABLE MATRIX to one paper in the size of an A4

Apoteket AB	Feelings have been discussed in relation to the new organisational structure	"This seems very interesting" Other comments: "In general, this will work" "Step 5, Crossbreeding, is difficult" "TABLE MATRIX could be useful for special occasions"
ICA AB	No special relation	"This seems very interesting" "You are definitely on the right track" Other comments: "Good that everyone is doing this anonymously" "Most people will probably answer these questions" "The time for doing this is a disadvantage" "If you are afraid you will have problems with answering the questions, particularly within a group" "Good that everyone is doing this under the same conditions" "Good with questions on a paper – an interviewer may not always be that professional" "Some questions might be augmented unnecessarily"
The Church of Sweden	The employees are	"You are definitely on the right track" Other (personal) comments:

	used to show feelings and the respondent explained that it is not unusual that someone cries at a meeting.	<p>“In front of changes your personnel must be with you”</p> <p>“You must be allowed to make mistakes”</p>
Pfiser Health AB	No special relation	<p>“This could work”, “You are definitely on the right track”</p> <p>Other comments:</p> <p>“To set the goals are important – how will it look afterwards?”</p> <p>“This is a tool for having the employees to understand their situation”</p> <p>“The tool is not better than the people who are using it”</p>
SEB	No special relation	<p>“You are definitely on the right track”</p> <p>“This could be useful when entering a new project”</p>
Skanska Sweden AB	No special relation	<p>“This is how we want to work!”</p> <p>“This seems really interesting, we would like to test it”</p> <p>Other comments:</p> <ul style="list-style-type: none"> • “An “agent” should be doing this – a neutral part” • “It is important to inform the participant about: 1) why are we doing this? and 2) what happens afterward?” • “The anonymity makes people more secure” • “TABLE MATRIX is simple and understandable” • “Feedback must be given shortly afterwards” • “Have an text example in the tool”
Volvo Powertrain	No special relation	<p>“This is how we try to work”</p> <p>“We are interested in testing this approach”</p> <p>Other comments:</p> <ul style="list-style-type: none"> • “Step 5 is difficult, but it is important for the individual to be initiative” • “This is how we try to work, but not as structured” • “There exists no forum here within the organisation to show anger – TABLE MATRIX could be useful here” • “Feedback must be given immediately” • “This instrument will promote a culture where you take care of the emotional parts”
Posten AB	No special relation	<p>“This approach is in line with our next step in our current change process”</p> <p>Other comments:</p> <ul style="list-style-type: none"> • “This instrument demands good leaders” • “It is important to clarify why they should use it, the purpose and the goal with it” • “This is a steering tool” • “You must be aware of the consequences when using the instrument” • “You must be patient – it takes time”

At this point, we changed the A4-format of TABLE MATRIX into A3. Also, Step 5 had been divided into Step 5A and Step 5B

Statoil AB	Retail	Feelings have been discussed in relation to the new organisational structure	<p>“If this could work? Yes, why not?”</p> <p><i>Other comments:</i></p> <ul style="list-style-type: none"> • “There is a danger of fuzziness. One must be able to measure the results – where are we going?” • “How should the participants be motivated?” • “The first step is extremely important – how can you overhear the real underlying issue?” • “This instrument creates a lot of expectations of the initiators because the user communicates private thoughts and feelings.” • “TABLE MATRIX would have been useful in the current change process.” • “The presentation of the material, i.e. the analysis and the visualisation of it, is the most powerful aspect of TABLE MATRIX; this without not losing the subjective aspects of the content. Organisations consist of stressed employees with little time for doing “the extra”; such as analysing complex situations.”
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The following four significant issues can be commented and analysed in relation to the collected material:

- When presenting the first version of TABLE MATRIX for The Specialist for Human Resources at COOP, she spontaneously exclaimed: “It is too well developed”. This we found as a surprising and interesting comment and started to think if it was possible to make it more “undeveloped” without losing the original vision. At that time we spontaneously thought at the “strict” format but kept its current design for the two next interviews. However, when changing the “questionnaire” format from mainly four text based pages to one paper in the size of an A4 with figures, arrows and colours, the respondents’ attitude and interest changed dramatically.
- The respondent at Scania told us that: “We don’t want a new method”. How could the TABLE MATRIX approach be seen as a natural element in the organisational work and not as a new method? When using TABLE MATRIX, the user is, for example, given the possibility to experience and practice a certain type of methodology (which is also based on some philosophical view) for solving problems, which could be useful in many different ways, both in the private life and in the professional life. As with conceptual models – a theoretical construct that represents physical, biological or social processes, TABLE MATRIX could be validated or justified in terms of logic, and not by mapping on to the real world (Checkland, 1993). This means that the purpose should be to let the user to experience his or her thoughts and feeling in relation to learning by following his or her own logical process for reasoning. Individuals within organisations need tools for generating knowledge that “corresponds to their natural behaviour”, i.e. tools that provides human shortage for not always acting “correctly”.
- The respondent at SKL told us that: “We are already working like this, but not as structured”. According to Friedman et al. (2001), the existence of organisational structures in which the learning process can be carried out is a necessary, but not sufficient, condition for systematically promoting organisational learning. In Olsson Neve (2003c) we are presenting a framework for supporting input and output processes in order to identify individuals who should carry out the learning activities, individuals perceiving errors and anomalies, individuals as bearers of knowledge, and input and output processes for collecting, storing, and disseminating that knowledge for (re)use. The process goes as follows: (1) identification of important knowledge in relation to organisational goals; (2) identification of important knowledge key actors; (3) knowledge assimilation activities, i.e. transformation of knowledge into action on an individual level, (such as using TABLE MATRIX); (4) integration of knowledge, not necessarily into (existing) systems; and (5) transformation of knowledge into an organisational level. Also Pawlowsky (2001) presents a framework for supporting organisational learning. However, in his model, transformation of knowledge into action (i.e. on the individual level) constitutes the last step in the process. We believe it is important to point out in that transformation of knowledge into action on an individual level should be taken earlier in the process. When developing TABLE MATRIX, the aspect of structurally managing employees’ thoughts and feelings seemed highly relevant. However, as with Checkland’s (1993) Soft Systems Methodology (SSM), TABLE

MATRIX is not a technique which, even properly applied, can guarantee a particular kind of result since it leaves room for personal interpretation and problem-solving.

- The respondent at SKL also told us that: “The employees want directives”. Senge (1995) tells us, that when there (really) is a strong-shared vision within the organisation, people are developing (there is a huge difference between a genuine vision and vision statement). Unfortunately, the visions are too often dependent upon one manager’s charisma or of a temporary crisis that unifies the individuals (ibid). This means that organisations need tools, or guidelines, for transforming one individual’s vision into a shared vision. Senge continues; “In order to control the discipline of building shared visions, it is important to visualise those “conceptions of the future” that engage people and are shared by most of them” (p. 22, authors’ translation and italics). Consequently, TABLE MATRIX could be a useful tool for visualising these conceptions since it addresses the fears that exist within the organisation, current interest and considerations.

To conclude, several respondents also commented Step 5, ‘Crossbreeding’, as hard to understand. Step 5 is built upon systems thinking, i.e. to think about the world outside ourselves (Checkland, 1993), and improves the individual’s capability to understand and influence the situation/environment in which he or she is a part. The difficulties in understanding this phase may be derived from how we early in life in school “are told how to think”, i.e. to be a rational thinker. Nevertheless, the actual question was changed several times. In the latest version of TABLE MATRIX, Step 5 was also divided into two different steps; Step 5A and Step 5B, depending on if the user had marked a positive, a neutral or a negative feeling in Step 2.

5. Summary and concluding remarks

In conclusion, with background to the experiences from the study we have come to the following realisation:

- People involved in operational development within organisations seem interested in

visualising and managing feelings in relation to the organisational work.

- The issue of visualising and analysing affections seems not restricted to a specific type of organisation, but possible within any type.
- However, as one of the respondents expressed it; ‘the tool will not be better than the people that are using it’. This puts great demands upon the management function, which must inform the participants of 1) why they are doing this, 2) what is beneficial for them, and 3) how to manage the results.
- A real strength in TABLE MATRIX lies upon the possibility in doing IT based analyses and reports effectively; this without altering the original descriptions.

Our ambition with the study has been to investigate how individuals can increase the motivation and awareness for contributing with their knowledge and experiences in relation to the organisational work. That individual’s become motivated by appreciation, attention and confirmation were already established by the psychologist Abraham Maslow in his Hierarchy of Needs (1970). However, it becomes harder for today’s changeable and exposed organisations to give the employees the attention and confirmation, to not to say safety, they need. By constructing TABLE MATRIX with its focus upon the structured method and the cognitive culture, i.e. asking the right questions according to a specific structure (see for example Olsson Neve 2002), our ambition has been to contribute to today’s knowledge debate regarding unmotivated employees and not using the organisational competence sufficient enough, as well as supporting the increasing trend of mental illness. We also find it as highly relevant for the systematic aspect and the ability to analyse and compile data quantities to have the product Web-based, this because specialised software: improves availability; offers measures to adapt the mode of access to knowledge and its presentation to individual preferences; allows the deployment of specialised software that operates on digitalised knowledge; (Frank 2002) and offer human beings and organisations much faster, cheaper and broader sources of data and means for communication for enabling them to generate and share knowledge (Walsham 2001).

References

- Adler and Adler (2006) ‘Affect Scale’ [online] <http://www.kognitiva.org/affektskala.html>.
- de Wit, B. and Meyer, R. (1999) Strategy synthesis: resolving strategy paradoxes to create competitive advantage. London: International Thomson Business.
- Checkland, P. (1993) Systems Thinking, Systems Practice. Chichester: Wiley.

- Easterby-Smith and Araujo (1999) "Organisational Learning: Current Debates and Opportunities", in Easterby-Smith, M., Burgoyne, J. and Araujo, L. [ed] (1999) *Organisational Learning and the Learning Organisation: Developments in theory and practice*. London: SAGE.
- Frank, U. (2002) "A Multi-layer Architecture for Knowledge Management Systems", in Barnes, S. [ed.] (2002) *Knowledge Management Systems: Theory and Practice*. London: Thomson Learning.
- Freeman, A., Pretzer, J, Fleming, B. and Simon, K. M. (1990) *Kognitiv psykoterapi i Klinisk tillämpning*, Danderyd: Pilgrim press.
- Friedman, V. J., Lipshitz, R. and Overmeer, W. (2001) "Creating Conditions for Organisational Learning", in Dierkes, M., Berthoin Antal, A., Child, J. and Nonaka, I. [ed] (2001) *Handbook of Organisational Learning and Knowledge*. Oxford: Oxford University Press.
- Kim, D. H. (1993) "The Link between Individual and Organisational Learning", *Sloan Management Review*, Fall.
- Olsson Neve, T. (2005b) "A Study Concerning the Danger of Confusing Knowledge with Information: Construction of 'The Affect Based Learning Matrix'", 2nd International Conference on Intellectual Capital, Knowledge Management and Organisational Learning, ICICKM 2005, 21-22 November, Dubai, United Arab Emirates.
- Olsson Neve, T. (2005a) "To Integrate Employees Individual Knowledge Processes with the Organisations Learning Process: Construction of 'The Affect Based Learning Matrix'", 2nd International Conference on Knowledge Management, ICKM'05, 27-28 October, Westin Charlotte, North Carolina.
- Olsson Neve, (2003c) *A Cognitive Narrative Approach to Individual Learning and Personal Development within Organisations*. Licentiate Thesis, Stockholm University.
- Olsson Neve, T. (2003b), "Knowledge-Exchange within the Public Sector by a Cognitive Approach", 4th Working Conference on Knowledge Management in Electronic Government, KMGov2003, Rhodes Island, Greece.
- Olsson Neve, T (2003a) "Learning and Personal Development within the Public Sector by a Narrative Cognitive Cultural Approach", 4th Working Conference on Knowledge Management in Electronic Government, KMGov2003, Rhodes Island, Greece, 26-28 May. Organised by IFIP WG 8.3 and 8.5. ISBN 3-8548724-6-1.
- Olsson Neve, T (2002) "Right Questions to Capture Knowledge", 3rd European Conference on Knowledge Management, ECKM 2002, Trinity College Dublin, Ireland, 24-25 September. ISBN 0-9540488-6-5. Also published in *The Electronic Journal of Knowledge Management*, EJKM, March, 2003 [online] <http://www.ejkm.com/issue-current.htm>, ISSN 1479-4411.
- Pawlowsky, P. (2001) "The Treatment of Organisational Learning in Management Science", in Dierkes, M., Berthoin Antal, A., Child, J. and Nonaka, I. [ed] (2001) *Handbook of Organisational Learning and Knowledge*. Oxford: Oxford University Press.
- Senge, P (1995) *Den femte disciplinen*. Stockholm: Nerenius and Santérus.
- Svenska Dagbladet, Tuesday, Mars 16, 2004, 'Idag', Interview with Mimmi Engestang.
- Tomkins, SS (1995) *Exploring affect: the selected writings of Silvan S. Tomkins*. Cambridge: Cambridge University Press.
- Undén, A-L. and Elofsson, S. (2001) "Health from the Patient's Point of View. How Does it Relate to the Physician's Judgement?" *Family Practice*, Vol. 18, No. 2, pp. 174-180.
- Walsham, G. (2001) "Knowledge Management: The Benefits and Limitations of Computer Systems", *European Management Journal*, Vol. 19, No. 6, pp. 599-608, December.
- Winograd T. and Flores F. (1986) *Understanding Computers and Cognition*. Norwood, N.J.: Ablex Pub. Corp.

